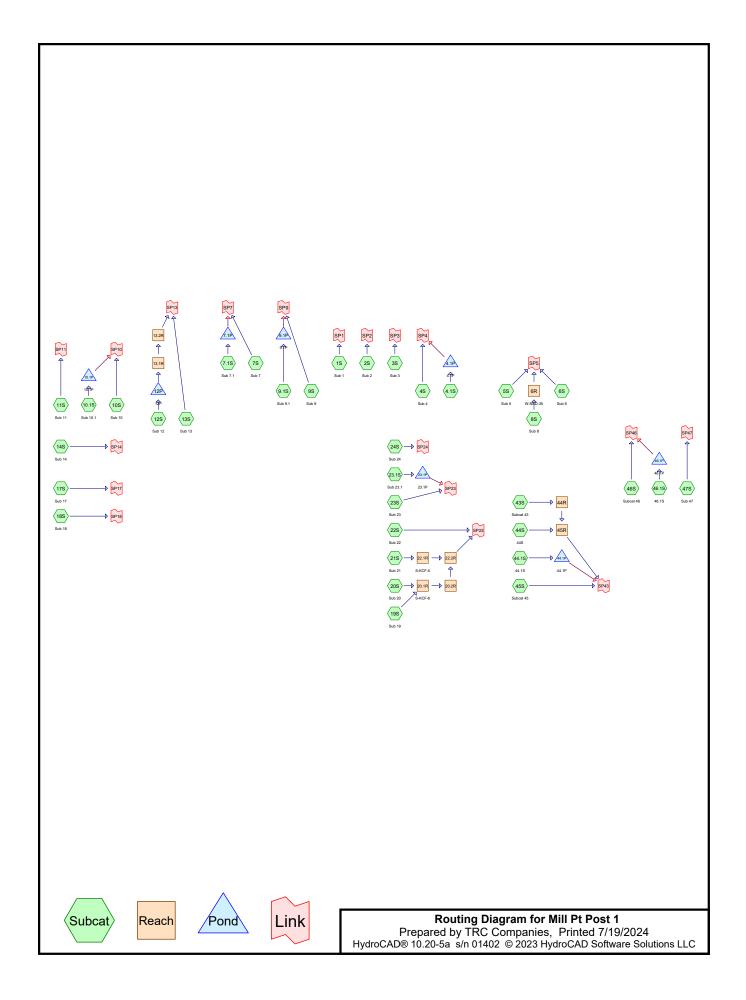
Appendix L – Post-Development HydroCAD Model



# Area Listing (all nodes)

Area	CN	Description
(acres)		(subcatchment-numbers)
0.498	39	>75% Grass cover, Good, HSG A (47S)
23.502	61	>75% Grass cover, Good, HSG B (9S, 10.1S, 10S, 11S, 17S, 20S, 21S, 23S, 24S, 47S)
16.502	74	>75% Grass cover, Good, HSG C (9.1S, 9S, 10.1S, 10S, 11S, 17S, 21S, 24S)
5.642	80	>75% Grass cover, Good, HSG D (10.1S, 10S, 14S, 17S)
0.802	30	Brush, Good, HSG A (46.1S, 46S, 47S)
11.302	48	Brush, Good, HSG B (4S, 7S, 9S, 10S, 11S, 14S, 18S, 20S, 21S, 22S, 23S, 43S, 45S, 46S, 47S)
3.755	65	Brush, Good, HSG C (9.1S, 9S, 10.1S, 10S, 11S, 14S, 19S, 20S, 21S, 22S, 23S, 43S, 45S)
11.133	73	Brush, Good, HSG D (9S, 10S, 14S, 18S, 19S, 20S, 43S)
3.906	96	Gravel (4.1S, 23.1S, 44.1S, 44S, 46.1S, 46S)
1.452	96	Gravel Impervious (43S)
0.653	96	Gravel road (18S)
1.938	96	Gravel surface (4S)
2.599	96	Gravel surface, HSG A (3S, 5S, 7S, 8S)
0.131	96	Gravel surface, HSG B (7.1S)
14.609	96	Gravel surface, HSG D (9S, 10S, 11S, 12S, 13S, 17S, 20S, 21S, 22S, 24S, 47S)
23.090	30	Meadow, non-grazed, HSG A (2S, 3S, 4S, 43S, 44S, 45S, 46.1S, 46S, 47S)
387.341	58	Meadow, non-grazed, HSG B (1S, 2S, 3S, 4.1S, 4S, 5S, 6S, 7.1S, 7S, 8S, 9S, 10.1S, 10S, 11S, 13S, 14S, 17S, 18S, 19S, 20S, 21S, 22S, 23.1S, 23S, 24S, 43S, 44S, 45S, 46.1S, 46S, 47S)
348.914	71	Meadow, non-grazed, HSG C(3S, 4.1S, 4S, 5S, 6S, 8S, 9.1S, 9S, 10.1S, 10S, 11S, 13S, 14S, 17S, 18S, 19S, 20S, 21S, 22S, 23S, 24S, 43S, 44.1S, 44S, 45S)
73.967	78	Meadow, non-grazed, HSG D (7S, 8S, 9.1S, 9S, 14S, 17S, 18S, 19S, 20S, 21S, 22S, 23.1S, 43S, 44.1S, 44S, 45S)
0.107	74	Pasture/grassland/range, Good, HSG C (7S)
0.090	80	Pasture/grassland/range, Good, HSG D (8S)
0.335	98	Pavement (18S)
0.807	98	Unconnected pavement, HSG D (12S, 13S, 22S, 47S)
0.259	98	Unconnected roofs (4S)
0.166	98	Unconnected roofs, HSG C (43S, 45S)
4.230	98	Unconnected roofs, HSG D (9S, 10S, 11S, 14S, 17S, 20S, 21S, 23S, 24S)
7.722	98	Water Surface, HSG D (9S, 10S, 11S, 12S, 19S, 20S, 21S)
20.917	30	Woods, Good, HSG A (43S, 44S, 45S, 46.1S, 46S, 47S)
105.763	55	Woods, Good, HSG B (1S, 2S, 3S, 4S, 5S, 6S, 7.1S, 7S, 8S, 9S, 10S, 11S, 13S, 14S, 17S, 20S, 21S, 22S, 23S, 43S, 44S, 45S, 46.1S, 46S, 47S)
35.506	70	Woods, Good, HSG C  (3S, 4S, 5S, 6S, 8S, 9S, 10S, 11S, 13S, 14S, 17S, 20S, 21S, 22S, 24S, 43S, 44S, 45S)
21.816	77	Woods, Good, HSG D (7S, 8S, 10S, 14S, 17S, 18S, 19S, 20S, 22S, 43S, 44.1S, 44S, 45S, 46S)
1,129.454	64	TOTAL AREA

# Soil Listing (all nodes)

Area	Soil	Subcatchment
(acres)	Group	Numbers
47.906	HSG A	2S, 3S, 4S, 5S, 7S, 8S, 43S, 44S, 45S, 46.1S, 46S, 47S
528.039	HSG B	1S, 2S, 3S, 4.1S, 4S, 5S, 6S, 7.1S, 7S, 8S, 9S, 10.1S, 10S, 11S, 13S, 14S, 17S,
		18S, 19S, 20S, 21S, 22S, 23.1S, 23S, 24S, 43S, 44S, 45S, 46.1S, 46S, 47S
404.950	HSG C	3S, 4.1S, 4S, 5S, 6S, 7S, 8S, 9.1S, 9S, 10.1S, 10S, 11S, 13S, 14S, 17S, 18S,
		19S, 20S, 21S, 22S, 23S, 24S, 43S, 44.1S, 44S, 45S
140.016	HSG D	7S, 8S, 9.1S, 9S, 10.1S, 10S, 11S, 12S, 13S, 14S, 17S, 18S, 19S, 20S, 21S,
		22S, 23.1S, 23S, 24S, 43S, 44.1S, 44S, 45S, 46S, 47S
8.543	Other	4.1S, 4S, 18S, 23.1S, 43S, 44.1S, 44S, 46.1S, 46S
1,129.454		TOTAL AREA

Mill Pt Post 1
Prepared by TRC Companies
HydroCAD® 10.20-5a s/n 01402 © 2023 HydroCAD Software Solutions LLC

Ground Covers (all nodes)							
HSG-A	HSG-B	HSG-C	HSG-D	Other	Total	Ground	Subcatchment
(acres)	(acres)	(acres)	(acres)	(acres)	(acres)	Cover	Numbers
 0.498	23.502	16.502	5.642	0.000	46.144	>75% Grass cover, Good	9.1
							S,
							9S,
							10.1
							S,
							10S
							,
							11S
							,
							14S
							,
							17S
							,
							20S
							,
							21S
							,
							23S
							,
							24S
							3
							47S
0.802	11.302	3.755	11.133	0.000	26.992	Brush, Good	4S,
							7S,
							9.1
							S,
							9S,

## Ground Covers (all nodes)

23S

		Grou		s (an noue	5) (contin	lueu)	
HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
 0.000	0.000	0.000	0.000	3.906	3.906	Gravel	4.1 S, 23.1 S, 44.1 S, 44S
							, 46.1 S, 46S
0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	1.452 0.653	1.452 0.653	Gravel Impervious Gravel road	43S 18S
2.599	0.131	0.000	14.609	1.938	19.277	Gravel surface	3S, 4S, 5S, 7.1 S, 7S, 8S, 9S, 10S , 11S , 12S , 13S , 17S
							, 20S ,
							21S , 22S
							, 24S ,
23.090	387.341	348.914	73.967	0.000	833.312	Meadow, non-grazed	47S 1S, 2S, 3S,

### Ground Covers (all nodes) (continued)

4.1 S, 4S,

21S

		Giu		s (all noue	5) (contin	lueu)	
HSG-A	HSG-B	HSG-C	HSG-D	Other	Total	Ground	Subcatchment
 (acres)	(acres)	(acres)	(acres)	(acres)	(acres)	Cover	Numbers
0.000	0.000	0.107	0.090	0.000	0.197	Pasture/grassland/range, Good	7S,
							8S
0.000	0.000	0.000	0.000	0.335	0.335	Pavement	18S
0.000	0.000	0.000	0.807	0.000	0.807	Unconnected pavement	12S
							,
							13S
							,
							22S
							,
		0.400	4 000	0.050	4.055		47S
0.000	0.000	0.166	4.230	0.259	4.655	Unconnected roofs	4S,
							9S,
							10S
							, 11S
							, 14S
							, 17S
							,
							, 20S
							,
							21S
							,
							23S
							,
							24S
							,
							43S
							,
							45S
0.000	0.000	0.000	7.722	0.000	7.722	Water Surface	9S,
							10S
							,
							11S
							,
							12S
							, 19S
							, 20S
							200
							•

# Ground Covers (all nodes) (continued)

3S, 4S, 5S, 6S,

Ground Covers (all nodes) (continued)							
HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
 20.917	105.763	35.506	21.816	0.000	184.002	Woods, Good	1S, 2S,

os, 7.1
S,
7S,
8S,
9S,
10S
, 11S
, 13S
, 14S
, 17S
, 18S
, 19S
, 20S
, 21S
, 22S
, 23S
, 24S
, 43S
, 44.1
S,
44S
, 45S
, 16 1
46.1 S,
46S

Ground Covers (all nodes	) (continued)
--------------------------	---------------

 47.906	528.039	404.950	140.016	8.543	1,129.454	TOTAL AREA	
(acres)	(acres)	(acres)	(acres)	(acres)	(acres)	Cover	Numbers
HSG-A	HSG-B	HSG-C	HSG-D	Other	Total	Ground	Subcatchment

#### Time span=0.00-48.00 hrs, dt=0.05 hrs, 961 points Runoff by SCS TR-20 method, UH=SCS, Weighted-CN Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: Sub 1	Runoff Area=5.786 ac 0.00% Impervious Runoff Depth=0.04" Flow Length=1,005' Tc=13.1 min CN=56 Runoff=0.03 cfs 0.020 af
Subcatchment 2S: Sub 2	Runoff Area=16.498 ac 0.00% Impervious Runoff Depth=0.04" Flow Length=1,307' Tc=14.1 min CN=56 Runoff=0.07 cfs 0.058 af
Subcatchment 3S: Sub 3	Runoff Area=33.979 ac 0.00% Impervious Runoff Depth=0.09" Flow Length=2,507' Tc=25.3 min CN=60 Runoff=0.54 cfs 0.264 af
Subcatchment 4.1S:	Runoff Area=14.786 ac 0.00% Impervious Runoff Depth=0.25" Tc=6.0 min CN=68 Runoff=4.70 cfs 0.314 af
Subcatchment 4S: Sub 4	Runoff Area=78.130 ac 0.33% Impervious Runoff Depth=0.14" Flow Length=4,160' Tc=35.5 min CN=63 Runoff=2.89 cfs 0.939 af
Subcatchment 5S: Sub 5	Runoff Area=16.698 ac 0.00% Impervious Runoff Depth=0.21" Flow Length=1,888' Tc=22.2 min CN=66 Runoff=1.69 cfs 0.287 af
Subcatchment 6S: Sub 6	Runoff Area=16.301 ac 0.00% Impervious Runoff Depth=0.21" Flow Length=1,894' Tc=48.6 min CN=66 Runoff=1.03 cfs 0.280 af
Subcatchment 7.1S: Sub 7.1	Runoff Area=4.575 ac 0.00% Impervious Runoff Depth=0.08" Flow Length=1,051' Tc=14.9 min CN=59 Runoff=0.05 cfs 0.030 af
Subcatchment7S: Sub 7	Runoff Area=62.317 ac 0.00% Impervious Runoff Depth=0.07" Flow Length=2,117' Tc=40.9 min CN=58 Runoff=0.49 cfs 0.340 af
Subcatchment 8S: Sub 8	Runoff Area=58.963 ac 0.00% Impervious Runoff Depth=0.28" Flow Length=2,902' Tc=63.3 min CN=69 Runoff=5.24 cfs 1.378 af
Subcatchment 9.1S: Sub 9.1	Runoff Area=8.972 ac 0.00% Impervious Runoff Depth=0.40" Flow Length=873' Tc=34.1 min CN=73 Runoff=2.12 cfs 0.298 af
Subcatchment9S: Sub 9	Runoff Area=59.593 ac 1.28% Impervious Runoff Depth=0.14" Flow Length=2,945' Tc=45.6 min CN=63 Runoff=1.97 cfs 0.716 af
Subcatchment 10.1S: Sub 10.1	Runoff Area=2.860 ac 0.00% Impervious Runoff Depth=0.34" Tc=18.7 min CN=71 Runoff=0.79 cfs 0.080 af
Subcatchment 10S: Sub 10	Runoff Area=19.376 ac 5.62% Impervious Runoff Depth=0.37" Flow Length=2,047' Tc=36.7 min CN=72 Runoff=3.83 cfs 0.593 af
Subcatchment 11S: Sub 11	Runoff Area=17.595 ac 2.63% Impervious Runoff Depth=0.18" Flow Length=1,622' Tc=19.0 min CN=65 Runoff=1.55 cfs 0.270 af
Subcatchment 12S: Sub 12	Runoff Area=4.859 ac 53.67% Impervious Runoff Depth=1.84" Tc=6.0 min CN=97 Runoff=13.94 cfs 0.744 af

Mill Pt Post 1

Prepared by TRC Companies HydroCAD® 10.20-5a s/n 01402 © 2023 HydroCAD Software Solutions LLC

Hydrocade 10.20-5a 5/1101402	The solutions let the solution
Subcatchment13S: Sub13	Runoff Area=10.383 ac 0.18% Impervious Runoff Depth=0.14" Flow Length=849' Tc=17.7 min CN=63 Runoff=0.53 cfs 0.125 af
Subcatchment14S: Sub14	Runoff Area=72.733 ac 0.42% Impervious Runoff Depth=0.23" Flow Length=4,131' Tc=49.6 min CN=67 Runoff=5.46 cfs 1.393 af
Subcatchment 17S: Sub 17	Runoff Area=97.893 ac 1.18% Impervious Runoff Depth=0.09" Flow Length=3,526' Tc=35.1 min CN=60 Runoff=1.46 cfs 0.761 af
Subcatchment18S: Sub18	Runoff Area=45.577 ac 0.74% Impervious Runoff Depth=0.28" Flow Length=2,382' Tc=42.2 min CN=69 Runoff=5.31 cfs 1.065 af
Subcatchment 19S: Sub 19	Runoff Area=28.406 ac 0.54% Impervious Runoff Depth=0.37" Flow Length=1,760' Tc=30.4 min CN=72 Runoff=6.43 cfs 0.869 af
Subcatchment 20S: Sub 20	Runoff Area=70.525 ac 0.78% Impervious Runoff Depth=0.21" Flow Length=1,829' Tc=21.6 min UI Adjusted CN=66 Runoff=7.25 cfs 1.213 af
Subcatchment 21S: Sub 21	Runoff Area=123.016 ac 3.33% Impervious Runoff Depth=0.23" Flow Length=4,201' Tc=42.5 min CN=67 Runoff=10.13 cfs 2.356 af
Subcatchment 22S: Sub 22	Runoff Area=62.296 ac 0.60% Impervious Runoff Depth=0.37" Flow Length=1,448' Tc=27.3 min CN=72 Runoff=15.23 cfs 1.905 af
Subcatchment 23.1S: Sub 23	Tc=6.0 min CN=70 Runoff=1.59 cfs 0.094 af
Subcatchment 23S: Sub 23	Runoff Area=13.069 ac 2.96% Impervious Runoff Depth=0.25" Flow Length=1,297' Tc=33.2 min UI Adjusted CN=68 Runoff=1.51 cfs 0.277 af
	Runoff Area=5.466 ac 7.70% Impervious Runoff Depth=0.40" Flow Length=1,045' Tc=24.7 min UI Adjusted CN=73 Runoff=1.63 cfs 0.182 af
Subcatchment 43S: Subcat 4	Flow Length=2,795' Tc=40.7 min CN=71 Runoff=5.47 cfs 0.956 af
Subcatchment 44.1S: 44.1S	Runoff Area=6.425 ac 0.00% Impervious Runoff Depth=0.58" Tc=6.0 min CN=78 Runoff=6.32 cfs 0.312 af
Subcatchment 44S: 44S	Runoff Area=39.864 ac 0.00% Impervious Runoff Depth=0.31" Flow Length=2,470' Tc=41.7 min CN=70 Runoff=5.45 cfs 1.023 af
Subcatchment45S: Subcat4	Flow Length=2,198' Tc=29.8 min CN=59 Runoff=0.37 cfs 0.223 af
Subcatchment 46.1S: 46.1S	Runoff Area=5.473 ac 0.00% Impervious Runoff Depth=0.00" Flow Length=719' Tc=31.5 min CN=45 Runoff=0.00 cfs 0.000 af
Subcatchment 46S: Subcat 4	Flow Length=1,524' Tc=54.0 min CN=41 Runoff=0.00 cfs 0.000 af
Subcatchment 47S: Sub 47	Runoff Area=30.058 ac 1.25% Impervious Runoff Depth=0.00" Flow Length=1,895' Tc=43.3 min UI Adjusted CN=40 Runoff=0.00 cfs 0.000 af

Mill Pt Post 1

Reach 6R: W-NSD-35	Avg. Flow Depth=0.20' Max Vel=2.19 fps Inflow=5.24 cfs 1.378 af n=0.036 L=1,882.0' S=0.0276 '/' Capacity=88.34 cfs Outflow=4.91 cfs 1.378 af
Reach 13.1R:	Avg. Flow Depth=0.08' Max Vel=2.22 fps Inflow=1.40 cfs 0.745 af n=0.030 L=165.0' S=0.0727 '/' Capacity=48.67 cfs Outflow=1.40 cfs 0.745 af
Reach 13.2R:	Avg. Flow Depth=0.13' Max Vel=4.64 fps Inflow=1.40 cfs 0.745 af n=0.035 L=232.0' S=0.2069 '/' Capacity=1,230.81 cfs Outflow=1.40 cfs 0.745 af
Reach 20.1R: S-KCF-6	Avg. Flow Depth=0.62' Max Vel=1.69 fps Inflow=13.40 cfs 2.082 af n=0.030 L=1,405.0' S=0.0028 '/' Capacity=141.69 cfs Outflow=10.19 cfs 2.082 af
Reach 20.2R:	Avg. Flow Depth=0.42' Max Vel=2.39 fps Inflow=10.19 cfs 2.082 af n=0.035 L=1,322.0' S=0.0121 '/' Capacity=250.41 cfs Outflow=9.34 cfs 2.082 af
Reach 22.1R: S-KCF-5	Avg. Flow Depth=0.43' Max Vel=2.03 fps Inflow=10.13 cfs 2.356 af n=0.030 L=665.0' S=0.0060 '/' Capacity=89.91 cfs Outflow=9.94 cfs 2.356 af
Reach 22.2R:	Avg. Flow Depth=0.62' Max Vel=2.40 fps Inflow=17.72 cfs 4.438 af n=0.035 L=707.0' S=0.0075 '/' Capacity=86.27 cfs Outflow=17.45 cfs 4.438 af
Reach 44R:	Avg. Flow Depth=0.40' Max Vel=3.08 fps Inflow=5.47 cfs 0.956 af n=0.035 L=498.0' S=0.0321 '/' Capacity=8.70 cfs Outflow=5.43 cfs 0.956 af
Reach 45R:	Avg. Flow Depth=0.39' Max Vel=4.03 fps Inflow=10.84 cfs 1.979 af n=0.035 L=537.0' S=0.0372 '/' Capacity=16.21 cfs Outflow=10.78 cfs 1.979 af
Pond 4.1P: 4.1P	Peak Elev=495.98' Storage=13,656 cf Inflow=4.70 cfs 0.314 af Primary=0.00 cfs 0.000 af Secondary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af
Pond 7.1P:	Peak Elev=512.20' Storage=1,308 cf Inflow=0.05 cfs 0.030 af Primary=0.00 cfs 0.000 af Secondary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af
Pond 9.1P: 9.1P	Peak Elev=467.22' Storage=10,910 cf Inflow=2.12 cfs 0.298 af Primary=0.10 cfs 0.088 af Secondary=0.00 cfs 0.000 af Outflow=0.10 cfs 0.088 af
Pond 10.1P: 10.1P	Peak Elev=568.63' Storage=3,495 cf Inflow=0.79 cfs 0.080 af Primary=0.00 cfs 0.000 af Secondary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af
Pond 12P: 12P	Peak Elev=507.46' Storage=11,723 cf Inflow=13.94 cfs 0.744 af 8.0" Round Culvert n=0.013 L=172.7' S=0.0058 '/' Outflow=1.40 cfs 0.745 af
Pond 23.1P: 23.1P	Peak Elev=493.06' Storage=4,062 cf Inflow=1.59 cfs 0.094 af Primary=0.01 cfs 0.007 af Secondary=0.00 cfs 0.000 af Outflow=0.01 cfs 0.007 af
Pond 44.1P: 44.1P	Peak Elev=426.67' Storage=13,588 cf Inflow=6.32 cfs 0.312 af Primary=0.00 cfs 0.000 af Secondary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af
Pond 46.1P: 46.1P	Peak Elev=354.00' Storage=0 cf Inflow=0.00 cfs 0.000 af Primary=0.00 cfs 0.000 af Secondary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af

Mill Pt Post 1 Prepared by TRC Companies	Type II 24-hr 1-year Rainfall=2.17" Printed 7/19/2024
HydroCAD® 10.20-5a s/n 01402 © 2023 HydroCAD Software Solutions	LLC Page 12
Link SP1:	Inflow=0.03 cfs 0.020 af Primary=0.03 cfs 0.020 af
Link SP10:	Inflow=3.83 cfs 0.593 af Primary=3.83 cfs 0.593 af
Link SP11:	Inflow=1.55 cfs 0.270 af Primary=1.55 cfs 0.270 af
Link SP13:	Inflow=1.93 cfs 0.870 af Primary=1.93 cfs 0.870 af
Link SP14:	Inflow=5.46 cfs 1.393 af Primary=5.46 cfs 1.393 af
Link SP17:	Inflow=1.46 cfs 0.761 af Primary=1.46 cfs 0.761 af
Link SP18:	Inflow=5.31 cfs 1.065 af Primary=5.31 cfs 1.065 af
Link SP2:	Inflow=0.07 cfs 0.058 af Primary=0.07 cfs 0.058 af
Link SP22:	Inflow=21.38 cfs  6.343 af Primary=21.38 cfs  6.343 af
Link SP23:	Inflow=1.51 cfs 0.284 af Primary=1.51 cfs 0.284 af
Link SP24:	Inflow=1.63 cfs 0.182 af Primary=1.63 cfs 0.182 af
Link SP3:	Inflow=0.54 cfs 0.264 af Primary=0.54 cfs 0.264 af
Link SP4:	Inflow=2.89 cfs 0.939 af Primary=2.89 cfs 0.939 af
Link SP43:	Inflow=11.09 cfs 2.201 af Primary=11.09 cfs 2.201 af
Link SP46:	Inflow=0.00 cfs 0.000 af Primary=0.00 cfs 0.000 af
Link SP47:	Inflow=0.00 cfs 0.000 af Primary=0.00 cfs 0.000 af
Link SP5:	Inflow=6.08 cfs 1.946 af Primary=6.08 cfs 1.946 af
Link SP7:	Inflow=0.49 cfs 0.340 af Primary=0.49 cfs 0.340 af

Link SP9:

Inflow=1.97 cfs 0.805 af Primary=1.97 cfs 0.805 af

Total Runoff Area = 1,129.454 ac Runoff Volume = 19.367 af Average Runoff Depth = 0.21" 98.80% Pervious = 1,115.935 ac 1.20% Impervious = 13.519 ac

#### Summary for Subcatchment 1S: Sub 1

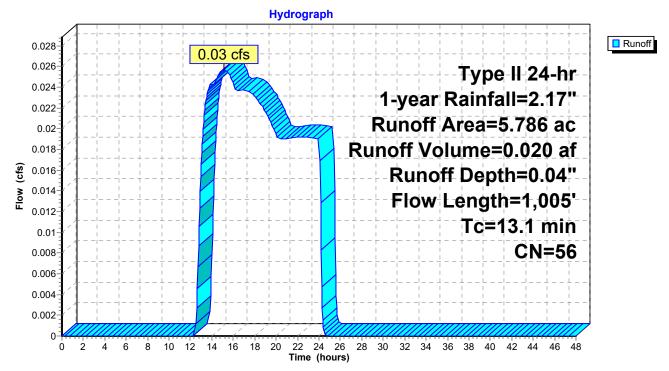
Runoff = 0.03 cfs @ 15.11 hrs, Volume= 0.020 af, Depth= 0.04" Routed to Link SP1 :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 1-year Rainfall=2.17"

Area	(ac) C	N Desc	cription		
				grazed, HS	G B
4.	.149 5	5 <u>Woo</u>	ds, Good,	HSG B	
5.	786 5	6 Weig	ghted Aver	age	
5.	786	100.	00% Pervi	ous Area	
Тс	Length	Slope	Velocity	Capacity	Description
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
7.1	100	0.0620	0.24		Sheet Flow,
					Grass: Short n= 0.150 P2= 2.50"
2.9	427	0.2390	2.44		Shallow Concentrated Flow,
					Woodland Kv= 5.0 fps
2.0	263	0.0980	2.19		Shallow Concentrated Flow,
					Short Grass Pasture Kv= 7.0 fps
1.1	215	0.4050	3.18		Shallow Concentrated Flow,
					Woodland Kv= 5.0 fps

13.1 1,005 Total

### Subcatchment 1S: Sub 1

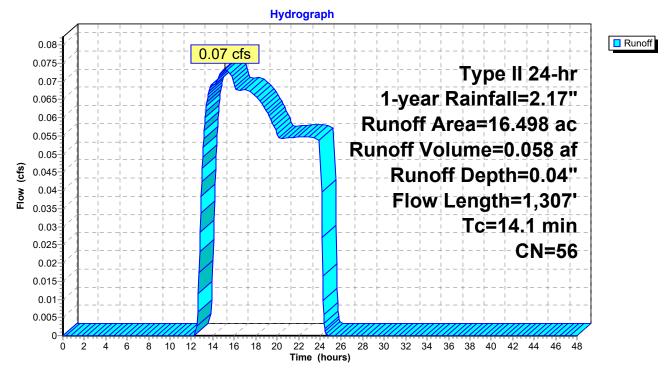


### Summary for Subcatchment 2S: Sub 2

Runoff = 0.07 cfs @ 15.12 hrs, Volume= 0.058 af, Depth= 0.04" Routed to Link SP2 :

Area	(ac) C	N Desc	ription							
0.124 30 Meadow, non-grazed, HSG A 8.883 58 Meadow, non-grazed, HSG B										
			ds, Good,							
16.	16.498 56 Weighted Average									
16.	498	100.	00% Pervi	ous Area						
Тс	Length	Slope	Velocity	Capacity	Description					
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)						
5.8	100	0.1010	0.29		Sheet Flow,					
					Grass: Short n= 0.150 P2= 2.50"					
2.8	407	0.2420	2.46		Shallow Concentrated Flow,					
4 5	225	0 4000	0.40		Woodland Kv= 5.0 fps					
1.5	225	0.1200	2.42		Shallow Concentrated Flow,					
1.3	169	0.1830	2.14		Short Grass Pasture Kv= 7.0 fps Shallow Concentrated Flow,					
1.0	103	0.1000	2.14		Woodland Kv= 5.0 fps					
0.5	113	0.5100	3.57		Shallow Concentrated Flow,					
0.0					Woodland Kv= 5.0 fps					
2.2	293	0.0220	2.22		Shallow Concentrated Flow,					
					Grassed Waterway Kv= 15.0 fps					
14.1	1,307	Total								





### Summary for Subcatchment 3S: Sub 3

Runoff = 0.54 cfs @ 12.64 hrs, Volume= 0.264 af, Depth= 0.09" Routed to Link SP3 :

Area	(ac) C	N Dese	cription							
18	.697	58 Mea	Meadow, non-grazed, HSG B							
7	.336	71 Mea	leadow, non-grazed, HSG C							
7	.021	55 Woo	ds, Good,	HSG B						
			ds, Good,							
			/el surface							
0	.363	<u>30 Mea</u>	dow, non-g	grazed, HS	G A					
33	.979	60 Weig	ghted Aver	age						
33	.979	100.	00% Pervi	ous Area						
_				_						
Tc	Length	Slope	Velocity	Capacity	Description					
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)						
8.4	100	0.0400	0.20		Sheet Flow,					
					Grass: Short n= 0.150 P2= 2.50"					
9.4	1,002	0.0640	1.77		Shallow Concentrated Flow,					
					Short Grass Pasture Kv= 7.0 fps					
3.7	337	0.0940	1.53		Shallow Concentrated Flow,					
					Woodland Kv= 5.0 fps					
2.5	632		4.29		Direct Entry, CF					
1.3	436		5.59		Direct Entry, CF					
25.3	2,507	Total								
	_,									

10 12 14 16 18

2

Ó

4 6 8

Hydrograph 0.6 Runoff 0.54 cfs 0.55 Type II 24-hr 0.5 1-year Rainfall=2.17" 0.45 Runoff Area=33.979 ac 0.4 Runoff Volume=0.264 af 0.35 Runoff Depth=0.09" Flow (cfs) 0.3 Flow Length=2,507' 0.25 Tc=25.3 min 0.2 **CN=60** 0.15 0.1 0.05 0-

## Subcatchment 3S: Sub 3

22 24 26 28

30

32 34 36

38 40 42

44 46 48

20

Time (hours)

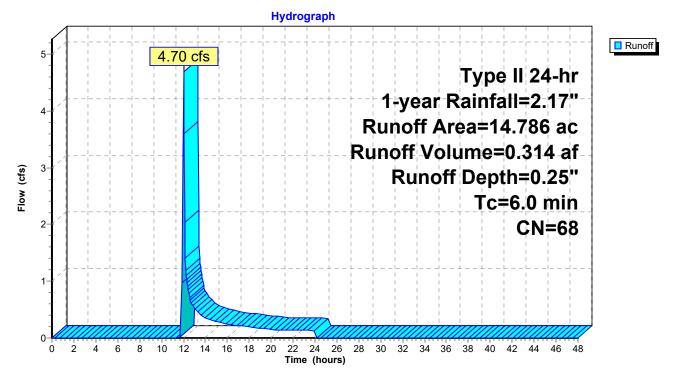
#### Summary for Subcatchment 4.1S:

Runoff = 4.70 cfs @ 12.00 hrs, Volume= 0.314 af, Depth= 0.25" Routed to Pond 4.1P : 4.1P

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 1-year Rainfall=2.17"

	Area	(ac)	CN	Desc	Description								
	10.	166	71	Mea	Aeadow, non-grazed, HSG C								
*	0.	489	96 Gravel										
	4.	131	58	Mea	dow, non-g	grazed, HS	SG B						
	14.	786	68	Weig	hted Aver	age							
	14.786 100.00% Pervious Area				00% Pervi	ous Area							
	Тс	Leng		Slope	Velocity	Capacity	Description						
_	(min)	(fee	et)	(ft/ft)	(ft/sec)	(cfs)							
	6.0						Direct Entry,						

### Subcatchment 4.1S:

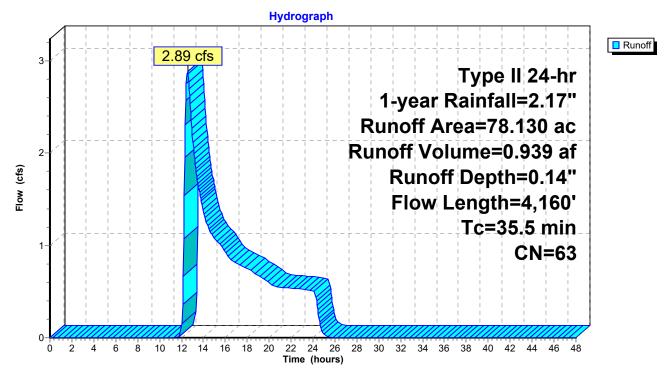


### Summary for Subcatchment 4S: Sub 4

Runoff = 2.89 cfs @ 12.55 hrs, Volume= 0.939 af, Depth= 0.14" Routed to Link SP4 :

	Area	(ac) (	CN Des	cription							
	0.	192	48 Brus	rush, Good, HSG B							
*	1.	938	96 Grav	vel surface							
*	0.	259	98 Unc	onnected r	oofs						
	0.	393			grazed, HS						
		847			grazed, HS						
		883			grazed, HS	GC					
		274		ods, Good,							
	3.	344	70 Woo	ods, Good,	HSG C						
		130	63 Wei	ghted Aver	age						
	77.	871		7% Pervio							
		259		% Impervi							
	0.	259	100	.00% Unco	nnected						
	-		0		<b>A B</b>						
	Tc	Length		Velocity	Capacity	Description					
_	(min)	(feet)		(ft/sec)	(cfs)						
	9.9	100	0.1900	0.17		Sheet Flow,					
				- <b>-</b> -		Woods: Light underbrush n= 0.400 P2= 2.50"					
	1.8	295	0.1550	2.76		Shallow Concentrated Flow,					
	474	4 0 4 4	0 0050	4.04		Short Grass Pasture Kv= 7.0 fps					
	17.1	1,344	0.0350	1.31		Shallow Concentrated Flow,					
	67	0 404		6.00		Short Grass Pasture Kv= 7.0 fps					
	6.7	2,421		6.02		Direct Entry, CF					
	35.5	4,160	Total								

Subcatchment 4S: Sub 4

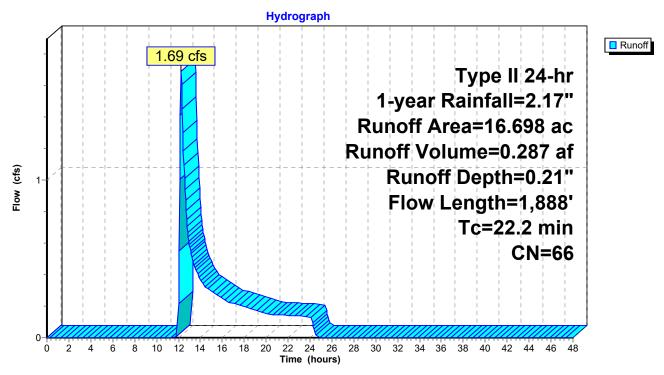


### Summary for Subcatchment 5S: Sub 5

Runoff = 1.69 cfs @ 12.24 hrs, Volume= 0.287 af, Depth= 0.21" Routed to Link SP5 :

Area	(ac) (	N Dese	cription								
5.	916	58 Mea	/leadow, non-grazed, HSG B								
8.	.385	71 Mea	dow, non-g	grazed, HS	GC						
0.	.686	55 Woo	ds, Good,	HSG B							
1.	.558		ds, Good,								
0.	153	96 Grav	el surface	, HSG A							
16.	698	66 Weig	ghted Aver	age							
16.	.698	100.	00% Pervi	ous Area							
Tc	Length		Velocity	Capacity	Description						
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)							
9.4	100	0.0300	0.18		Sheet Flow,						
					Grass: Short n= 0.150 P2= 2.50"						
6.4	549	0.0420	1.43		Shallow Concentrated Flow,						
					Short Grass Pasture Kv= 7.0 fps						
1.7	195	0.0780	1.95		Shallow Concentrated Flow,						
					Short Grass Pasture Kv= 7.0 fps						
4.7	1,044		3.70		Direct Entry, CF						
22.2	1,888	Total									

Subcatchment 5S: Sub 5



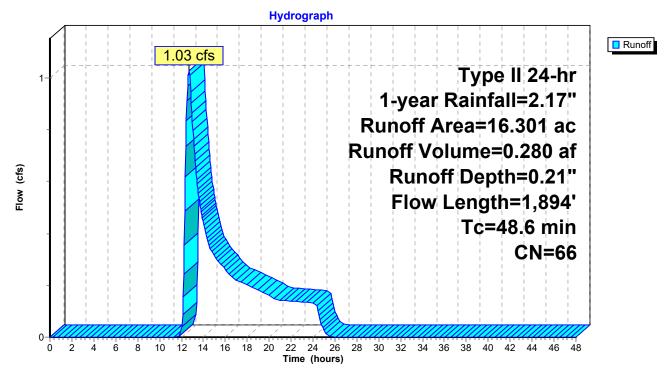
#### Summary for Subcatchment 6S: Sub 6

Runoff = 1.03 cfs @ 12.69 hrs, Volume= 0.280 af, Depth= 0.21" Routed to Link SP5 :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 1-year Rainfall=2.17"

Area	(ac) (	N Dese	cription		
6	.064			grazed, HS	
9.	.461	71 Mea	dow, non-g	grazed, HS	GC
0.	.126	55 Woo	ds, Good,	HSG B	
0.	.650	70 Woo	ds, Good,	HSG C	
16.	.301	66 Weig	ghted Aver	age	
16.	.301	100.	00% Pervi	ous Area	
Tc	Length	Slope	Velocity	Capacity	Description
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
27.8	100	0.0020	0.06		Sheet Flow,
					Grass: Short n= 0.150 P2= 2.50"
19.8	1,554	0.0350	1.31		Shallow Concentrated Flow,
					Short Grass Pasture Kv= 7.0 fps
1.0	240		3.81		Direct Entry, CF
48.6	1,894	Total			

#### Subcatchment 6S: Sub 6



#### Summary for Subcatchment 7.1S: Sub 7.1

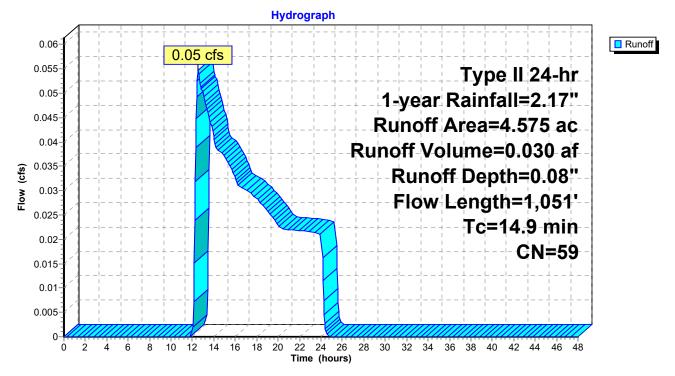
Runoff = 0.05 cfs @ 12.55 hrs, Volume= 0.030 af, Depth= 0.08" Routed to Pond 7.1P :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 1-year Rainfall=2.17"

Area	(ac) C	N Dese	cription							
4.	4.216 58 Meadow, non-grazed, HSG B									
0.	131 9	96 Grav	el surface	, HSG B						
0.	0.228 55 Woods, Good, HSG B									
4.	4.575 59 Weighted Average									
4.	575	100.	00% Pervi	ous Area						
Tc	Length	Slope	Velocity	Capacity	Description					
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)						
7.0	100	0.0640	0.24		Sheet Flow,					
					Grass: Short n= 0.150 P2= 2.50"					
0.7	90	0.1000	2.21		Shallow Concentrated Flow,					
					Short Grass Pasture Kv= 7.0 fps					
0.5	54	0.1100	1.66		Shallow Concentrated Flow,					
					Woodland Kv= 5.0 fps					
6.7	807	0.0820	2.00		Shallow Concentrated Flow,					
					Short Grass Pasture Kv= 7.0 fps					

14.9 1,051 Total

### Subcatchment 7.1S: Sub 7.1



### Summary for Subcatchment 7S: Sub 7

Runoff = 0.49 cfs @ 13.70 hrs, Volume= 0.340 af, Depth= 0.07" Routed to Link SP7 :

Area	(ac) (	CN Des	cription								
46.	288		leadow, non-grazed, HSG B								
1.	123	78 Mea	dow, non-g	grazed, HS	G D						
12.	864		ods, Good,								
-			ods, Good,								
			•	•	Good, HSG C						
			vel surface	,							
0.	457	48 Brus	sh, Good, H	ISG B							
-			ghted Aver	0							
62.	317	100	.00% Pervi	ous Area							
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description						
27.8	100	0.0020	0.06		Sheet Flow,						
					Grass: Short n= 0.150 P2= 2.50"						
9.7	786	0.0370	1.35		Shallow Concentrated Flow,						
					Short Grass Pasture Kv= 7.0 fps						
3.4	1,231		6.01		Direct Entry,						
40.9	2,117	Total									

Hydrograph 0.55 Runoff 0.49 cfs 0.5 Type II 24-hr 0.45 1-year Rainfall=2.17" Runoff Area=62.317 ac 0.4 Runoff Volume=0.340 af 0.35 (cts) 0.3-Runoff Depth=0.07" Flow Length=2,117' Tc=40.9 min 0.2 **CN=58** 0.15 0.1 0.05 0-2 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 4 6 8 Ó Time (hours)

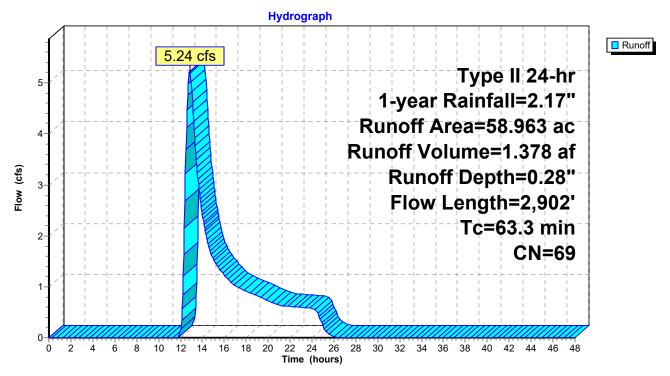
### Subcatchment 7S: Sub 7

### Summary for Subcatchment 8S: Sub 8

Runoff = 5.24 cfs @ 12.85 hrs, Volume= 1.378 af, Depth= 0.28" Routed to Reach 6R : W-NSD-35

Area	(ac) C	N Dese	cription							
6.	209	58 Mea	leadow, non-grazed, HSG B							
30.	.343	71 Mea	dow, non-	grazed, HS	GC					
8.	.033	78 Mea	dow, non-	grazed, HS	IG D					
5.	.658	55 Woo	ds, Good,	HSG B						
6.	737	70 Woo	ds, Good,	HSG C						
1.	132	77 Woo	ds, Good,	HSG D						
-			el surface	,						
0.	.090	30 Past	ure/grassl	and/range,	Good, HSG D					
58.	.963	69 Weig	ghted Aver	age						
58.	.963	100.	00% Pervi	ous Area						
Тс	Length	Slope	Velocity	Capacity	Description					
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)						
23.7	100	0.0030	0.07		Sheet Flow,					
					Grass: Short n= 0.150 P2= 2.50"					
6.6	315	0.0130	0.80		Shallow Concentrated Flow,					
					Short Grass Pasture Kv= 7.0 fps					
23.1	727	0.0110	0.52		Shallow Concentrated Flow,					
					Woodland Kv= 5.0 fps					
9.9	1,760		2.97		Direct Entry, CF					
63.3	2,902	Total								

Subcatchment 8S: Sub 8



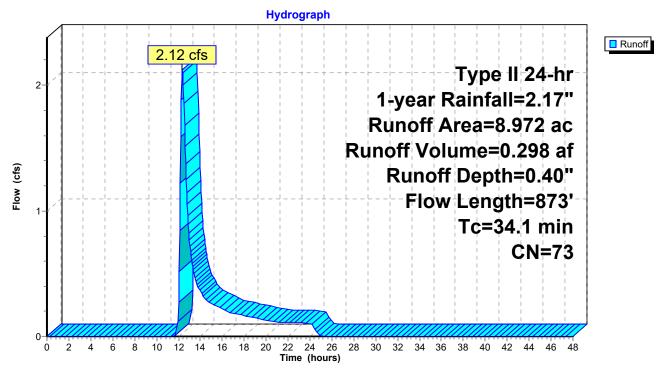
#### Summary for Subcatchment 9.1S: Sub 9.1

Runoff = 2.12 cfs @ 12.36 hrs, Volume= 0.298 af, Depth= 0.40" Routed to Pond 9.1P : 9.1P

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 1-year Rainfall=2.17"

A	rea (	ac) C	N Des	cription		
	1.619 78 Meadow, non-grazed, HSG			adow, non-	grazed, HS	GD
	0.5	528	65 Bru	sh, Good, I	HSG C	
	4.8	396	71 Mea	adow, non-	grazed, HS	GC
	1.9	929	74 >75	% Grass c	over, Good	, HSG C
	8.972 73 Weighted Average					
	8.9	972	100	.00% Pervi	ious Area	
	Тс	Length	Slope	Velocity	Capacity	Description
(m	in)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
21	1.1	100	0.0040	0.08		Sheet Flow,
						Grass: Short n= 0.150 P2= 2.50"
13	3.0	773	0.0200	0.99		Shallow Concentrated Flow,
						Short Grass Pasture Kv= 7.0 fps
34	1.1	873	Total			

#### Subcatchment 9.1S: Sub 9.1



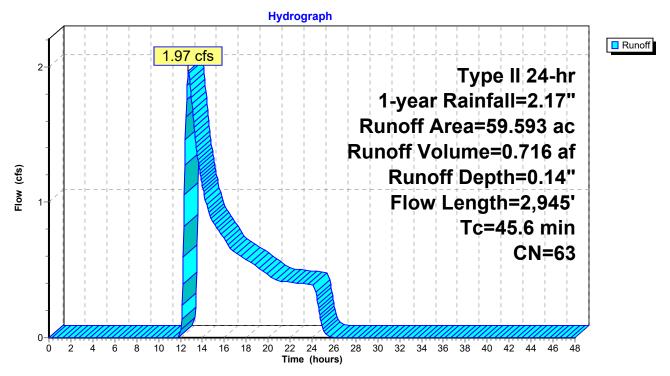
### Summary for Subcatchment 9S: Sub 9

Runoff = 1.97 cfs @ 12.72 hrs, Volume= Routed to Link SP9 :

0.716 af, Depth= 0.14"

Area	(ac) C	N Dese	cription					
2.	871 4	18 Brus	Brush, Good, HSG B					
0.	293 6	65 Brus	Brush, Good, HSG C					
0.	014 7	73 Brus	Brush, Good, HSG D					
3.			Gravel surface, HSG D					
23.	23.963 58 Meadow, non-grazed, HSG B							
	2.179 71 Meadow, non-grazed, HSG C							
0.495 78 Meadow, non-grazed, HSG D								
6.553 61 >75% Grass cover, Good, HSG B								
6.501 74 >75% Grass cover, Good, HSG C								
0.430 98 Water Surface, HSG D								
			Woods, Good, HSG B					
1.580 70 Woods, Good, HSG C								
			ghted Aver					
	831		2% Pervio					
	762		% Impervi					
0.	332	43.5	7% Uncon	nected				
Тс	Length	Slope	Velocity	Capacity	Description			
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	Description			
17.9	100	0.0060	0.09	(013)	Sheet Flow,			
17.5	100	0.0000	0.09		Grass: Short $n= 0.150$ P2= 2.50"			
13.8	841	0.0210	1.01		Shallow Concentrated Flow,			
10.0	041	0.0210	1.01		Short Grass Pasture Kv= 7.0 fps			
10.9	1,254	0.0750	1.92		Shallow Concentrated Flow,			
10.5	1,204	0.0750	1.52		Short Grass Pasture Kv= 7.0 fps			
1.6	156		1.63		Direct Entry,			
1.4	594		7.07		Direct Entry,			
45.6	2,945	Total						

Subcatchment 9S: Sub 9



#### Summary for Subcatchment 10.1S: Sub 10.1

Runoff = 0.79 cfs @ 12.16 hrs, Volume= 0.080 af, Depth= 0.34" Routed to Pond 10.1P : 10.1P

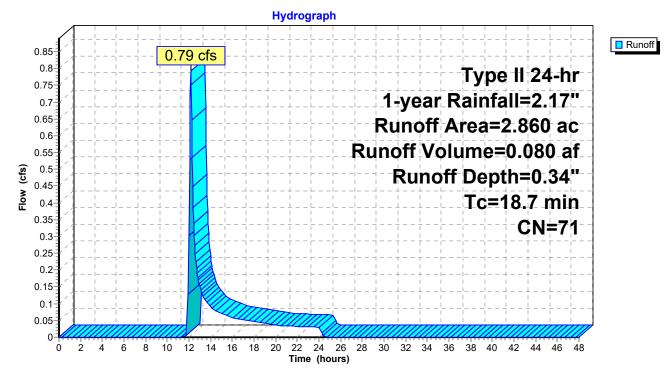
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 1-year Rainfall=2.17"

 Area (ac)	CN	Description
0.026	61	>75% Grass cover, Good, HSG B
0.781	74	>75% Grass cover, Good, HSG C
0.447	80	>75% Grass cover, Good, HSG D
0.524	58	Meadow, non-grazed, HSG B
1.054	71	Meadow, non-grazed, HSG C
 0.028	65	Brush, Good, HSG C
2.860	71	Weighted Average
2.860		100.00% Pervious Area
	ngth <sup>T</sup> eet)	Slope Velocity Capacity Description (ft/ft) (ft/sec) (cfs)

10.7	1		7
------	---	--	---

**Direct Entry, Direct** 

#### Subcatchment 10.1S: Sub 10.1



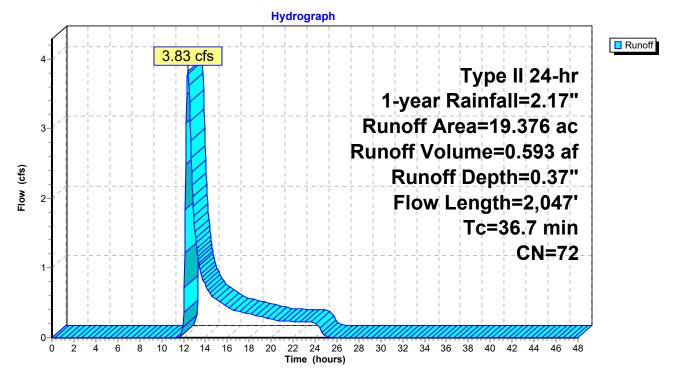
### Summary for Subcatchment 10S: Sub 10

Runoff = 3.83 cfs @ 12.41 hrs, Volume= Routed to Link SP10 :

0.593 af, Depth= 0.37"

Area	(ac)	C	N Desc	ription				
1.	.008	98	3 Wate	er Surface,	HSG D			
0.	.081	98	3 Unco	Unconnected roofs, HSG D				
0.	.828	90	6 Grav	Gravel surface, HSG D				
0.	.200	48						
	1.752 65 Brush, Good, HSG C							
	.996	7:		h, Good, F				
	.403	58			grazed, HS			
	.089	7			grazed, HS			
	.486	6			over, Good,			
	.211	74			over, Good,			
	.204	8			over, Good,	, HSG D		
	.917	5		ds, Good,				
-	.044	70		ds, Good,				
	.157	7		ds, Good,				
	.376	72		hted Aver	•			
	.287			3% Pervio				
	.089			% Impervi				
0.	.081		7.44	% Unconn	ected			
Тс	Leng	th	Slope	Velocity	Conacity	Description		
(min)	(fee		Slope (ft/ft)	(ft/sec)	Capacity (cfs)	Description		
10.9		)0 00	0.0210	0.15	(013)	Shoot Flow		
10.9		50	0.0210	0.15		Sheet Flow, Grass: Short n= 0.150 P2= 2.50"		
22.7	1,34	17	0.0200	0.99		Shallow Concentrated Flow,		
22.1	1,0-	τ/	0.0200	0.55		Short Grass Pasture Kv= 7.0 fps		
3.1	60	00		3.18		Direct Entry, CF		
36.7	2,04	47	Total					

### Subcatchment 10S: Sub 10



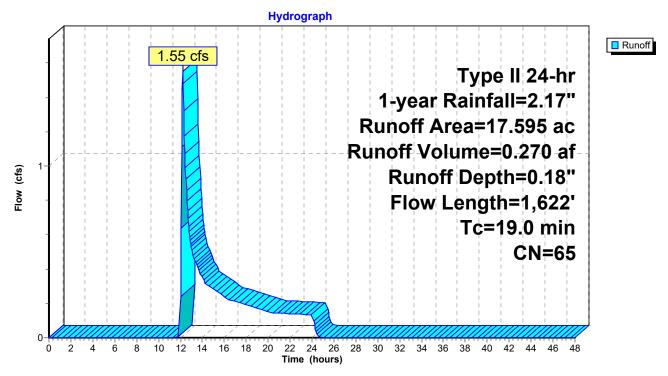
# Summary for Subcatchment 11S: Sub 11

Runoff = 1.55 cfs @ 12.20 hrs, Volume= Routed to Link SP11 :

0.270 af, Depth= 0.18"

Area	(ac) C	N Dese	cription							
0.	199 4	48 Brus	Brush, Good, HSG B							
0.	091 (	65 Brus	Brush, Good, HSG C							
			el surface/							
				oofs, HSG						
				grazed, HS						
				grazed, HS						
				over, Good,						
				over, Good,	, HSG C					
			er Surface,							
			ds, Good,							
			ds, Good,							
			ghted Aver							
	132		7% Pervio							
	463 091		% Impervie 5% Uncon							
0.	091	19.0	5% UNCON	necled						
Тс	Length	Slope	Velocity	Capacity	Description					
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	Description					
9.2	100	0.0320	0.18	(010)	Sheet Flow,					
5.2	100	0.0020	0.10		Grass: Short $n= 0.150$ P2= 2.50"					
3.9	579	0.0240	2.49		Shallow Concentrated Flow,					
0.0	010	0.0210	2.10		Unpaved Kv= 16.1 fps					
2.6	277	0.0620	1.74		Shallow Concentrated Flow,					
					Short Grass Pasture Kv= 7.0 fps					
0.7	102	0.2670	2.58		Shallow Concentrated Flow,					
					Woodland Kv= 5.0 fps					
2.6	564		3.62		Direct Entry, CF					
19.0	1,622	Total								

Subcatchment 11S: Sub 11



#### Summary for Subcatchment 12S: Sub 12

Runoff = 13.94 cfs @ 11.96 hrs, Volume= Routed to Pond 12P : 12P 0.744 af, Depth= 1.84"

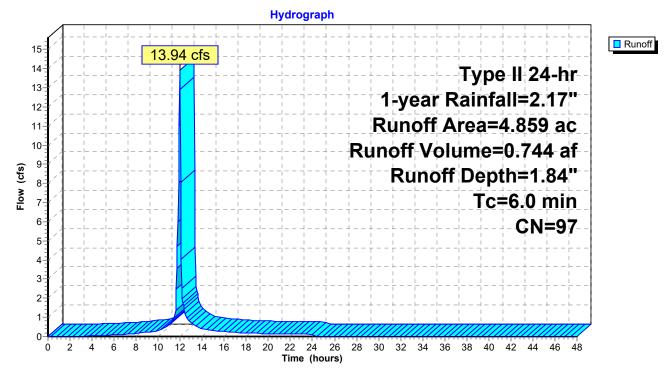
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 1-year Rainfall=2.17"

	Area	(ac)	CN	Desc	Description						
	0.	038	98	Unco	Unconnected pavement, HSG D						
	2.	251	96	Grav	Gravel surface, HSG D						
_	2.	570	98	Wate	er Surface,	, HSG D					
	4.	859	97	Weig	ghted Aver	age					
	2.	251	0 0								
	2.	608		53.6	7% Imper∖	/ious Area					
	0.	038		1.46	% Unconn	ected					
	Тс	Leng		Slope	Velocity	Capacity	Description				
_	(min)	(fee	et)	(ft/ft)	(ft/sec)	(cfs)					
	60						Direct Entry	minimum			



Direct Entry, minimum

# Subcatchment 12S: Sub 12

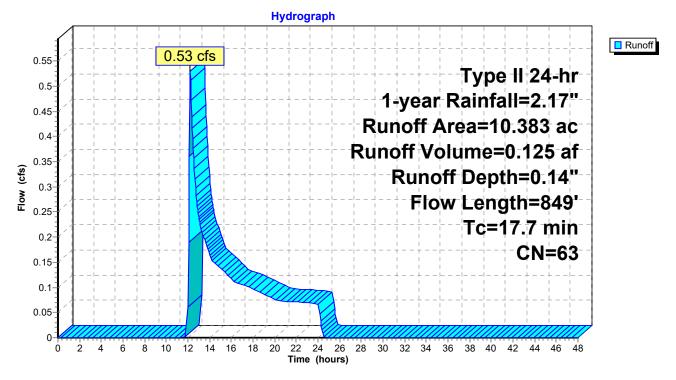


# Summary for Subcatchment 13S: Sub 13

Runoff = 0.53 cfs @ 12.21 hrs, Volume= 0.125 af, Depth= 0.14" Routed to Link SP13 :

Area	(ac)	CN Des	cription						
0	.019	98 Und	onnected p	pavement, l	HSG D				
0.	.120	96 Gra	Gravel surface, HSG D						
1.	.784	58 Mea	dow, non-	grazed, HS	G B				
4	.488			grazed, HS	SG C				
3.	.647	55 Woo	ods, Good,	HSG B					
0.	.325	70 Woo	ods, Good,	HSG C					
10.	.383	63 Wei	ghted Aver	age					
	.364	99.8	32% Pervio	us Area					
	.019		3% Impervi						
0.	.019	100	100.00% Unconnected						
-		01		0 1					
Tc	Length		Velocity	Capacity	Description				
<u>(min)</u>	(feet)		(ft/sec)	(cfs)					
10.1	100	0.0250	0.16		Sheet Flow,				
<b>-</b> 4	500	0 05 40	4.00		Grass: Short n= 0.150 P2= 2.50"				
5.4	526	0.0540	1.63		Shallow Concentrated Flow,				
0.7	~~~	0 0070	4 50		Short Grass Pasture Kv= 7.0 fps				
0.7	62	0.0970	1.56		Shallow Concentrated Flow,				
1 5	161	0 1220	1 00		Woodland Kv= 5.0 fps				
1.5	161	0.1330	1.82		Shallow Concentrated Flow,				
477	0.40	Tatal			Woodland Kv= 5.0 fps				
17.7	849	Total							

Subcatchment 13S: Sub 13

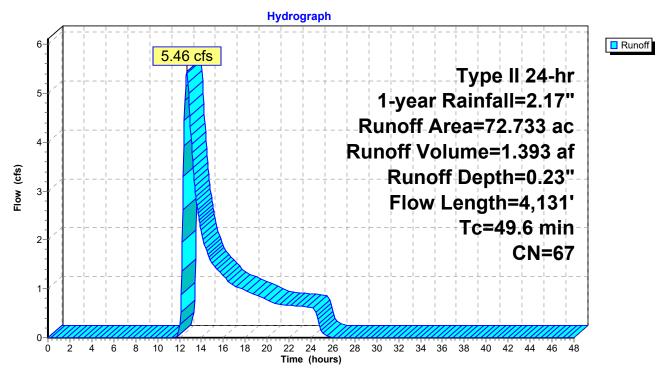


# Summary for Subcatchment 14S: Sub 14

Runoff = 5.46 cfs @ 12.67 hrs, Volume= 1 Routed to Link SP14 :

1.393 af, Depth= 0.23"

Area	(ac) C	N Desc	cription					
0.	.667 4	18 Brus	h, Good, H	ISG B				
0.	.121 6	65 Brus	h, Good, H	HSG C				
1.	1.517 73 Brush, Good, HSG D							
0.	0.307 98 Unconnected roofs, HSG D							
19.	19.939 58 Meadow, non-grazed, HSG B							
36.	.007 7	71 Mea	dow, non-g	grazed, HS	GC			
0.	.100 7	78 Mea	dow, non-	grazed, HS	G D			
0.	.759 8	30 >75%	% Grass co	over, Good	, HSG D			
3.	.148 5	55 Woo	ds, Good,	HSG B				
9.	.611 7	70 Woo	ds, Good,	HSG C				
0.	.557 7	77 Woo	ds, Good,	HSG D				
72.	.733 6	67 Weig	ghted Aver	age				
72.	.426	99.5	8% Pervio	us Area				
-	.307		% Impervi					
0.	.307	100.	00% Unco	nnected				
-		~		<b>•</b> •				
Tc	Length	Slope	Velocity	Capacity	Description			
(min)	(feet)	(ft/ft)	(ft/sec)	Capacity (cfs)				
			,		Sheet Flow,			
<u>(min)</u> 9.0	(feet) 50	(ft/ft) 0.0600	(ft/sec) 0.09		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.50"			
(min)	(feet)	(ft/ft)	(ft/sec)		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.50" Sheet Flow,			
<u>(min)</u> 9.0 5.6	(feet) 50 50	(ft/ft) 0.0600 0.0280	(ft/sec) 0.09 0.15		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.50" Sheet Flow, Grass: Short n= 0.150 P2= 2.50"			
<u>(min)</u> 9.0	(feet) 50	(ft/ft) 0.0600	(ft/sec) 0.09		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.50" Sheet Flow, Grass: Short n= 0.150 P2= 2.50" Shallow Concentrated Flow,			
(min) 9.0 5.6 6.7	(feet) 50 50 465	(ft/ft) 0.0600 0.0280 0.0270	(ft/sec) 0.09 0.15 1.15	(cfs)	Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.50" Sheet Flow, Grass: Short n= 0.150 P2= 2.50" Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps			
<u>(min)</u> 9.0 5.6	(feet) 50 50	(ft/ft) 0.0600 0.0280	(ft/sec) 0.09 0.15		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.50" Sheet Flow, Grass: Short n= 0.150 P2= 2.50" Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps Trap/Vee/Rect Channel Flow,			
(min) 9.0 5.6 6.7	(feet) 50 50 465	(ft/ft) 0.0600 0.0280 0.0270	(ft/sec) 0.09 0.15 1.15	(cfs)	Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.50" Sheet Flow, Grass: Short n= 0.150 P2= 2.50" Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps Trap/Vee/Rect Channel Flow, Bot.W=5.00' D=0.50' Z= 20.0 '/' Top.W=25.00'			
(min) 9.0 5.6 6.7 9.8	(feet) 50 50 465 1,433	(ft/ft) 0.0600 0.0280 0.0270 0.0120	(ft/sec) 0.09 0.15 1.15 2.43	(cfs)	Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.50" Sheet Flow, Grass: Short n= 0.150 P2= 2.50" Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps Trap/Vee/Rect Channel Flow, Bot.W=5.00' D=0.50' Z= 20.0 '/' Top.W=25.00' n= 0.030 Earth, grassed & winding			
(min) 9.0 5.6 6.7	(feet) 50 50 465	(ft/ft) 0.0600 0.0280 0.0270	(ft/sec) 0.09 0.15 1.15	(cfs)	Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.50" Sheet Flow, Grass: Short n= 0.150 P2= 2.50" Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps Trap/Vee/Rect Channel Flow, Bot.W=5.00' D=0.50' Z= 20.0 '/' Top.W=25.00' n= 0.030 Earth, grassed & winding Trap/Vee/Rect Channel Flow,			
(min) 9.0 5.6 6.7 9.8	(feet) 50 50 465 1,433	(ft/ft) 0.0600 0.0280 0.0270 0.0120	(ft/sec) 0.09 0.15 1.15 2.43	(cfs)	Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.50" Sheet Flow, Grass: Short n= 0.150 P2= 2.50" Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps Trap/Vee/Rect Channel Flow, Bot.W=5.00' D=0.50' Z= 20.0 '/' Top.W=25.00' n= 0.030 Earth, grassed & winding Trap/Vee/Rect Channel Flow, Bot.W=5.00' D=0.50' Z= 6.0 '/' Top.W=11.00'			
(min) 9.0 5.6 6.7 9.8	(feet) 50 50 465 1,433	(ft/ft) 0.0600 0.0280 0.0270 0.0120	(ft/sec) 0.09 0.15 1.15 2.43	(cfs)	Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.50" Sheet Flow, Grass: Short n= 0.150 P2= 2.50" Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps Trap/Vee/Rect Channel Flow, Bot.W=5.00' D=0.50' Z= 20.0 '/' Top.W=25.00' n= 0.030 Earth, grassed & winding Trap/Vee/Rect Channel Flow,			



### Subcatchment 14S: Sub 14

# Summary for Subcatchment 17S: Sub 17

Runoff = 1.46 cfs @ 12.84 hrs, Volume= 0.761 af, Depth= 0.09" Routed to Link SP17 :

Area	(ac) C	N Des	cription						
1.	139 9	96 Grav	/el surface	, HSG D					
1.		98 Unconnected roofs, HSG D							
77.	902 5	58 Mea	Meadow, non-grazed, HSG B						
0.	464 7			grazed, HS					
4.	651 7	78 Mea	dow, non-g	grazed, HS	G D				
				over, Good,					
-	-			over, Good,					
				over, Good,	, HSG D				
			ds, Good,						
-			ds, Good,						
-			ds, Good,						
-			phted Aver						
	740		2% Pervio						
	153 153		% Impervie 00% Unco						
١.	100	100.		nneclea					
Тс	Length	Slope	Velocity	Capacity	Description				
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	Decemption				
9.4	100	0.0300	0.18		Sheet Flow,				
••••					Grass: Short n= 0.150 P2= 2.50"				
5.2	681	0.0990	2.20		Shallow Concentrated Flow,				
					Short Grass Pasture Kv= 7.0 fps				
10.3	1,098	0.0650	1.78		Shallow Concentrated Flow,				
					Short Grass Pasture Kv= 7.0 fps				
10.2	1,647	0.0140	2.68	6.70	Trap/Vee/Rect Channel Flow,				
					Bot.W=2.00' D=0.50' Z= 6.0 '/' Top.W=8.00'				
					n= 0.030 Earth, grassed & winding				
35.1	3,526	Total							

Hydrograph Runoff 1.46 cfs Type II 24-hr 1-year Rainfall=2.17" Runoff Area=97.893 ac Runoff Volume=0.761 af 1 Flow (cfs) Runoff Depth=0.09" Flow Length=3,526' Tc=35.1 min **CN=60** 0-2 4 6 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 ò 8 Time (hours)

### Subcatchment 17S: Sub 17

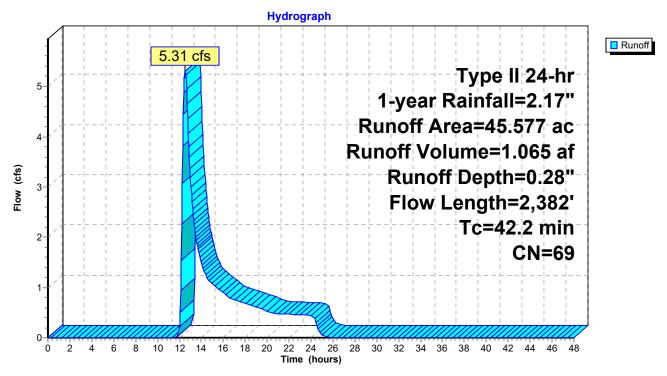
# Summary for Subcatchment 18S: Sub 18

Runoff = 5.31 cfs @ 12.52 hrs, Volume= 1.06 Routed to Link SP18 :

1.065 af, Depth= 0.28"

	Area	(ac) C	N Dese	cription						
	2.	524	48 Brus	h, Good, H	ISG B					
	4.	116	73 Brus	h, Good, H	ISG D					
*	0.	335	98 Pave	ement						
	9.	706	58 Mea	Meadow, non-grazed, HSG B						
	19.	493	71 Mea	dow, non-	grazed, HS	GC				
	8.	101	78 Mea	Meadow, non-grazed, HSG D						
	0.	649	77 Woo	ds, Good,	HSG D					
*	0.	653	96 Grav	/el road						
	45.	577	69 Weig	ghted Aver	age					
	45.	242	99.2	6% Pervio	us Area					
	0.335		0.74	% Impervi	ous Area					
	Тс	Length	Slope	Velocity	Capacity	Description				
	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)					
	11.6	100	0.0180	0.14		Sheet Flow,				
						Grass: Short n= 0.150 P2= 2.50"				
	10.5	668	0.0230	1.06		Shallow Concentrated Flow,				
						Short Grass Pasture Kv= 7.0 fps				
	4.5	459	0.0590	1.70		Shallow Concentrated Flow,				
						Short Grass Pasture Kv= 7.0 fps				
	2.7	128	0.0130	0.80		Shallow Concentrated Flow,				
						Short Grass Pasture Kv= 7.0 fps				
	12.9	1,027		1.33		Direct Entry, CF				
	42.2	2,382	Total							

Subcatchment 18S: Sub 18

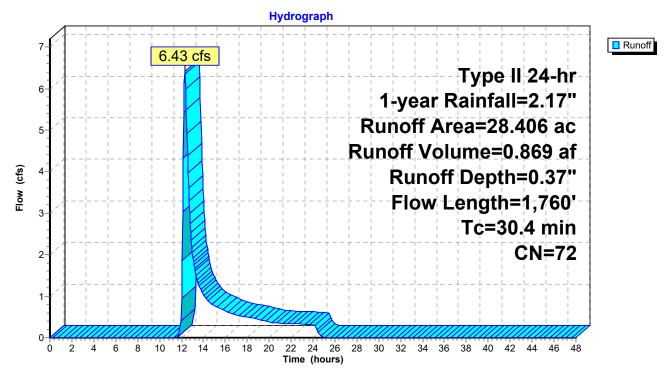


# Summary for Subcatchment 19S: Sub 19

Runoff = 6.43 cfs @ 12.32 hrs, Volume= Routed to Reach 20.1R : S-KCF-6 0.869 af, Depth= 0.37"

_	Area	(ac) (	N Dese	cription				
	0.	227	65 Brus	h, Good, H	ISG C			
	0.	105	73 Brus	h, Good, I	ISG D			
	2.120 58 Meadow, non-grazed, HSG B							
	18.	358	GC					
	7.	318	78 Mea	dow, non-g	grazed, HS	G D		
	0.	153	98 Wate	er Surface	, HSG D			
	0.	125	77 Woo	ds, Good,	HSG D			
	28.	406	72 Weig	ghted Aver	age			
		253		6% Pervio				
	0.	153	0.54	0.54% Impervious Area				
	-		~		<b>•</b> • •			
	Tc	Length	Slope	Velocity	Capacity	Description		
	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)			
	8.2	100	0.0430	0.20		Sheet Flow,		
		0.40				Grass: Short n= 0.150 P2= 2.50"		
	1.5	212	0.1120	2.34		Shallow Concentrated Flow,		
	40.0	005	0 0000	4 00		Short Grass Pasture Kv= 7.0 fps		
	10.0	635	0.0230	1.06		Shallow Concentrated Flow,		
	10.7	010	0 0000	1 07		Short Grass Pasture Kv= 7.0 fps		
	10.7	813	0.0330	1.27		Shallow Concentrated Flow,		
_	00.4	4 700	<b>T</b> . 4 . 1			Short Grass Pasture Kv= 7.0 fps		
	30.4	1,760	Total					

Subcatchment 19S: Sub 19

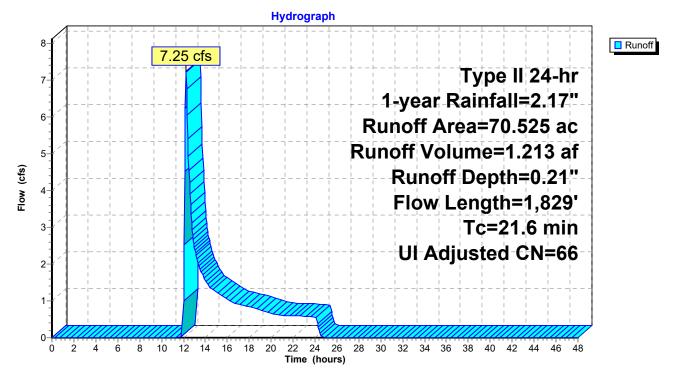


# Summary for Subcatchment 20S: Sub 20

Runoff = 7.25 cfs @ 12.23 hrs, Volume= 1.213 af, Depth= 0.21" Routed to Reach 20.1R : S-KCF-6

Area (a	ac) C	N Adj	Descript	tion						
0.5	508 9	98	Unconn	ected roofs	, HSG D					
29.5	509 5	58	Meadow	Meadow, non-grazed, HSG B						
23.0	)16 7	'1	Meadow, non-grazed, HSG C							
12.5		'8		Meadow, non-grazed, HSG D						
		61		rass cover, Good, HSG B						
-		55		Good, HSC						
-		<u>′0</u>		Woods, Good, HSG C						
	-	7		Woods, Good, HSG D						
		8		urface, HS						
-		8		Good, HSG						
		)5 7		Good, HSG						
		73 VG		Brush, Good, HSG D						
		96		Gravel surface, HSG D						
70.5		66 66	Weighted Average, UI Adjusted 99.22% Pervious Area							
69.9										
	552 508		0.78% Impervious Area 92.03% Unconnected							
0.5	000		92.03%	Unconnect	eu					
Тс	Length	Slope	Velocity	Capacity	Description					
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	Decemption					
6.7	100	0.0700	0.25	(0.0)	Sheet Flow,					
0.7	100	0.0700	0.20		Grass: Short n= 0.150 P2= 2.50"					
2.6	259	0.0580	1.69		Shallow Concentrated Flow,					
2.0	200	0.0000			Short Grass Pasture Kv= 7.0 fps					
8.8	703	0.0360	1.33		Shallow Concentrated Flow,					
					Short Grass Pasture Kv= 7.0 fps					
3.5	767		3.65		Direct Entry, CF					
21.6	1,829	Total								

Subcatchment 20S: Sub 20

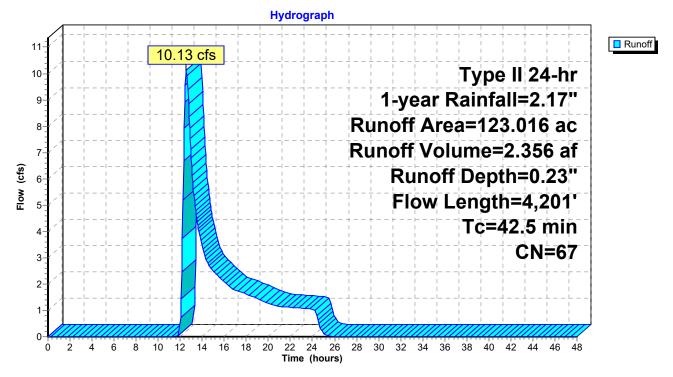


# Summary for Subcatchment 21S: Sub 21

Runoff = 10.13 cfs @ 12.56 hrs, Volume= Routed to Reach 22.1R : S-KCF-5 2.356 af, Depth= 0.23"

Area	(ac) C	N Desc	ription				
2.	223 9	6 Grav	el surface	, HSG D			
0.	950 9	8 Unco	onnected r	oofs, HSG	D		
50.	366 5	58 Mea	dow, non-g	grazed, HS	G B		
57.	844 7	1 Mea	dow, non-g	grazed, HS	GC		
3.				grazed, HS	G D		
3.	145 9	98 Wate	er Surface	, HSG D			
			Woods, Good, HSG B				
		'0 Woo	Woods, Good, HSG C				
			>75% Grass cover, Good, HSG B				
				over, Good	HSG C		
			h, Good, H				
0.	<u>344 6</u>	65 Brus	h, Good, H	ISG C			
123.	016 6	67 Weig	hted Aver	age			
118.		96.6	7% Pervio	us Area			
	095	3.33	3.33% Impervious Area				
0.	950	23.2	23.20% Unconnected				
_							
	1 11	~	N / N / M	<b>•</b> ••			
Tc	Length	Slope	Velocity	Capacity	Description		
(min)	(feet)	(ft/ft)	(ft/sec)	Capacity (cfs)			
					Sheet Flow,		
<u>(min)</u> 12.1	(feet) 100	(ft/ft) 0.0160	(ft/sec) 0.14		Sheet Flow, Grass: Short n= 0.150 P2= 2.50"		
(min)	(feet)	(ft/ft)	(ft/sec)		Sheet Flow, Grass: Short n= 0.150 P2= 2.50" Shallow Concentrated Flow,		
(min) 12.1 12.6	(feet) 100 1,112	(ft/ft) 0.0160 0.0440	(ft/sec) 0.14 1.47	(cfs)	Sheet Flow, Grass: Short n= 0.150 P2= 2.50" Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps		
<u>(min)</u> 12.1	(feet) 100	(ft/ft) 0.0160	(ft/sec) 0.14		Sheet Flow, Grass: Short n= 0.150 P2= 2.50" Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps Trap/Vee/Rect Channel Flow,		
(min) 12.1 12.6	(feet) 100 1,112	(ft/ft) 0.0160 0.0440	(ft/sec) 0.14 1.47	(cfs)	Sheet Flow, Grass: Short n= 0.150 P2= 2.50" Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps Trap/Vee/Rect Channel Flow, Bot.W=6.00' D=0.50' Z= 9.0 '/' Top.W=15.00'		
(min) 12.1 12.6 2.2	(feet) 100 1,112 346	(ft/ft) 0.0160 0.0440 0.0150	(ft/sec) 0.14 1.47 2.58	(cfs) 13.52	Sheet Flow, Grass: Short n= 0.150 P2= 2.50" Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps Trap/Vee/Rect Channel Flow, Bot.W=6.00' D=0.50' Z= 9.0 '/' Top.W=15.00' n= 0.035 Earth, dense weeds		
(min) 12.1 12.6	(feet) 100 1,112	(ft/ft) 0.0160 0.0440	(ft/sec) 0.14 1.47	(cfs)	Sheet Flow, Grass: Short n= 0.150 P2= 2.50" Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps Trap/Vee/Rect Channel Flow, Bot.W=6.00' D=0.50' Z= 9.0 '/' Top.W=15.00' n= 0.035 Earth, dense weeds Trap/Vee/Rect Channel Flow,		
(min) 12.1 12.6 2.2	(feet) 100 1,112 346	(ft/ft) 0.0160 0.0440 0.0150	(ft/sec) 0.14 1.47 2.58	(cfs) 13.52	Sheet Flow, Grass: Short n= 0.150 P2= 2.50" Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps Trap/Vee/Rect Channel Flow, Bot.W=6.00' D=0.50' Z= 9.0 '/' Top.W=15.00' n= 0.035 Earth, dense weeds Trap/Vee/Rect Channel Flow, Bot.W=9.00' D=0.50' Z= 2.0 '/' Top.W=11.00'		
(min) 12.1 12.6 2.2 8.3	(feet) 100 1,112 346 1,504	(ft/ft) 0.0160 0.0440 0.0150 0.0150	(ft/sec) 0.14 1.47 2.58 3.03	(cfs) 13.52 15.15	Sheet Flow, Grass: Short n= 0.150 P2= 2.50" Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps Trap/Vee/Rect Channel Flow, Bot.W=6.00' D=0.50' Z= 9.0 '/' Top.W=15.00' n= 0.035 Earth, dense weeds Trap/Vee/Rect Channel Flow, Bot.W=9.00' D=0.50' Z= 2.0 '/' Top.W=11.00' n= 0.035 Earth, dense weeds		
(min) 12.1 12.6 2.2	(feet) 100 1,112 346	(ft/ft) 0.0160 0.0440 0.0150	(ft/sec) 0.14 1.47 2.58	(cfs) 13.52	Sheet Flow, Grass: Short n= 0.150 P2= 2.50" Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps Trap/Vee/Rect Channel Flow, Bot.W=6.00' D=0.50' Z= 9.0 '/' Top.W=15.00' n= 0.035 Earth, dense weeds Trap/Vee/Rect Channel Flow, Bot.W=9.00' D=0.50' Z= 2.0 '/' Top.W=11.00' n= 0.035 Earth, dense weeds Trap/Vee/Rect Channel Flow,		
(min) 12.1 12.6 2.2 8.3	(feet) 100 1,112 346 1,504	(ft/ft) 0.0160 0.0440 0.0150 0.0150	(ft/sec) 0.14 1.47 2.58 3.03	(cfs) 13.52 15.15	Sheet Flow, Grass: Short n= 0.150 P2= 2.50" Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps Trap/Vee/Rect Channel Flow, Bot.W=6.00' D=0.50' Z= $9.0$ '/' Top.W=15.00' n= 0.035 Earth, dense weeds Trap/Vee/Rect Channel Flow, Bot.W=9.00' D=0.50' Z= $2.0$ '/' Top.W=11.00' n= 0.035 Earth, dense weeds Trap/Vee/Rect Channel Flow, Bot.W=9.00' D=0.50' Z= $2.0$ '/' Top.W=11.00'		
(min) 12.1 12.6 2.2 8.3	(feet) 100 1,112 346 1,504	(ft/ft) 0.0160 0.0440 0.0150 0.0150	(ft/sec) 0.14 1.47 2.58 3.03	(cfs) 13.52 15.15	Sheet Flow, Grass: Short n= 0.150 P2= 2.50" Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps Trap/Vee/Rect Channel Flow, Bot.W=6.00' D=0.50' Z= 9.0 '/' Top.W=15.00' n= 0.035 Earth, dense weeds Trap/Vee/Rect Channel Flow, Bot.W=9.00' D=0.50' Z= 2.0 '/' Top.W=11.00' n= 0.035 Earth, dense weeds Trap/Vee/Rect Channel Flow,		





# Summary for Subcatchment 22S: Sub 22

[47] Hint: Peak is 276% of capacity of segment #6

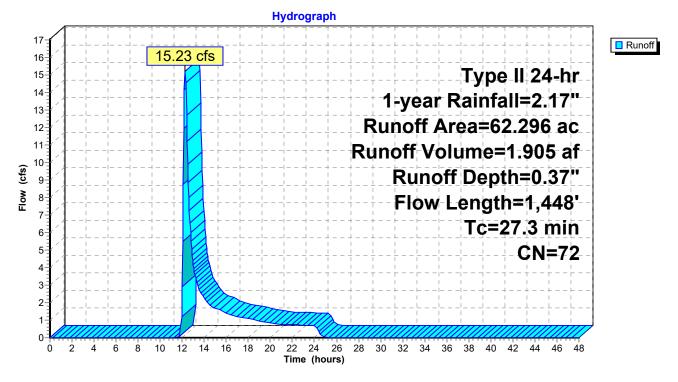
15.23 cfs @ 12.27 hrs, Volume= 1.905 af, Depth= 0.37" Runoff = Routed to Link SP22 :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 1-year Rainfall=2.17"

Area	(ac) C	N Desc	cription							
1.	623 9	96 Grav	el surface	, HSG D						
4.	694 5	58 Mea	dow, non-g	grazed, HS	G B					
			Meadow, non-grazed, HSG C							
		78 Meadow, non-grazed, HSG D								
	0.118 55 Woods, Good, HSG B									
			ds, Good,							
			ds, Good,							
				avement, I	HSG D					
			h, Good, H							
-			h, Good, H							
			phted Aver							
	923		0% Pervio							
	373		0.60% Impervious Area 100.00% Unconnected							
0.	373	100.		nnected						
Тс	Length	Slope	Velocity	Capacity	Description					
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)						
7.6	100	0.0520	0.22		Sheet Flow,					
					Grass: Short n= 0.150 P2= 2.50"					
1.7	319	0.0420	3.07		Shallow Concentrated Flow,					
					Grassed Waterway Kv= 15.0 fps					
7.8	360	0.0120	0.77		Shallow Concentrated Flow,					
					Short Grass Pasture Kv= 7.0 fps					
7.4	452	0.0210	1.01		Shallow Concentrated Flow,					
0.0	04	0.0400			Short Grass Pasture Kv= 7.0 fps					
0.9	61	0.0490	1.11		Shallow Concentrated Flow,					
1.0	150	0 0000	1 20	5 E 4	Woodland Kv= 5.0 fps					
1.9	156	0.0020	1.38	5.51	Trap/Vee/Rect Channel Flow, Bot.W=2.00' D=1.00' Z= 2.0 '/' Top.W=6.00'					
					n= 0.035 Earth, dense weeds					
		<b>T</b> ( )			11- 0.000 Latti, uchoc weeus					

27.3 1,448 Total

### Subcatchment 22S: Sub 22



### Summary for Subcatchment 23.1S: Sub 23.1

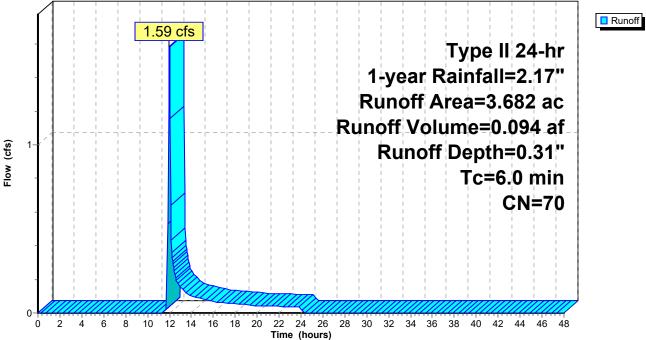
Runoff = 1.59 cfs @ 12.00 hrs, Volume= Routed to Pond 23.1P : 23.1P 0.094 af, Depth= 0.31"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 1-year Rainfall=2.17"

	Area	(ac)	CN	Desc	cription						
*	0.	928	96	Grav	Gravel						
	2.	257	58		Meadow, non-grazed, HSG B						
	0.	497	78	Mea	dow, non-g	grazed, HS	SG D				
	3.682 70 Weighted Average										
	3.	682		100.	00% Pervi	ous Area					
	Tc (min)	Leng (fee		Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description				
	6.0						Direct Entry,				
					•	L ( . L					

#### Subcatchment 23.1S: Sub 23.1



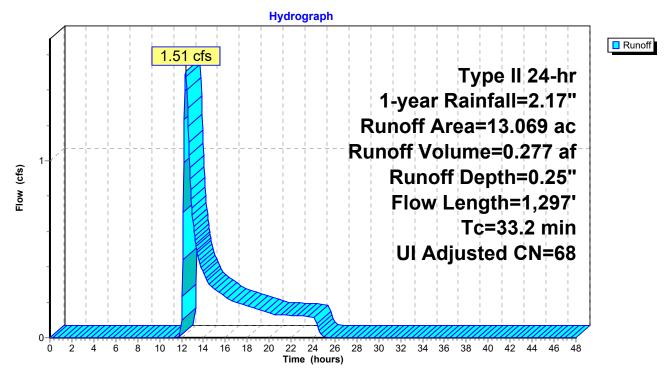


# Summary for Subcatchment 23S: Sub 23

Runoff = 1.51 cfs @ 12.39 hrs, Volume= 0.277 af, Depth= 0.25" Routed to Link SP23 :

Area	(ac) C	N Adj	Descript	tion					
0	.012	48	Brush, C	Good, HSG	B				
0	.040	65	Brush, C	Brush, Good, HSG C					
0	.387	98	Unconn	Unconnected roofs, HSG D					
2	.687	58	Meadow	/, non-graz	ed, HSG B				
9	.525	71	Meadow	leadow, non-grazed, HSG C					
0	.031	55	Woods,	Woods, Good, HSG B					
0	.387	61	>75% G	rass cover	, Good, HSG B				
13	.069	69 68	Weighte	d Average	, UI Adjusted				
12	.682		97.04%	Pervious A	Area				
0	.387		2.96% Impervious Area						
0	.387		100.00% Unconnected						
Tc	0	Slope	Velocity	Capacity	Description				
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)					
14.2	100	0.0760	0.12		Sheet Flow,				
					Woods: Light underbrush n= 0.400 P2= 2.50"				
15.8	892	0.0180	0.94		Shallow Concentrated Flow,				
					Short Grass Pasture Kv= 7.0 fps				
2.8	262	0.0490	1.55		Shallow Concentrated Flow,				
					Short Grass Pasture Kv= 7.0 fps				
0.4	43		1.79		Direct Entry,				
33.2	1,297	Total							

Subcatchment 23S: Sub 23

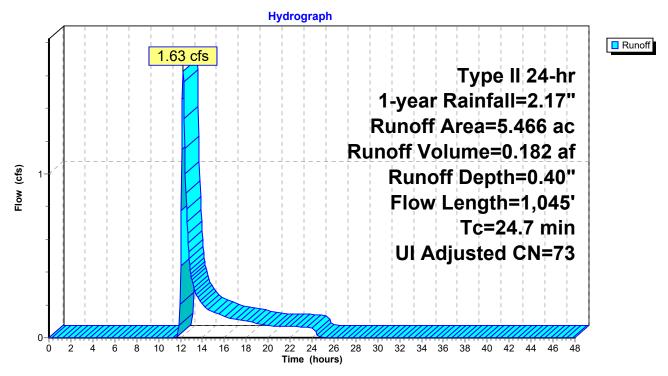


# Summary for Subcatchment 24S: Sub 24

Runoff = 1.63 cfs @ 12.23 hrs, Volume= 0.182 af, Depth= 0.40" Routed to Link SP24 :

0.036 96 Gravel surface, HSG D					
	Gravel surface, HSG D				
0.421 98 Unconnected roofs, HSG D	Unconnected roofs, HSG D				
0.252 58 Meadow, non-grazed, HSG B					
2.730 71 Meadow, non-grazed, HSG C					
0.093 61 >75% Grass cover, Good, HSG B					
1.916 74 >75% Grass cover, Good, HSG C					
0.018 70 Woods, Good, HSG C					
5.466 74 73 Weighted Average, UI Adjusted					
5.045 92.30% Pervious Area					
0.421 7.70% Impervious Area					
0.421 100.00% Unconnected					
To Longth Clans Malasity Consists Description					
Tc Length Slope Velocity Capacity Description					
(min) (feet) (ft/ft) (ft/sec) (cfs)					
17.9 100 0.0060 0.09 Sheet Flow,					
Grass: Short n= 0.150 P2= 2.50" 2.2 192 0.0450 1.48 <b>Shallow Concentrated Flow,</b>					
2.2 192 0.0450 1.48 Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps					
1.4 100 0.0300 1.21 <b>Shallow Concentrated Flow,</b>					
Short Grass Pasture Kv= 7.0 fps					
0.8 144 0.0220 3.15 4.73 <b>Trap/Vee/Rect Channel Flow,</b>					
Bot.W=2.00' D=0.50' Z= 2.0 '/' Top.W=4.00'					
n= 0.035 Earth, dense weeds					
2.4 509 0.0220 3.47 13.02 Trap/Vee/Rect Channel Flow,					
Bot.W=6.00' D=0.50' Z= 3.0 '/' Top.W=9.00'					
n= 0.035 Earth, dense weeds					
24.7 1,045 Total					

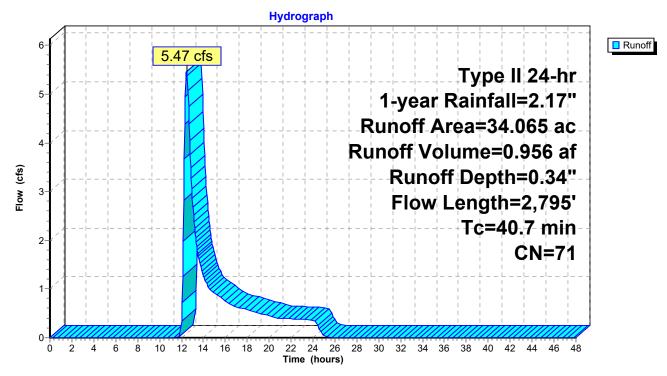
Subcatchment 24S: Sub 24



# Summary for Subcatchment 43S: Subcat 43

Runoff = 5.47 cfs @ 12.47 hrs, Volume= Routed to Reach 44R : 0.956 af, Depth= 0.34"

	Area	(ac)	CN	Desc	ription				
* 1.452 96 Gravel Impervious									
0.107 48 Brush, Good, HSG B									
	0.109 65 Brush, Good, HSG C								
	2.252 73 Brush, Good, HSG D								
	0.186 30 Meadow, non-grazed, HSG A								
		295	58			grazed, HS			
		175	71			grazed, HS			
		209	78			grazed, HS			
		092 648	98			oofs, HSG	C		
		040 349	30 55		ds, Good, ds, Good,				
	-	914	70		ds, Good, ds, Good,				
		277	77		ds, Good, ds, Good,				
		065	71		hted Aver				
	-	973			3% Pervio				
	0.	092		0.27	% Impervie	ous Area			
	0.092 100.00% Unc				00% Ünco	nnected			
	_		_			•	<b>–</b>		
	Tc	Length		Slope	Velocity	Capacity	Description		
	(min)	(feet)		<u>(ft/ft)</u>	(ft/sec)	(cfs)			
	9.4	100	0.0	0300	0.18		Sheet Flow,		
	26.2	4 556		0000	0.00		Grass: Short n= 0.150 P2= 2.50"		
	26.2	1,556	0.0	0200	0.99		Shallow Concentrated Flow,		
	5.1	1,139		0320	3.76	13.15	Short Grass Pasture Kv= 7.0 fps Trap/Vee/Rect Channel Flow,		
	0.1	1,100	0.0	0020	0.70	10.10	Bot.W=6.00' D=0.50' Z= 2.0 '/' Top.W=8.00'		
							n= 0.040 Winding stream, pools & shoals		
	40.7	2,795	To	otal					
		_,. 00							



# Subcatchment 43S: Subcat 43

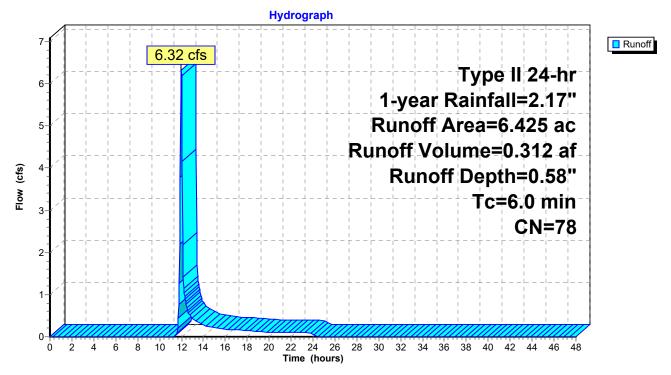
### Summary for Subcatchment 44.1S: 44.1S

Runoff = 6.32 cfs @ 11.98 hrs, Volume= Routed to Pond 44.1P : 44.1P 0.312 af, Depth= 0.58"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 1-year Rainfall=2.17"

	Area	(ac)	CN	Desc	ription						
*	0.	766	96	Grav	Gravel						
	1.	461	77	Woo	ds, Good,	HSG D					
	1.	511	71	Mea	dow, non-g	grazed, HS	SG C				
_	2.	.687 78 Meadow, non-grazed, HSG D									
	6.425 78 Weighted Average					age					
	6.425 100.00% Pervious Area					ous Area					
	Tc (min)	Leng (fee		Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description				
	6.0						Direct Entry,				

#### Subcatchment 44.1S: 44.1S

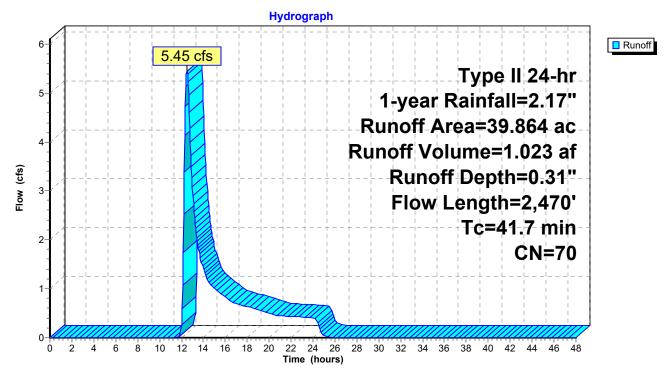


# Summary for Subcatchment 44S: 44S

Runoff = 5.45 cfs @ 12.50 hrs, Volume= Routed to Reach 45R : 1.023 af, Depth= 0.31"

	Area	(ac) C	N Des	cription						
*	1.	144	96 Gravel							
	6.222 55 Woods, Good, HSG B									
	7.156 70 Woods, Good, HSG C									
					grazed, HS					
					grazed, HS	GC				
				ods, Good,						
					grazed, HS					
					grazed, HS	G D				
				ds, Good,						
				ghted Aver						
	39.	864	100.	00% Pervi	ous Area					
	Та	المربع والمراجع	Clana	Valasity	Consolt	Description				
	Tc (min)	Length	Slope	Velocity	Capacity	Description				
	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)					
	21.9	100	0.0260	0.08		Sheet Flow,				
	9.2	409	0.0220	0.74		Woods: Light underbrush n= 0.400 P2= 2.50" Shallow Concentrated Flow,				
	9.2	409	0.0220	0.74		Woodland Kv= 5.0 fps				
	5.2	715	0.0320	2.31	5.55	Parabolic Channel,				
	0.2	710	0.0020	2.01	0.00	W=18.00' D=0.20' Area=2.4 sf Perim=18.0'				
						n= 0.030 Earth, grassed & winding				
	5.4	1,246	0.0350	3.83	14.37	Trap/Vee/Rect Channel Flow,				
	0.1	1,210	0.0000	0.00		Bot.W=6.00' D=0.50' Z= 3.0 '/' Top.W=9.00'				
						n= 0.040 Earth, cobble bottom, clean sides				
	41.7	2,470	Total			· · · · · · · · · · · · · · · · · · ·				
		_, •								

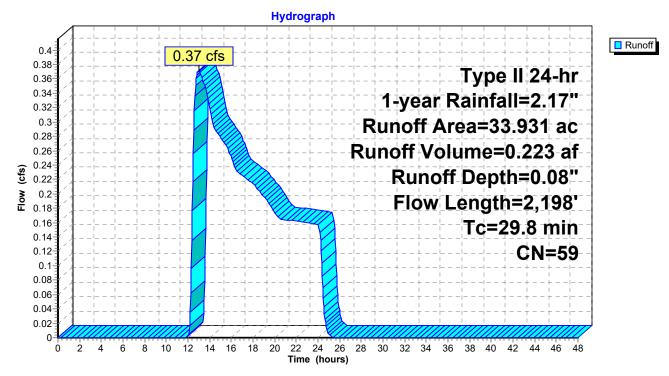
Subcatchment 44S: 44S



# Summary for Subcatchment 45S: Subcat 45

Runoff = 0.37 cfs @ 13.00 hrs, Volume= 0.223 af, Depth= 0.08" Routed to Link SP43 :

Area	(ac) C	N Desc	cription					
1.	1.898 48 Brush, Good, HSG B							
0.038 65 Brush, Good, HSG C								
1.297 30 Meadow, non-grazed, HSG A								
-	13.561 58 Meadow, non-grazed, HSG B							
	7.566 71 Meadow, non-grazed, HSG C							
				grazed, HS				
				oofs, HSG	C			
			ds, Good,					
			ds, Good,					
			ds, Good,					
			ds, Good,					
			phted Aver					
	857		8% Pervio					
	074		% Impervi					
0.	074	100.	00% Unco	nneclea				
Тс	Length	Slope	Velocity	Capacity	Description			
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	Description			
12.4	100	0.0150	0.13	(0.0)	Sheet Flow,			
12.7	100	0.0100	0.10		Grass: Short $n= 0.150$ P2= 2.50"			
6.5	396	0.0210	1.01		Shallow Concentrated Flow,			
0.0		0.02.0			Short Grass Pasture Kv= 7.0 fps			
1.8	223	0.0900	2.10		Shallow Concentrated Flow,			
					Short Grass Pasture Kv= 7.0 fps			
3.4	196	0.0360	0.95		Shallow Concentrated Flow,			
					Woodland Kv= 5.0 fps			
5.7	1,283	0.0370	3.77	10.38	Trap/Vee/Rect Channel Flow,			
					Bot.W=4.00' D=0.50' Z= 3.0 '/' Top.W=7.00'			
					n= 0.040 Winding stream, pools & shoals			
29.8	2,198	Total						



### Subcatchment 45S: Subcat 45

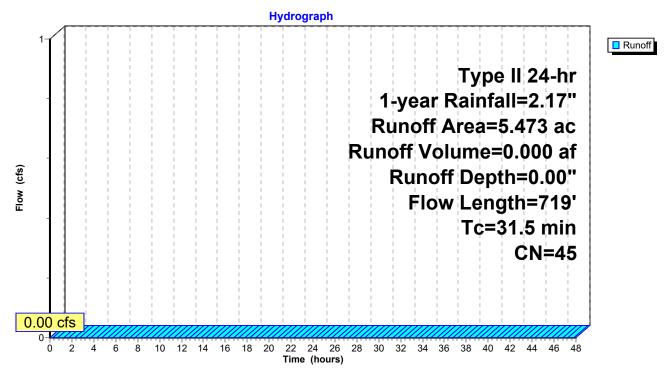
# Summary for Subcatchment 46.1S: 46.1S

[45] Hint: Runoff=Zero

Runoff = 0.00 cfs @ 0.00 hrs, Volume= Routed to Pond 46.1P : 46.1P 0.000 af, Depth= 0.00"

	Area	(ac) (	CN Des	cription				
	0.196 30 Meadow, non-grazed, HSG A							
	0.132 58 Meadow, non-grazed, HSG B							
2.928 55 Woods, Good, HSG B								
			30 Brus	sh, Good, H	HSG A			
*			96 Grav					
_	2.	010	30 Woo	ods, Good,	HSG A			
	-			ghted Aver	0			
	5.	473	100.	00% Pervi	ous Area			
	т.	1	01	\/_l!t.	O a ma aite a	Description		
	Tc (min)	Length		Velocity	Capacity	Description		
	(min)	(feet)	. ,	(ft/sec)	(cfs)			
	22.2	100	0.0250	0.08		Sheet Flow,		
		000	0 0000	0.04		Woods: Light underbrush n= 0.400 P2= 2.50"		
	7.7	389	0.0280	0.84		Shallow Concentrated Flow,		
	4.0	000	0 0000	0.40		Woodland Kv= 5.0 fps		
	1.6	230	0.2300	2.40		Shallow Concentrated Flow,		
_						Woodland Kv= 5.0 fps		
	31.5	719	Total					

Subcatchment 46.1S: 46.1S



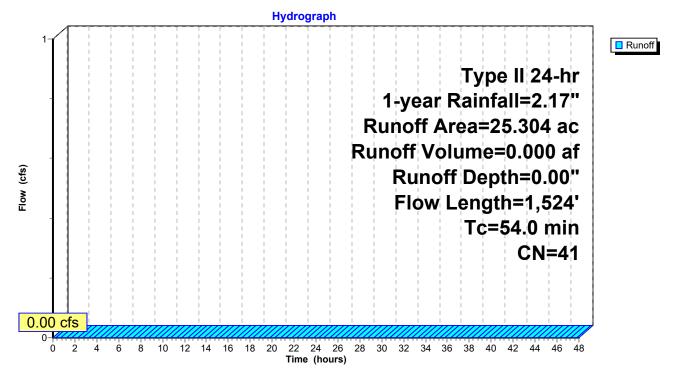
# Summary for Subcatchment 46S: Subcat 46

[45] Hint: Runoff=Zero

Runoff = 0.00 cfs @ 0.00 hrs, Volume= Routed to Link SP46 : 0.000 af, Depth= 0.00"

	Area	(ac) C	N Dese	cription					
	0.	617 3	30 Brus	Brush, Good, HSG A					
	0.			Brush, Good, HSG B					
	2.				grazed, HS	GA			
	1.				grazed, HS				
	12.	350 3		ds, Good,					
	6.			ds, Good,					
	1.	123		ds, Good,					
*	0.	506 9	96 Grav	/el					
	25.	304 4	11 Weid	ghted Aver	ade				
		304		00% Pervi					
	Тс	Length	Slope	Velocity	Capacity	Description			
	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)				
	9.4	100	0.0300	0.18		Sheet Flow,			
	-					Grass: Short n= 0.150 P2= 2.50"			
	36.5	774	0.0050	0.35		Shallow Concentrated Flow,			
						Woodland Kv= 5.0 fps			
	5.2	153	0.0050	0.49		Shallow Concentrated Flow,			
						Short Grass Pasture Kv= 7.0 fps			
	1.3	245	0.4120	3.21		Shallow Concentrated Flow,			
						Woodland Kv= 5.0 fps			
	1.2	79	0.0510	1.13		Shallow Concentrated Flow,			
						Woodland Kv= 5.0 fps			
	0.4	173		6.95		Lake or Reservoir,			
						Mean Depth= 1.50'			
	54.0	1,524	Total						

# Subcatchment 46S: Subcat 46



# Summary for Subcatchment 47S: Sub 47

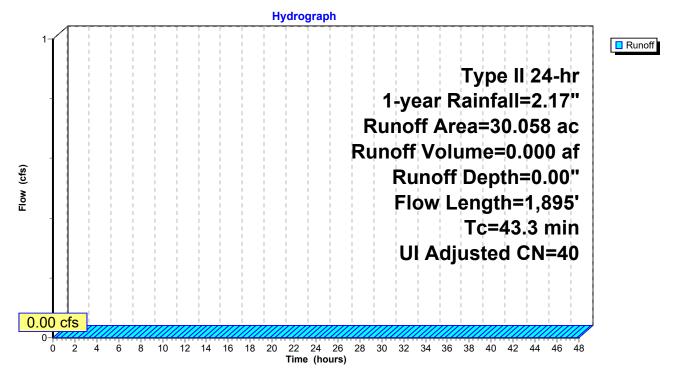
[45] Hint: Runoff=Zero

Runoff = 0.00 cfs @ 0.00 hrs, Volume= Routed to Link SP47 :

0.000 af, Depth= 0.00"

Area	(ac) (	CN Adj	Descript	tion				
0.	.377	98	Unconn	ected pave	ment, HSG D			
0.	432	96		surface, HS				
0.	498	39	, Good, HSG A					
2.	.024	61	>75% G	rass cover	, Good, HSG B			
17.	.600	30	Meadow	/, non-graz	ed, HSG A			
2.	644	58	Meadow	, non-graz	ed, HSG B			
0.	.051	30	Brush, C	Good, HSG	A			
0.	702	48	Brush, C	Good, HSG	В			
1.	.083	30	Woods,	Good, HSC	G A			
4.	.647	55	Woods,	Good, HSC	G B			
30.	.058	41 40	Weighte	d Average	, UI Adjusted			
29.	.681		98.75%	98.75% Pervious Area				
0.	377		1.25% l	mpervious	Area			
0.	0.377			6 Unconne	cted			
Tc	Length	Slope	Velocity	Capacity	Description			
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)				
15.3	100	0.2550	0.11		Sheet Flow,			
					Woods: Dense underbrush n= 0.800 P2= 2.50"			
25.9	1,688	0.0240	1.08		Shallow Concentrated Flow,			
					Short Grass Pasture Kv= 7.0 fps			
2.1	107	0.0280	0.84		Shallow Concentrated Flow,			
					Woodland Kv= 5.0 fps			
43.3	1,895	Total						

#### Subcatchment 47S: Sub 47



#### Summary for Reach 6R: W-NSD-35

Inflow Area = 58.963 ac. 0.00% Impervious, Inflow Depth = 0.28" for 1-year event Inflow 5.24 cfs @ 12.85 hrs, Volume= 1.378 af = 4.91 cfs @ 13.27 hrs, Volume= Outflow = 1.378 af, Atten= 6%, Lag= 25.1 min Routed to Link SP5 : Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Max. Velocity= 2.19 fps, Min. Travel Time= 14.3 min Avg. Velocity = 0.79 fps, Avg. Travel Time= 39.8 min Peak Storage= 4,220 cf @ 13.03 hrs Average Depth at Peak Storage= 0.20', Surface Width= 12.40' Bank-Full Depth= 1.00' Flow Area= 16.0 sf, Capacity= 88.34 cfs 10.00' x 1.00' deep channel, n= 0.036 Side Slope Z-value= 6.0 '/' Top Width= 22.00' Length= 1,882.0' Slope= 0.0276 '/' Inlet Invert= 542.00', Outlet Invert= 490.00' ‡ Reach 6R: W-NSD-35 Hydrograph Inflow 5.24 cfs Outflow Inflow Area=58.963 ac 4.91 cfs 5 Avg. Flow Depth=0.20' Max Vel=2.19 fps 4 n=0.036 -low (cfs) L=1,882.0' 3 S=0.0276 '/' Capacity=88.34 cfs 2 1 0 10 12 14 16 18 Ó 2 4 6 8 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48

Time (hours)

### Summary for Reach 13.1R:

[79] Warning: Submerged Pond 12P Primary device # 1 OUTLET by 0.08'

 Inflow Area =
 4.859 ac, 53.67% Impervious, Inflow Depth =
 1.84" for 1-year event

 Inflow =
 1.40 cfs @
 12.38 hrs, Volume=
 0.745 af

 Outflow =
 1.40 cfs @
 12.41 hrs, Volume=
 0.745 af, Atten= 0%, Lag= 2.1 min

 Routed to Reach 13.2R :
 12.41 hrs, Volume=
 1.40 cfs @

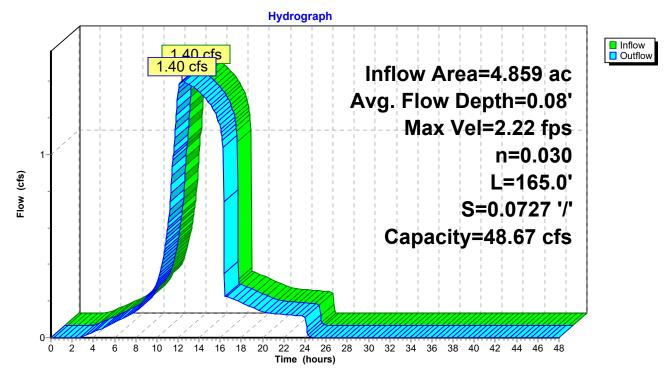
Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Max. Velocity= 2.22 fps, Min. Travel Time= 1.2 min Avg. Velocity = 1.23 fps, Avg. Travel Time= 2.2 min

Peak Storage= 104 cf @ 12.39 hrs Average Depth at Peak Storage= 0.08', Surface Width= 9.29' Bank-Full Depth= 0.50' Flow Area= 8.0 sf, Capacity= 48.67 cfs

6.00' x 0.50' deep channel, n= 0.030 Earth, grassed & winding Side Slope Z-value= 20.0 '/' Top Width= 26.00' Length= 165.0' Slope= 0.0727 '/' Inlet Invert= 504.00', Outlet Invert= 492.00'

‡

Reach 13.1R:



### Summary for Reach 13.2R:

[62] Hint: Exceeded Reach 13.1R OUTLET depth by 0.05' @ 12.45 hrs

 Inflow Area =
 4.859 ac, 53.67% Impervious, Inflow Depth =
 1.84" for 1-year event

 Inflow =
 1.40 cfs @
 12.41 hrs, Volume=
 0.745 af

 Outflow =
 1.40 cfs @
 12.44 hrs, Volume=
 0.745 af, Atten= 0%, Lag= 1.4 min

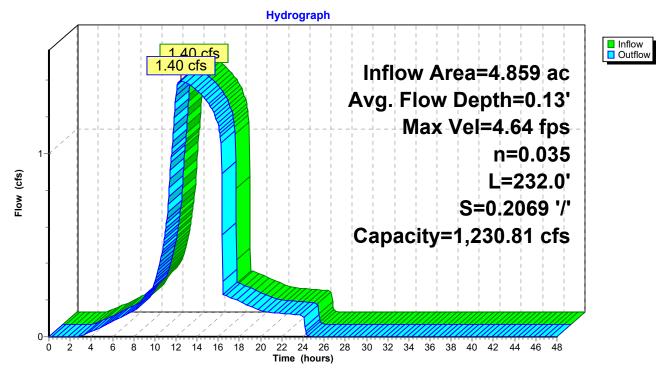
 Routed to Link SP13 :
 1.40 cfs @
 1.40 cfs @
 1.40 cfs @

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Max. Velocity= 4.64 fps, Min. Travel Time= 0.8 min Avg. Velocity = 2.80 fps, Avg. Travel Time= 1.4 min

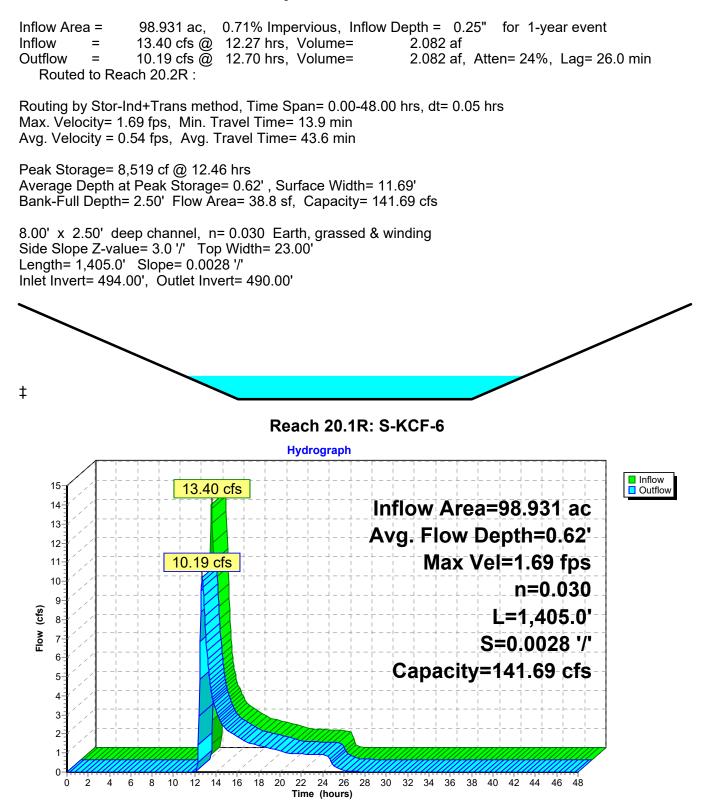
Peak Storage= 70 cf @ 12.42 hrs Average Depth at Peak Storage= 0.13', Surface Width= 2.53' Bank-Full Depth= 4.00' Flow Area= 40.0 sf, Capacity= 1,230.81 cfs

2.00' x 4.00' deep channel, n= 0.035 Earth, dense weeds Side Slope Z-value= 2.0 '/' Top Width= 18.00' Length= 232.0' Slope= 0.2069 '/' Inlet Invert= 492.00', Outlet Invert= 444.00'

Reach 13.2R:



#### Summary for Reach 20.1R: S-KCF-6



#### Summary for Reach 20.2R:

[62] Hint: Exceeded Reach 20.1R OUTLET depth by 0.01' @ 25.10 hrs

 Inflow Area =
 98.931 ac, 0.71% Impervious, Inflow Depth =
 0.25" for 1-year event

 Inflow =
 10.19 cfs @
 12.70 hrs, Volume=
 2.082 af

 Outflow =
 9.34 cfs @
 12.99 hrs, Volume=
 2.082 af, Atten= 8%, Lag= 17.8 min

 Routed to Reach 22.2R :
 0
 0
 0

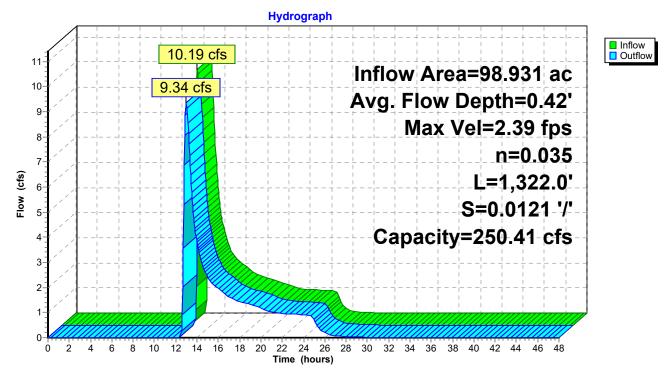
Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Max. Velocity= 2.39 fps, Min. Travel Time= 9.2 min Avg. Velocity = 0.81 fps, Avg. Travel Time= 27.3 min

Peak Storage= 5,167 cf @ 12.84 hrs Average Depth at Peak Storage= 0.42', Surface Width= 10.53' Bank-Full Depth= 2.50' Flow Area= 38.8 sf, Capacity= 250.41 cfs

8.00' x 2.50' deep channel, n= 0.035 Earth, dense weeds Side Slope Z-value= 3.0 '/' Top Width= 23.00' Length= 1,322.0' Slope= 0.0121 '/' Inlet Invert= 490.00', Outlet Invert= 474.00'

‡

Reach 20.2R:



#### Summary for Reach 22.1R: S-KCF-5

Inflow Area = 123.016 ac. 3.33% Impervious, Inflow Depth = 0.23" for 1-year event Inflow 10.13 cfs @ 12.56 hrs, Volume= 2.356 af = 9.94 cfs @ 12.72 hrs, Volume= Outflow = 2.356 af, Atten= 2%, Lag= 9.5 min Routed to Reach 22.2R : Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Max. Velocity= 2.03 fps, Min. Travel Time= 5.5 min Avg. Velocity = 0.81 fps, Avg. Travel Time= 13.8 min Peak Storage= 3,258 cf @ 12.63 hrs Average Depth at Peak Storage= 0.43', Surface Width= 12.60' Bank-Full Depth= 1.50' Flow Area= 21.8 sf, Capacity= 89.91 cfs 10.00' x 1.50' deep channel, n= 0.030 Earth, grassed & winding Side Slope Z-value= 3.0 '/' Top Width= 19.00' Length= 665.0' Slope= 0.0060 '/' Inlet Invert= 478.00', Outlet Invert= 474.00' ‡ Reach 22.1R: S-KCF-5 Hydrograph Inflow 10.13 cfs Outflow 11 9.94 cfs Inflow Area=123.016 ac 10-Avg. Flow Depth=0.43' 9 Max Vel=2.03 fps 8 n=0.030 7 L=665.0' (cfs) 6-S=0.0060 '/' No 5 Capacity=89.91 cfs 4 3 2 0 10 12 14 16 18 20 Ż 4 6 8 22 24 26 28 30 32 34 36 38 40 42 44 46 48 0

Time (hours)

#### Summary for Reach 22.2R:

[62] Hint: Exceeded Reach 20.2R OUTLET depth by 0.22' @ 13.10 hrs [62] Hint: Exceeded Reach 22.1R OUTLET depth by 0.26' @ 13.10 hrs

 Inflow Area =
 221.947 ac, 2.16% Impervious, Inflow Depth =
 0.24" for 1-year event

 Inflow =
 17.72 cfs @
 12.92 hrs, Volume=
 4.438 af

 Outflow =
 17.45 cfs @
 13.07 hrs, Volume=
 4.438 af, Atten= 2%, Lag= 8.8 min

 Routed to Link SP22 :
 13.07 hrs, Volume=
 17.45 cfs @

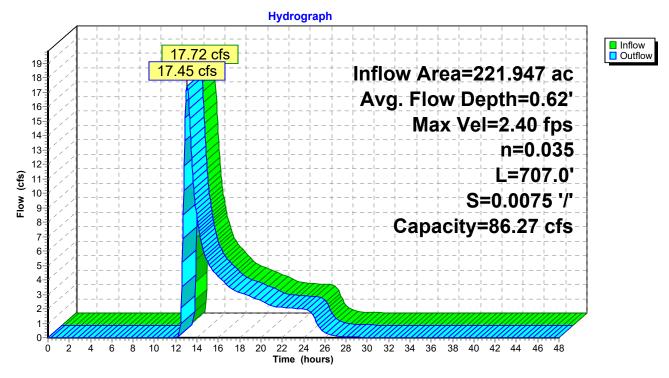
Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Max. Velocity= 2.40 fps, Min. Travel Time= 4.9 min Avg. Velocity = 0.73 fps, Avg. Travel Time= 16.2 min

Peak Storage= 5,152 cf @ 12.98 hrs Average Depth at Peak Storage= 0.62', Surface Width= 13.69' Bank-Full Depth= 1.50' Flow Area= 21.8 sf, Capacity= 86.27 cfs

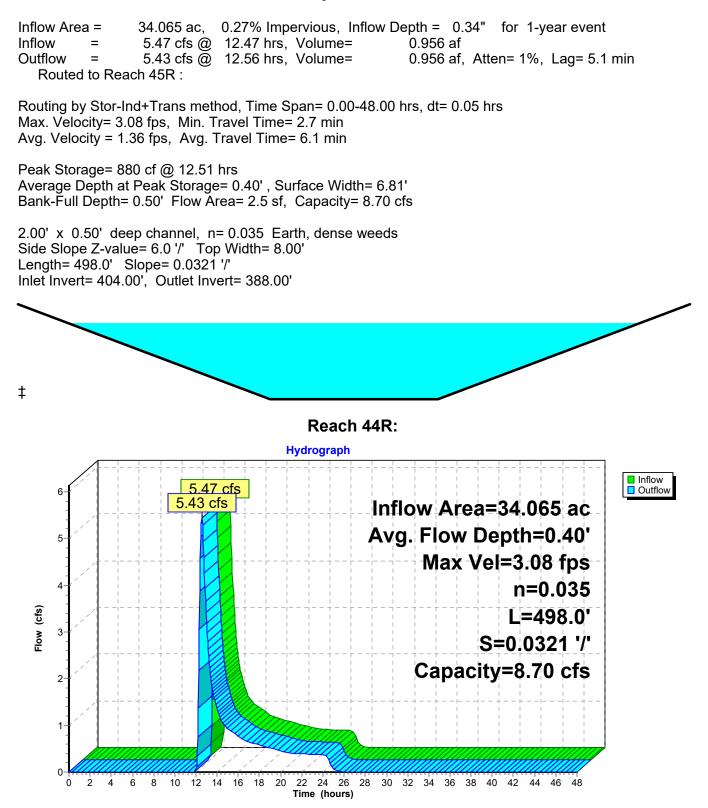
10.00' x 1.50' deep channel, n= 0.035 Earth, dense weeds Side Slope Z-value= 3.0 '/' Top Width= 19.00' Length= 707.0' Slope= 0.0075 '/' Inlet Invert= 474.00', Outlet Invert= 468.67'

‡

Reach 22.2R:



### Summary for Reach 44R:



#### Summary for Reach 45R:

[61] Hint: Exceeded Reach 44R outlet invert by 0.39' @ 12.55 hrs

 Inflow Area =
 73.929 ac, 0.12% Impervious, Inflow Depth =
 0.32" for 1-year event

 Inflow =
 10.84 cfs @
 12.53 hrs, Volume=
 1.979 af

 Outflow =
 10.78 cfs @
 12.60 hrs, Volume=
 1.979 af, Atten= 1%, Lag= 3.8 min

 Routed to Link SP43 :
 12.60 hrs, Volume=
 1.979 af, Atten= 1%, Lag= 3.8 min

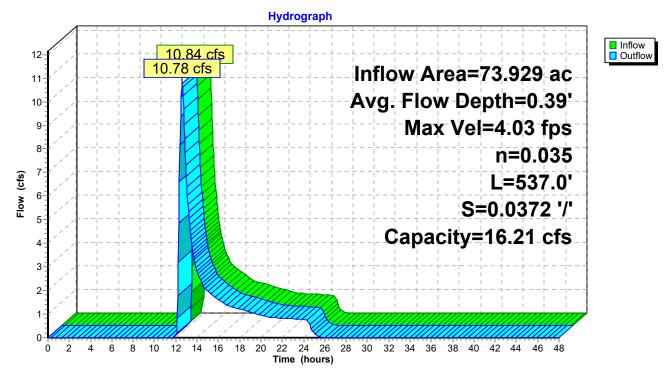
Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Max. Velocity= 4.03 fps, Min. Travel Time= 2.2 min Avg. Velocity = 1.44 fps, Avg. Travel Time= 6.2 min

Peak Storage= 1,439 cf @ 12.56 hrs Average Depth at Peak Storage= 0.39', Surface Width= 7.58' Bank-Full Depth= 0.50' Flow Area= 3.5 sf, Capacity= 16.21 cfs

6.00' x 0.50' deep channel, n= 0.035 Earth, dense weeds Side Slope Z-value= 2.0 '/' Top Width= 8.00' Length= 537.0' Slope= 0.0372 '/' Inlet Invert= 388.00', Outlet Invert= 368.00'

‡

### Reach 45R:



## Summary for Pond 4.1P: 4.1P

Inflow Area = 14.786 ac, 0.00% Impervious, Inflow Depth = 0.25" for 1-year event Inflow 4.70 cfs @ 12.00 hrs. Volume= 0.314 af = 0.00 cfs @ 0.00 hrs, Volume= Outflow = 0.000 af, Atten= 100%, Lag= 0.0 min 0.00 hrs, Volume= Primary = 0.00 cfs @ 0.000 af Routed to Link SP4 : Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af Routed to Link SP4 :

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 495.98' @ 24.40 hrs Surf.Area= 24,070 sf Storage= 13,656 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow) Center-of-Mass det. time= (not calculated: no outflow)

Volume	Invert	Avail.St	orage	Storage Description	on		
#1	495.40'	121,9	979 cf	Custom Stage Da	<b>ata (Irregular)</b> Liste	ed below (Recalc)	
Elevatio	on S	urf.Area	Perim.	Inc.Store	Cum.Store	Wet.Area	
(fee		(sq-ft)	(feet)	(cubic-feet)	(cubic-feet)	(sq-ft)	
495.4	0	23,410	686.0	0	0	23,410	
496.0	0	24,099	692.0	14,252	14,252	24,187	
497.0		25,495	704.0	24,794	39,046	25,692	
498.0		26,916	717.0	26,202	65,248	27,325	
499.0		28,362	729.0	27,636	92,884	28,883	
500.0	00	29,834	742.0	29,095	121,979	30,573	
Device	Routing	Invert	Outle	et Devices			
#1	Primary	495.50'	-	" Round Culvert			
				5.0' CPP, projectir			
						0.0143 '/' Cc= 0.900	1
щ <b>о</b>	Device 1	400.40		0		Flow Area= 0.79 sf	
#2	Device 1	499.40'		" Horiz. Orifice/Gr ed to weir flow at lo			
#3	Device 1	496.00'				ted to weir flow at low	heads
#3 #4	Secondary					Broad-Crested Recta	
$\pi$ -	occondary	+00.00				1.20 1.40 1.60 1.80	
				3.00 3.50 4.00 4		1.20 1.10 1.00 1.00	2.00
						7 2.67 2.65 2.66 2.	66
				2.72 2.73 2.76 2			

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=495.40' (Free Discharge)

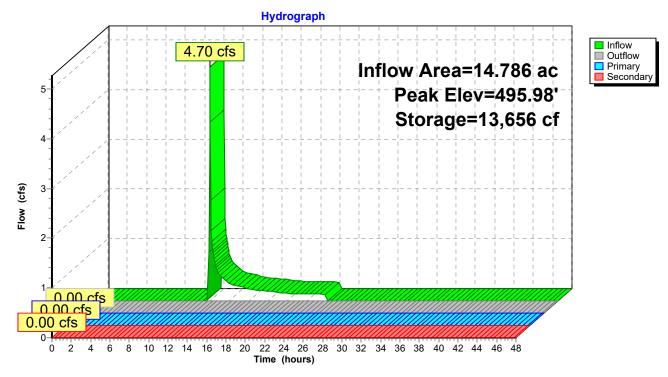
**1=Culvert** (Controls 0.00 cfs)

-2=Orifice/Grate (Controls 0.00 cfs)

-3=Orifice/Grate (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=495.40' (Free Discharge)

Pond 4.1P: 4.1P



## Summary for Pond 7.1P:

Inflow Area = 4.57		4.575 ac,	0.00% Impervious, Inflow	Depth = 0.08" for 1-year event
Inflow	=	0.05 cfs @	12.55 hrs, Volume=	0.030 af
Outflow	=	0.00 cfs @	0.00 hrs, Volume=	0.000 af, Atten= 100%, Lag= 0.0 min
Primary	=	0.00 cfs @	0.00 hrs, Volume=	0.000 af
Routed to Link SP7 :				
Secondary	=	0.00 cfs @	0.00 hrs, Volume=	0.000 af
Routed	to Link	SP7 :		

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 512.20' @ 24.90 hrs Surf.Area= 6,706 sf Storage= 1,308 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow) Center-of-Mass det. time= (not calculated: no outflow)

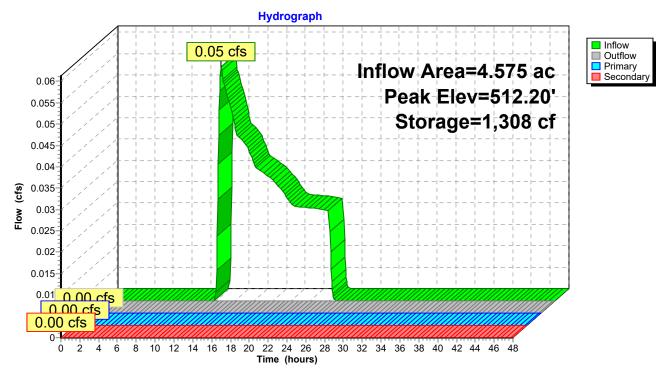
Volume	Invert	Avail.Sto	rage Storag	e Description	
#1	512.00'	37,7	73 cf Custo	m Stage Data (Prismatic)Listed below (Recalc)	
	_				
Elevatio		urf.Area	Inc.Store	Cum.Store	
(fee	1	(sq-ft)	(cubic-feet)	(cubic-feet)	
512.0		6,414	0	0	
513.0		7,879	7,147	7,147	
514.0		9,401	8,640	15,787	
515.0		10,979	10,190	25,977	
516.0	00	12,614	11,797	37,773	
Device	Routing	Invert	Outlet Devic	es	
#1	Primary	512.00'	12.0" Rour	d Culvert	
	2		L= 33.0' CI	PP, projecting, no headwall, Ke= 0.900	
			Inlet / Outlet	Invert= 512.00' / 510.00' S= 0.0606 '/' Cc= 0.9	900
			n= 0.013 C	prrugated PE, smooth interior, Flow Area= 0.79	sf
#2	Device 1	515.00'	48.0" Horiz	Orifice/Grate C= 0.600	
			Limited to w	eir flow at low heads	
#3	Device 1	512.25'	4.0" Vert. O	rifice/Grate X 0.00 C= 0.600	
			Limited to w	eir flow at low heads	
#4	Secondary	515.50'	10.0' long ·	- 3.0 '/' SideZ x 4.0' breadth Broad-Crested Re	ctangular Weir
				0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.8	0 2.00
			2.50 3.00 3	.50 4.00 4.50 5.00 5.50	
				sh) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66	2.66
			2.68 2.72 2	.73 2.76 2.79 2.88 3.07 3.32	
		1ax=0.00 cfs (	2)0.00 hrs H	V=512.00' (Free Discharge)	

-1=Culvert (Controls 0.00 cfs)

-2=Orifice/Grate (Controls 0.00 cfs) -3=Orifice/Grate (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=512.00' (Free Discharge) 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 7.1P:



## Summary for Pond 9.1P: 9.1P

Inflow Area = 8.972 ac, 0.00% Impervious, Inflow Depth = 0.40" for 1-year event Inflow 2.12 cfs @ 12.36 hrs, Volume= 0.298 af = 0.10 cfs @ 24.18 hrs, Volume= Outflow = 0.088 af, Atten= 95%, Lag= 709.4 min 0.10 cfs @ 24.18 hrs, Volume= Primary = 0.088 af Routed to Link SP9 : 0.00 hrs, Volume= Secondary = 0.00 cfs @ 0.000 af Routed to Link SP9 :

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 467.22' @ 24.18 hrs Surf.Area= 9,470 sf Storage= 10,910 cf

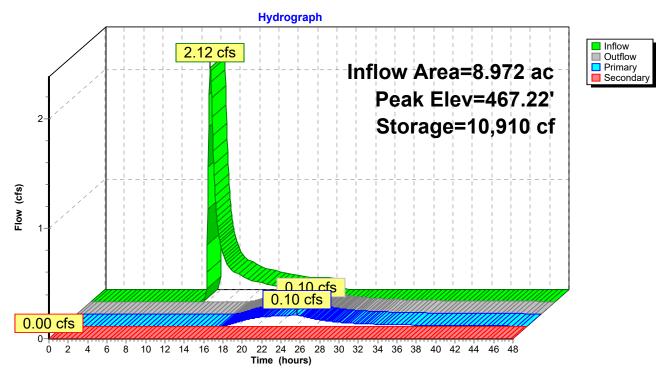
Plug-Flow detention time= 787.6 min calculated for 0.088 af (30% of inflow) Center-of-Mass det. time= 609.6 min (1,530.0 - 920.4)

Volume	Invert	Avail.Sto	rage Storage	e Description	
#1	466.00'	40,83	33 cf Custon	n Stage Data (Pr	ismatic)Listed below (Recalc)
	_				
Elevatio		urf.Area	Inc.Store	Cum.Store	
(fee	1	(sq-ft)	(cubic-feet)	(cubic-feet)	
466.0		8,356	0	0	
467.0		9,263	8,810	8,810	
468.0		10,188	9,726	18,535	
469.0		11,142	10,665	29,200	
470.0	00	12,124	11,633	40,833	
Device	Routing	Invert	Outlet Device	es	
#1	Primary	466.00'	12.0" Round	d Culvert	
	2		L= 30.0' CP	P, projecting, no	headwall, Ke= 0.900
			Inlet / Outlet	Invert= 466.00' / 4	462.00' S= 0.1333 '/' Cc= 0.900
					ooth interior, Flow Area= 0.79 sf
#2	Device 1	469.50'		Orifice/Grate C	
				eir flow at low hea	
#3	Device 1	467.00'			0.600 Limited to weir flow at low heads
#4	Secondary	469.50'			.0' breadth Broad-Crested Rectangular Weir
					0.80 1.00 1.20 1.40 1.60 1.80 2.00
				.50 4.00 4.50 5.	
					69 2.68 2.67 2.67 2.65 2.66 2.66
			2.68 2.72 2	.73 2.76 2.79 2.	88 3.07 3.32
Drimon		lav-0 10 ofa /	∂ 24 19 brc ⊔	M-467 22' /Era	
			2.54 cfs poten	W=467.22' (Free tial flow)	e Discharge)

**2=Orifice/Grate** (Controls 0.00 cfs)

-3=Orifice/Grate (Orifice Controls 0.10 cfs @ 1.61 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=466.00' (Free Discharge) 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs) Pond 9.1P: 9.1P



## Summary for Pond 10.1P: 10.1P

Inflow Area = 2.860 ac, 0.00% Impervious, Inflow Depth = 0.34" for 1-year event Inflow 0.79 cfs @ 12.16 hrs. Volume= 0.080 af = 0.00 cfs @ 0.00 hrs, Volume= Outflow = 0.000 af, Atten= 100%, Lag= 0.0 min 0.00 hrs, Volume= Primary = 0.00 cfs @ 0.000 af Routed to Link SP10 : 0.00 hrs, Volume= Secondary = 0.00 cfs @ 0.000 af Routed to Link SP10 :

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 568.63' @ 25.10 hrs Surf.Area= 5,959 sf Storage= 3,495 cf

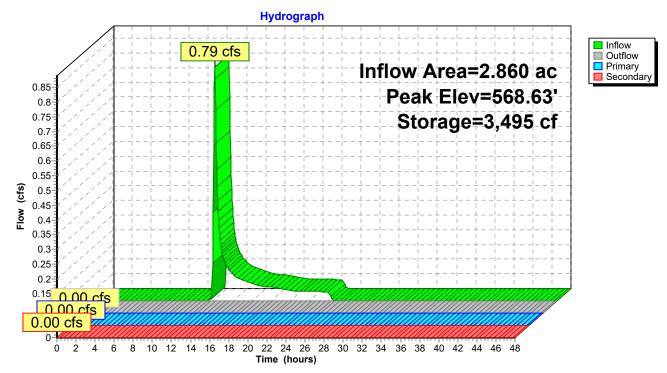
Plug-Flow detention time= (not calculated: initial storage exceeds outflow) Center-of-Mass det. time= (not calculated: no outflow)

Volume	Invert	Avail.Sto	rage Storage	e Description	
#1	568.00'	30,34	12 cf Custom	n Stage Data (Prismatic)Listed below (Recalc)	
Elevatio	on Su	ırf.Area	Inc.Store	Cum.Store	
(fee	et)	(sq-ft)	(cubic-feet)	(cubic-feet)	
568.0	00	5,183	0	0	
569.0	00	6,419	5,801	5,801	
570.0	00	7,717	7,068	12,869	
571.0	00	9,076	8,397	21,266	
572.0	00	9,077	9,077	30,342	
Deviee	Deuting	luo ya uti	Outlat Davias		
Device	Routing	Invert	Outlet Devices		
#1	Primary	568.00'	12.0" Round		
				P, projecting, no headwall, Ke= 0.900	
				Invert= 568.00' / 567.50' S= 0.0063 '/' Cc= 0.900	
	<b>D</b> : (			rrugated PE, smooth interior, Flow Area= 0.79 sf	
#2	Device 1	569.50'		Orifice/Grate C= 0.600	
	0	574 001		eir flow at low heads	•
#3	Secondary	571.00'		3.0 '/' SideZ x 4.0' breadth Broad-Crested Rectangular We	ır؛
				0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00	
				50 4.00 4.50 5.00 5.50	
				h) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66	
			2.00 2.12 2.1	73 2.76 2.79 2.88 3.07 3.32	
Drimora	OutFlow M	av=0.00 ofc 6	= 0.00  bre	$V = 568.00^{\circ}$ (Free Discharge)	

**Primary OutFlow** Max=0.00 cfs @ 0.00 hrs HW=568.00' (Free Discharge)

**2=Orifice/Grate** (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=568.00' (Free Discharge) -3=Broad-Crested Rectangular Weir (Controls 0.00 cfs) Pond 10.1P: 10.1P



## Summary for Pond 12P: 12P

[44] Hint: Outlet device #1 is below defined storage

Inflow Are	a =	4.859 ac, 5	53.67% Impervious, Inf	flow Depth = 1.84" for 1-year event
Inflow	=	13.94 cfs @	11.96 hrs, Volume=	0.744 af
Outflow	=	1.40 cfs @	12.38 hrs, Volume=	0.745 af, Atten= 90%, Lag= 25.0 min
Primary	=	1.40 cfs @	12.38 hrs, Volume=	0.745 af
Routed to Reach 13.1R :				

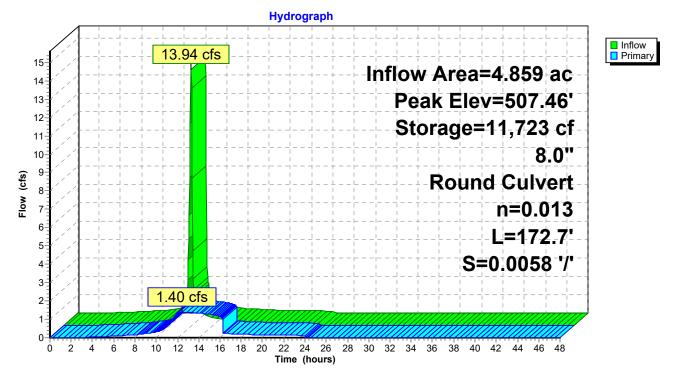
Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs / 3 Peak Elev= 507.46' @ 12.38 hrs Surf.Area= 22,160 sf Storage= 11,723 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow) Center-of-Mass det. time= 55.9 min (829.1 - 773.2)

Volume	Inve	ert Avai	I.Storage	Storage Description	on		
#1	506.0	)0' 3·	49,842 cf	Custom Stage Da	<b>ata (Irregular)</b> Liste	ed below (Recalc)	
Elevatio (fee		Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)	
506.0 508.0 510.0 512.0	00	138 39,705 80,589 124,830	45.5 811.5 1,415.9 2,053.3	0 28,123 117,907 203,812	0 28,123 146,030 349,842	138 52,385 159,538 335,540	
Device	Routing	In	vert Outle	et Devices			
#1	Primary	505	L= 1 Inlet		5.00' / 504.00' S=	Ke= 0.900 0.0058 '/' Cc= 0.90 , Flow Area= 0.35 sf	

**Primary OutFlow** Max=1.40 cfs @ 12.38 hrs HW=507.46' (Free Discharge) **1=Culvert** (Barrel Controls 1.40 cfs @ 4.01 fps)

Pond 12P: 12P



#### Summary for Pond 23.1P: 23.1P

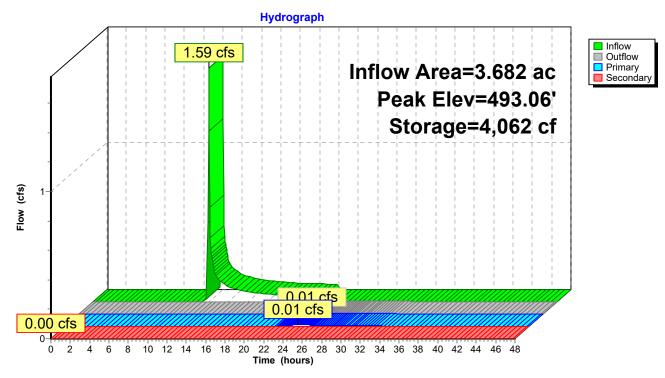
Inflow Area = 3.682 ac, 0.00% Impervious, Inflow Depth = 0.31" for 1-year event Inflow = 1.59 cfs @ 12.00 hrs, Volume= 0.094 af 0.01 cfs @ 24.11 hrs, Volume= Outflow = 0.007 af, Atten= 99%, Lag= 726.4 min 0.01 cfs @ 24.11 hrs, Volume= 0.007 af Primary = Routed to Link SP23 : 0.00 cfs @ 0.00 hrs, Volume= 0.000 af Secondary = Routed to Link SP23 :

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 493.06' @ 24.11 hrs Surf.Area= 4,105 sf Storage= 4,062 cf

Plug-Flow detention time= 1,026.4 min calculated for 0.007 af (7% of inflow) Center-of-Mass det. time= 831.6 min (1,743.4 - 911.8)

Volume	Invert	Avail.Sto	rage Storage	Description	
#1	492.00'	24,70	68 cf Custom	Stage Data (Pi	rismatic)Listed below (Recalc)
	-	<b>.</b> .			
Elevatio		rf.Area	Inc.Store	Cum.Store	
(fee	1	(sq-ft)	(cubic-feet)	(cubic-feet)	
492.0		3,530	0	0	
493.0	-	4,069	3,800	3,800	
494.0		4,634	4,352	8,151	
495.0		5,223	4,929	13,080	
496.0		5,838	5,531	18,610	
497.0	00	6,477	6,158	24,768	
Device	Routing	Invert	Outlet Device	S	
#1	Primary	492.00'	24.0" Round		
<i>"</i> .	i iiiida y	102.00			headwall, Ke= 0.900
					489.00' S= 0.1071 '/' Cc= 0.900
			n= 0.013 Cor	rugated PE. sm	ooth interior, Flow Area= 3.14 sf
#2	Device 1	493.00'			0.600 Limited to weir flow at low heads
#3	Device 1	494.00'	48.0" Horiz. (	Drifice/Grate	C= 0.600
			Limited to wei	r flow at low hea	ads
#4	Secondary	496.50'	10.0' long + 3	3.0 '/' SideZ x 4	I.0' breadth Broad-Crested Rectangular Weir
					0.80 1.00 1.20 1.40 1.60 1.80 2.00
			2.50 3.00 3.5	50 4.00 4.50 5	.00 5.50
			Coef. (English	n) 2.38 2.54 2.	69 2.68 2.67 2.67 2.65 2.66 2.66
			2.68 2.72 2.7	73 2.76 2.79 2	.88 3.07 3.32
				V=493.06' (Fre	e Discharge)
			4.71 cfs potenti		
			ntrols 0.01 cfs (	@ 0.86 fps)	
<u></u> —3=	Orifice/Grat	e (Controls (	0.00 cts)		
Second	ary OutFlow	Max=0.00 c	fs @ 0 00 hrs +	-1\N/=492 00' (F	ree Discharge)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=492.00' (Free Discharge) 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs) Pond 23.1P: 23.1P



### Summary for Pond 44.1P: 44.1P

Inflow Area = 6.425 ac, 0.00% Impervious, Inflow Depth = 0.58"for 1-year event Inflow 6.32 cfs @ 11.98 hrs. Volume= 0.312 af = 0.00 hrs, Volume= Outflow = 0.00 cfs @ 0.000 af, Atten= 100%, Lag= 0.0 min 0.00 hrs, Volume= Primary = 0.00 cfs @ 0.000 af Routed to Link SP43 : 0.00 hrs, Volume= Secondary = 0.00 cfs @ 0.000 af Routed to Link SP43 :

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 426.67' @ 24.40 hrs Surf.Area= 20,760 sf Storage= 13,588 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow) Center-of-Mass det. time= (not calculated: no outflow)

Volume	Invert	Avail.Sto	rage Storage	e Description
#1	426.00'	90,70	04 cf Custon	m Stage Data (Prismatic)Listed below (Recalc)
_				
Elevatio		urf.Area	Inc.Store	Cum.Store
(fee	et)	(sq-ft)	(cubic-feet)	(cubic-feet)
426.0	00	19,818	0	0
427.0		21,225	20,522	20,522
428.0		22,657	21,941	42,463
429.0		24,114	23,386	65,848
430.0	00	25,597	24,856	90,704
<b>D</b> .				
Device	Routing	Invert	Outlet Device	
#1	Primary	426.00'	12.0" Round	
				PP, projecting, no headwall, Ke= 0.900
				Invert= 426.00' / 425.50' S= 0.0227 '/' Cc= 0.900
				orrugated PE, smooth interior, Flow Area= 0.79 sf
#2	Device 1	427.25'		rifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	428.50'		Orifice/Grate C= 0.600
				eir flow at low heads
#4	Secondary	428.50'		+ 3.0 '/' SideZ x 4.0' breadth Broad-Crested Rectangular Weir
				0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00
				3.50 4.00 4.50 5.00 5.50
				sh) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66
			2.68 2.72 2.	2.73 2.76 2.79 2.88 3.07 3.32

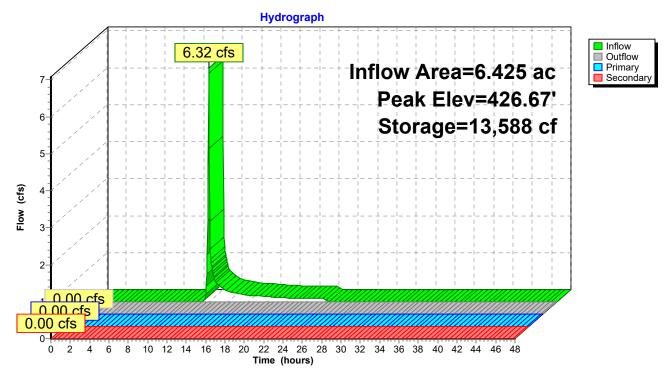
Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=426.00' (Free Discharge)

-1=Culvert (Controls 0.00 cfs)

-2=Orifice/Grate (Controls 0.00 cfs)

**3=Orifice/Grate** (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=426.00' (Free Discharge) 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs) Pond 44.1P: 44.1P



### Summary for Pond 46.1P: 46.1P

Inflow Area = 5.473 ac, 0.00% Impervious, Inflow Depth = 0.00" for 1-year event Inflow = 0.00 cfs @ 0.00 hrs. Volume= 0.000 af 0.00 cfs @ 0.00 hrs, Volume= Outflow = 0.000 af, Atten= 0%, Lag= 0.0 min 0.00 hrs, Volume= 0.000 af Primary = 0.00 cfs @ Routed to Link SP46 : 0.00 hrs, Volume= 0.000 af Secondary = 0.00 cfs @ Routed to Link SP46 :

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 354.00' @ 0.00 hrs Surf.Area= 6,512 sf Storage= 0 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow) Center-of-Mass det. time= (not calculated: no inflow)

Volume	Invert	Avail.Sto	rage Storag	ge Description
#1	354.00'			om Stage Data (Prismatic)Listed below (Recalc)
Elevatio		urf.Area	Inc.Store	Cum.Store
(fee	et)	(sq-ft)	(cubic-feet)	(cubic-feet)
354.0	00	6,512	0	0
355.0	00	8,313	7,413	7,413
356.0	00	10,140	9,227	16,639
357.0	00	11,992	11,066	27,705
Device	Routing	Invert	Outlet Devic	ces
#1	Primary	354.00'	24.0" Roun	nd Culvert
			L= 20.0' CF	CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet	et Invert= 354.00' / 353.75' S= 0.0125 '/' Cc= 0.900
			n= 0.013 C	Corrugated PE, smooth interior, Flow Area= 3.14 sf
#2	Device 1	354.83'	4.0" Vert. O	<b>Drifice/Grate</b> C= 0.600 Limited to weir flow at low heads
#3	Device 1	355.50'	48.0" Horiz.	z. Orifice/Grate C= 0.600
			Limited to w	veir flow at low heads
#4	Secondary	355.50'	10.0' long +	+ 3.0 '/' SideZ x 4.0' breadth Broad-Crested Rectangular Wei
			Head (feet)	0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00
			2.50 3.00 3	3.50 4.00 4.50 5.00 5.50
			Coef. (Englis	lish) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66
			2.68 2.72 2	2.73 2.76 2.79 2.88 3.07 3.32
Primary	OutFlow M	lax=0.00 cfs @	⑦ 0.00 hrs H\	W=354.00' (Free Discharge)

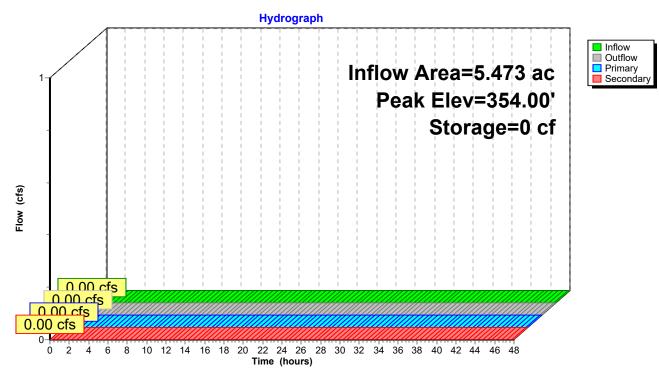
Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=354.00' (Free Discharge) -1=Culvert (Controls 0.00 cfs)

-2=Orifice/Grate (Controls 0.00 cfs)

**3=Orifice/Grate** (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=354.00' (Free Discharge) 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

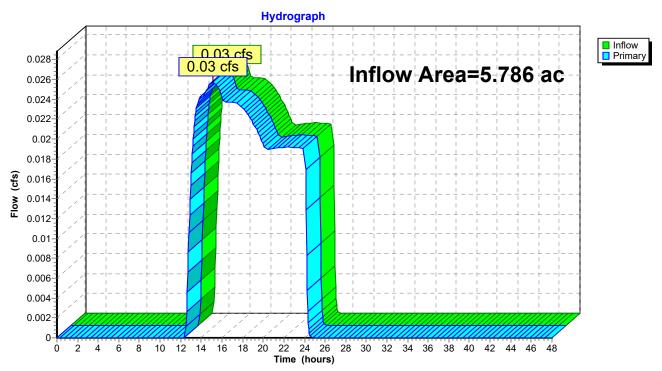
Pond 46.1P: 46.1P



## Summary for Link SP1:

Inflow Area	=	5.786 ac,	0.00% Impervious, I	nflow Depth = 0.04	' for 1-year event
Inflow	=	0.03 cfs @	15.11 hrs, Volume=	0.020 af	-
Primary	=	0.03 cfs @	15.11 hrs, Volume=	0.020 af, A	tten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

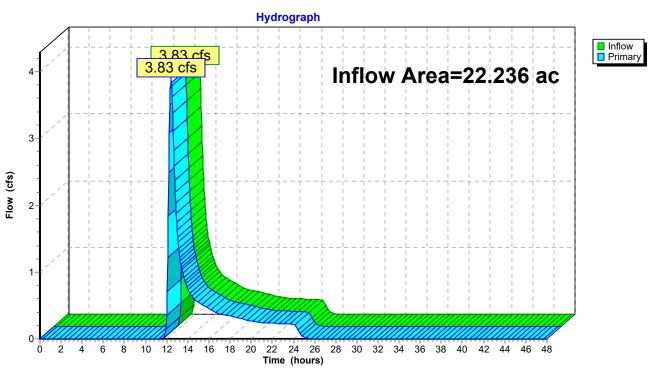


#### Link SP1:

# Summary for Link SP10:

Inflow Area =	22.236 ac,	4.90% Impervious, In	nflow Depth = 0.32"	for 1-year event
Inflow =	3.83 cfs @	12.41 hrs, Volume=	0.593 af	
Primary =	3.83 cfs @	12.41 hrs, Volume=	0.593 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

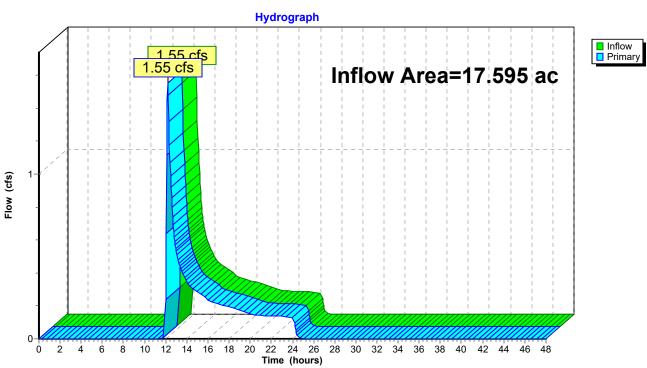


#### Link SP10:

# Summary for Link SP11:

Inflow Area =	17.595 ac,	2.63% Impervious,	Inflow Depth = 0.18"	for 1-year event
Inflow =	1.55 cfs @	12.20 hrs, Volume=	0.270 af	
Primary =	1.55 cfs @	12.20 hrs, Volume=	e 0.270 af, At	ten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

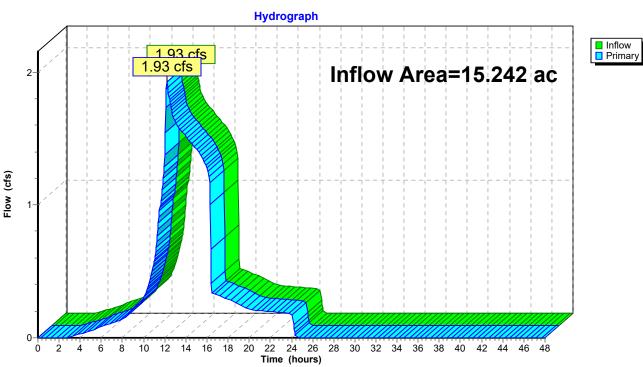


#### Link SP11:

## Summary for Link SP13:

Inflow Area =	15.242 ac, 17.24% Impervious, Inflow E	Depth = 0.69" for 1-year event
Inflow =	1.93 cfs @ 12.21 hrs, Volume=	0.870 af
Primary =	1.93 cfs @_ 12.21 hrs, Volume=	0.870 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

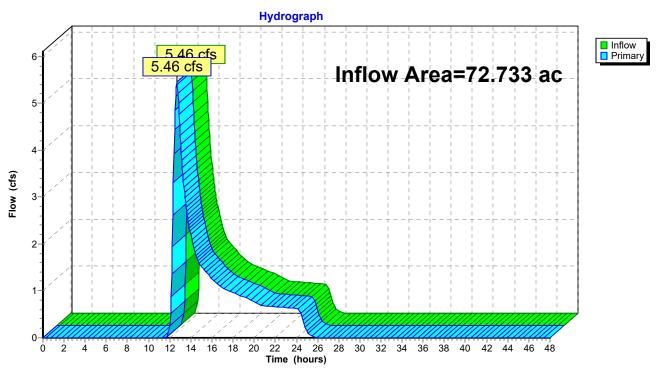


#### Link SP13:

# Summary for Link SP14:

Inflow Area	=	72.733 ac,	0.42% Impervious,	Inflow Depth = 0.23	8" for 1-year event
Inflow	=	5.46 cfs @	12.67 hrs, Volume	= 1.393 af	
Primary	=	5.46 cfs @	12.67 hrs, Volume	= 1.393 af, <i>A</i>	Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

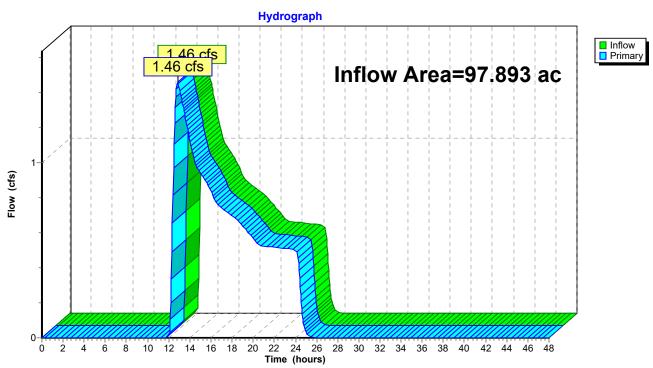


#### Link SP14:

# Summary for Link SP17:

Inflow Area =	97.893 ac,	1.18% Impervious, Inflow D	epth = 0.09"	for 1-year event
Inflow =	1.46 cfs @	12.84 hrs, Volume=	0.761 af	-
Primary =	1.46 cfs @	12.84 hrs, Volume=	0.761 af, Att	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

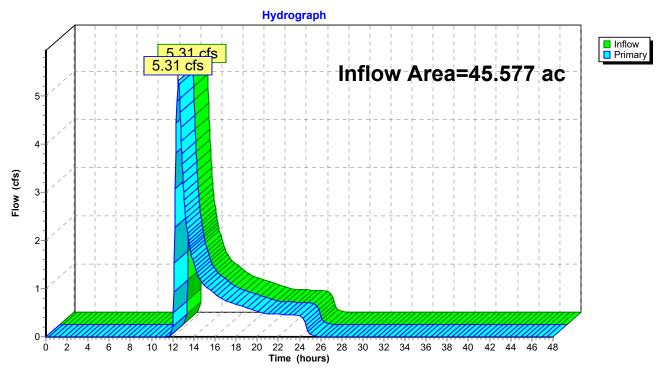


#### Link SP17:

# Summary for Link SP18:

Inflow Area =	45.577 ac,	0.74% Impervious, I	nflow Depth = 0.28"	for 1-year event
Inflow =	5.31 cfs @	12.52 hrs, Volume=	1.065 af	
Primary =	5.31 cfs @	12.52 hrs, Volume=	1.065 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

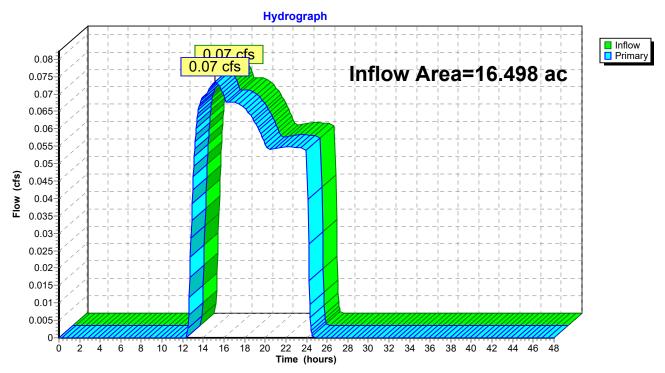


#### Link SP18:

# Summary for Link SP2:

Inflow Area =	16.498 ac,	0.00% Impervious, Inflow I	Depth = 0.04"	for 1-year event
Inflow =	0.07 cfs @	15.12 hrs, Volume=	0.058 af	-
Primary =	0.07 cfs @	15.12 hrs, Volume=	0.058 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

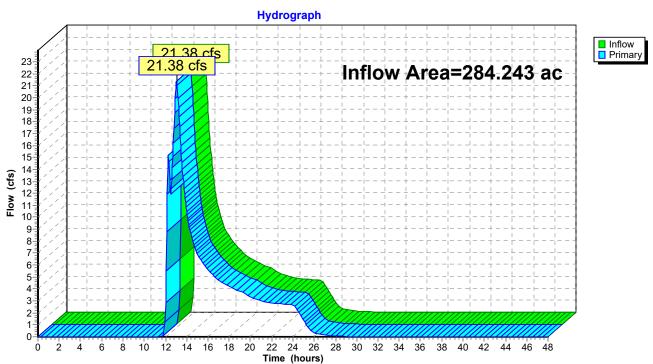


#### Link SP2:

# Summary for Link SP22:

Inflow Area	a =	284.243 ac,	1.82% Impervious, Inflo	w Depth = 0.27"	for 1-year event
Inflow	=	21.38 cfs @	13.04 hrs, Volume=	6.343 af	
Primary	=	21.38 cfs @	13.04 hrs, Volume=	6.343 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

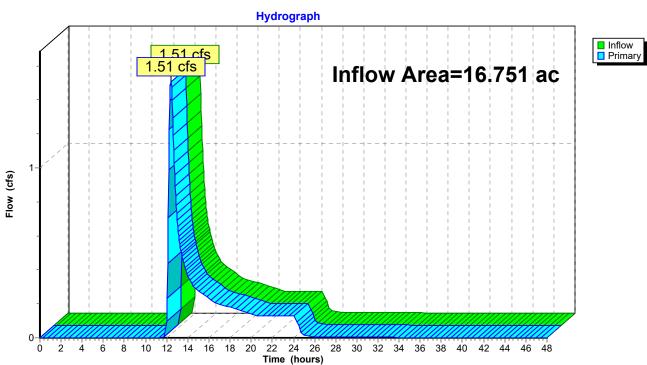


### Link SP22:

# Summary for Link SP23:

Inflow Area =	16.751 ac,	2.31% Impervious, Inflo	w Depth > 0.20"	for 1-year event
Inflow =	1.51 cfs @	12.39 hrs, Volume=	0.284 af	-
Primary =	1.51 cfs @	12.39 hrs, Volume=	0.284 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

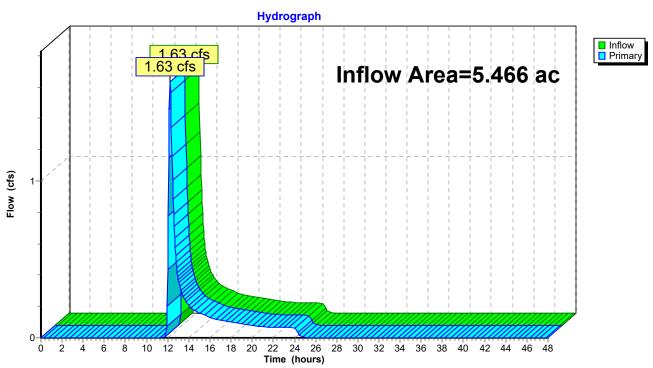


#### Link SP23:

# Summary for Link SP24:

Inflow Area =	5.466 ac,	7.70% Impervious, Inflow E	Depth = 0.40"	for 1-year event
Inflow =	1.63 cfs @	12.23 hrs, Volume=	0.182 af	
Primary =	1.63 cfs @	12.23 hrs, Volume=	0.182 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

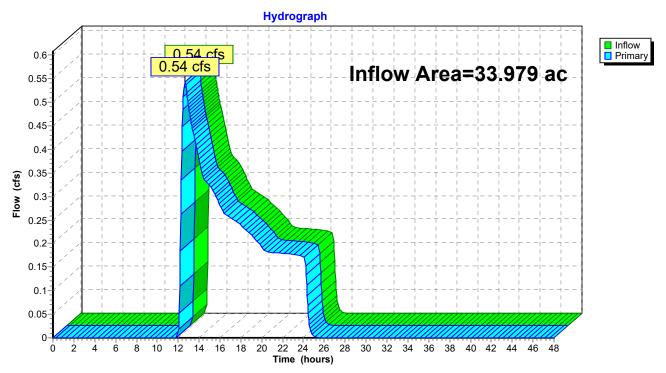


#### Link SP24:

# Summary for Link SP3:

Inflow Area =	33.979 ac,	0.00% Impervious, Inflo	w Depth = 0.09"	for 1-year event
Inflow =	0.54 cfs @	12.64 hrs, Volume=	0.264 af	-
Primary =	0.54 cfs @	12.64 hrs, Volume=	0.264 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

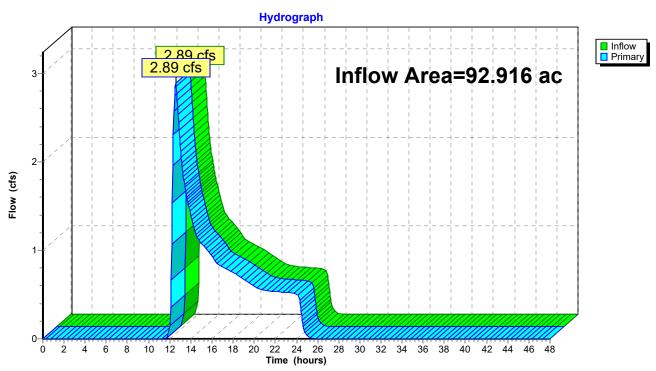


#### Link SP3:

### Summary for Link SP4:

Inflow Area =	92.916 ac,	0.28% Impervious, Inflow	Depth = 0.12"	for 1-year event
Inflow =	2.89 cfs @	12.55 hrs, Volume=	0.939 af	-
Primary =	2.89 cfs @	12.55 hrs, Volume=	0.939 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

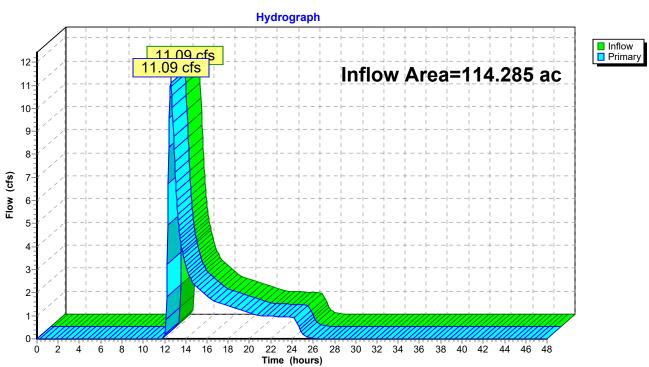


#### Link SP4:

# Summary for Link SP43:

Inflow Area	a =	114.285 ac,	0.15% Impervious,	Inflow Depth = 0.23'	' for 1-year event
Inflow	=	11.09 cfs @	12.60 hrs, Volume=	= 2.201 af	
Primary	=	11.09 cfs @	12.60 hrs, Volume=	= 2.201 af, A	tten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

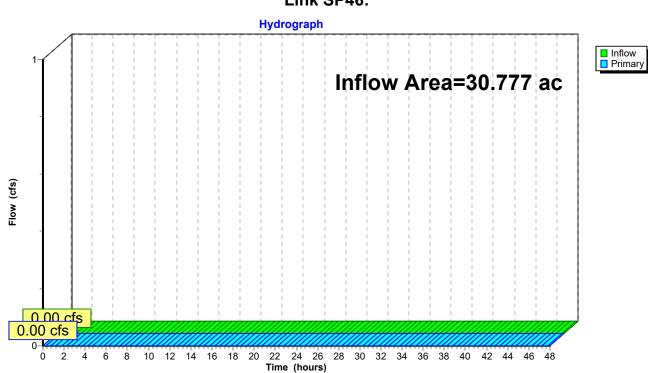


#### Link SP43:

# Summary for Link SP46:

Inflow Area =	30.777 ac,	0.00% Impervious, Inflo	w Depth = 0.00"	for 1-year event
Inflow =	0.00 cfs @	0.00 hrs, Volume=	0.000 af	
Primary =	0.00 cfs @	0.00 hrs, Volume=	0.000 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs



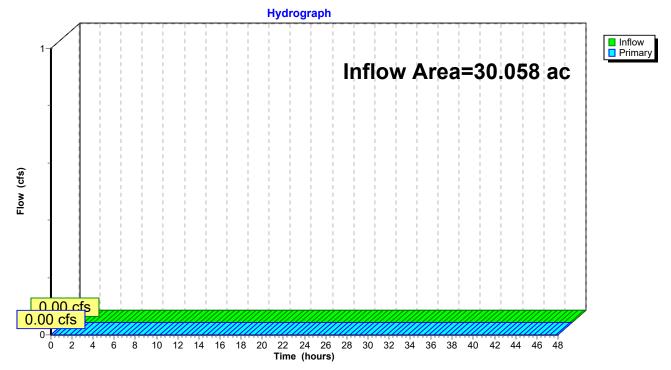
#### Link SP46:

# Summary for Link SP47:

Inflow Area =	30.058 ac,	1.25% Impervious, Inflow [	Depth = 0.00"	for 1-year event
Inflow =	0.00 cfs @	0.00 hrs, Volume=	0.000 af	
Primary =	0.00 cfs @	0.00 hrs, Volume=	0.000 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

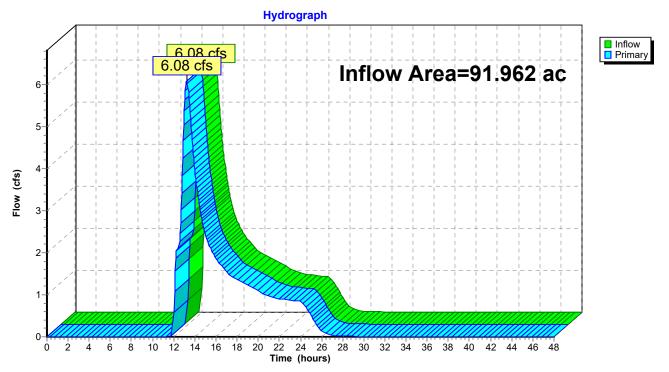
# Link SP47:



# Summary for Link SP5:

Inflow Area =	91.962 ac,	0.00% Impervious, Inf	low Depth = 0.25"	for 1-year event
Inflow =	6.08 cfs @	13.24 hrs, Volume=	1.946 af	
Primary =	6.08 cfs @	13.24 hrs, Volume=	1.946 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

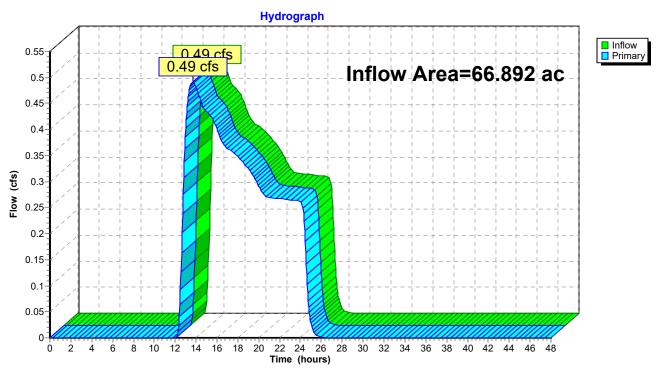


#### Link SP5:

### Summary for Link SP7:

Inflow Area =	66.892 ac,	0.00% Impervious,	Inflow Depth = 0.06"	for 1-year event
Inflow =	0.49 cfs @	13.70 hrs, Volume	= 0.340 af	
Primary =	0.49 cfs @	13.70 hrs, Volume	= 0.340 af, Att	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

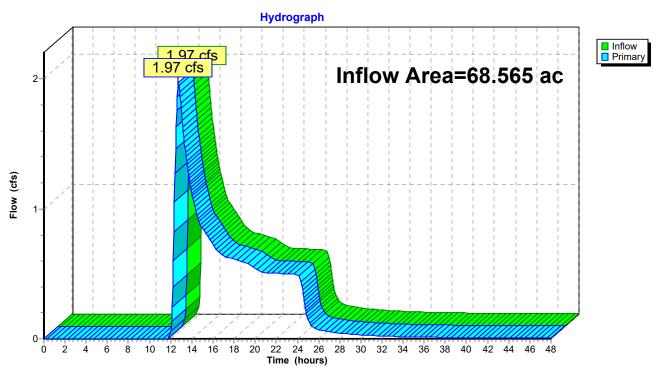


#### Link SP7:

# Summary for Link SP9:

Inflow Area =	68.565 ac,	1.11% Impervious, Inflow [	Depth > 0.14"	for 1-year event
Inflow =	1.97 cfs @	12.72 hrs, Volume=	0.805 af	
Primary =	1.97 cfs @	12.72 hrs, Volume=	0.805 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs



#### Link SP9:

Mill Pt Post 1	Тур
Prepared by TRC Companies	
HvdroCAD® 10.20-5a s/n 01402 © 2023 HvdroCAD Software Sc	olutions LLC

### Time span=0.00-48.00 hrs, dt=0.05 hrs, 961 points Runoff by SCS TR-20 method, UH=SCS, Weighted-CN Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: Sub 1	Runoff Area=5.786 ac 0.00% Impervious Runoff Depth=0.38" Flow Length=1,005' Tc=13.1 min CN=56 Runoff=1.74 cfs 0.183 af
Subcatchment 2S: Sub 2	Runoff Area=16.498 ac 0.00% Impervious Runoff Depth=0.38" Flow Length=1,307' Tc=14.1 min CN=56 Runoff=4.76 cfs 0.523 af
Subcatchment 3S: Sub 3	Runoff Area=33.979 ac 0.00% Impervious Runoff Depth=0.53" Flow Length=2,507' Tc=25.3 min CN=60 Runoff=11.88 cfs 1.505 af
Subcatchment4.1S:	Runoff Area=14.786 ac 0.00% Impervious Runoff Depth=0.90" Tc=6.0 min CN=68 Runoff=22.38 cfs 1.111 af
Subcatchment 4S: Sub 4	Runoff Area=78.130 ac 0.33% Impervious Runoff Depth=0.66" Flow Length=4,160' Tc=35.5 min CN=63 Runoff=30.16 cfs 4.294 af
Subcatchment 5S: Sub 5	Runoff Area=16.698 ac 0.00% Impervious Runoff Depth=0.80" Flow Length=1,888' Tc=22.2 min CN=66 Runoff=11.86 cfs 1.114 af
Subcatchment 6S: Sub 6	Runoff Area=16.301 ac 0.00% Impervious Runoff Depth=0.80" Flow Length=1,894' Tc=48.6 min CN=66 Runoff=6.63 cfs 1.087 af
Subcatchment7.1S: Sub 7.1	Runoff Area=4.575 ac 0.00% Impervious Runoff Depth=0.49" Flow Length=1,051' Tc=14.9 min CN=59 Runoff=2.02 cfs 0.187 af
Subcatchment7S: Sub 7	Runoff Area=62.317 ac 0.00% Impervious Runoff Depth=0.45" Flow Length=2,117' Tc=40.9 min CN=58 Runoff=11.99 cfs 2.352 af
Subcatchment8S: Sub 8	Runoff Area=58.963 ac 0.00% Impervious Runoff Depth=0.95" Flow Length=2,902' Tc=63.3 min CN=69 Runoff=25.13 cfs 4.687 af
Subcatchment9.1S: Sub 9.1	Runoff Area=8.972 ac 0.00% Impervious Runoff Depth=1.18" Flow Length=873' Tc=34.1 min CN=73 Runoff=7.88 cfs 0.882 af
Subcatchment9S: Sub 9	Runoff Area=59.593 ac 1.28% Impervious Runoff Depth=0.66" Flow Length=2,945' Tc=45.6 min CN=63 Runoff=19.21 cfs 3.276 af
Subcatchment10.1S: Sub 10.1	Runoff Area=2.860 ac 0.00% Impervious Runoff Depth=1.06" Tc=18.7 min CN=71 Runoff=3.27 cfs 0.254 af
Subcatchment10S: Sub10	Runoff Area=19.376 ac 5.62% Impervious Runoff Depth=1.12" Flow Length=2,047' Tc=36.7 min CN=72 Runoff=15.17 cfs 1.810 af
Subcatchment11S: Sub11	Runoff Area=17.595 ac 2.63% Impervious Runoff Depth=0.75" Flow Length=1,622' Tc=19.0 min CN=65 Runoff=12.71 cfs 1.103 af
Subcatchment 12S: Sub 12	Runoff Area=4.859 ac 53.67% Impervious Runoff Depth=3.15" Tc=6.0 min CN=97 Runoff=23.14 cfs 1.277 af

Mill Pt Post 1

Mill Pt Post 1 Prepared by TRC Companies	Type II 24-hr 10-year Rainfall=3.50" Printed 7/19/2024
<u>HydroCAD® 10.20-5a_s/n 01402_© 2023</u>	IydroCAD Software Solutions LLC         Page 123
Subcatchment 13S: Sub 13	Runoff Area=10.383 ac 0.18% Impervious Runoff Depth=0.66" Flow Length=849' Tc=17.7 min CN=63 Runoff=6.49 cfs 0.571 af
Subcatchment 14S: Sub 14	Runoff Area=72.733 ac 0.42% Impervious Runoff Depth=0.85" Flow Length=4,131' Tc=49.6 min CN=67 Runoff=31.66 cfs 5.152 af
Subcatchment 17S: Sub 17	Runoff Area=97.893 ac 1.18% Impervious Runoff Depth=0.53" Flow Length=3,526' Tc=35.1 min CN=60 Runoff=27.14 cfs 4.335 af
Subcatchment 18S: Sub 18	Runoff Area=45.577 ac 0.74% Impervious Runoff Depth=0.95" Flow Length=2,382' Tc=42.2 min CN=69 Runoff=26.15 cfs 3.623 af
Subcatchment 19S: Sub 19	Runoff Area=28.406 ac 0.54% Impervious Runoff Depth=1.12" Flow Length=1,760' Tc=30.4 min CN=72 Runoff=25.36 cfs 2.653 af
Subcatchment 20S: Sub 20 Flow Length	Runoff Area=70.525 ac 0.78% Impervious Runoff Depth=0.80" =1,829' Tc=21.6 min UI Adjusted CN=66 Runoff=51.14 cfs 4.704 af
Subcatchment 21S: Sub 21	Runoff Area=123.016 ac 3.33% Impervious Runoff Depth=0.85" Flow Length=4,201' Tc=42.5 min CN=67 Runoff=60.04 cfs 8.714 af
Subcatchment 22S: Sub 22	Runoff Area=62.296 ac 0.60% Impervious Runoff Depth=1.12" Flow Length=1,448' Tc=27.3 min CN=72 Runoff=59.70 cfs 5.819 af
Subcatchment 23.1S: Sub 23.1	Runoff Area=3.682 ac 0.00% Impervious Runoff Depth=1.01" Tc=6.0 min CN=70 Runoff=6.33 cfs 0.309 af
Subcatchment 23S: Sub 23 Flow Leng	Runoff Area=13.069 ac 2.96% Impervious Runoff Depth=0.90" th=1,297' Tc=33.2 min UI Adjusted CN=68 Runoff=8.27 cfs 0.982 af
Subcatchment 24S: Sub 24 Flow Leng	Runoff Area=5.466 ac  7.70% Impervious  Runoff Depth=1.18" th=1,045'  Tc=24.7 min  UI Adjusted CN=73  Runoff=5.97 cfs  0.537 af
Subcatchment 43S: Subcat 43	Runoff Area=34.065 ac 0.27% Impervious Runoff Depth=1.06" Flow Length=2,795' Tc=40.7 min CN=71 Runoff=23.12 cfs 3.020 af
Subcatchment 44.1S: 44.1S	Runoff Area=6.425 ac 0.00% Impervious Runoff Depth=1.50" Tc=6.0 min CN=78 Runoff=16.76 cfs 0.802 af
Subcatchment 44S: 44S	Runoff Area=39.864 ac 0.00% Impervious Runoff Depth=1.01" Flow Length=2,470' Tc=41.7 min CN=70 Runoff=24.83 cfs 3.349 af
Subcatchment 45S: Subcat 45	Runoff Area=33.931 ac 0.22% Impervious Runoff Depth=0.49" Flow Length=2,198' Tc=29.8 min CN=59 Runoff=9.30 cfs 1.390 af
Subcatchment 46.1S: 46.1S	Runoff Area=5.473 ac 0.00% Impervious Runoff Depth=0.08" Flow Length=719' Tc=31.5 min CN=45 Runoff=0.05 cfs 0.038 af
Subcatchment 46S: Subcat 46	Runoff Area=25.304 ac 0.00% Impervious Runoff Depth=0.03" Flow Length=1,524' Tc=54.0 min CN=41 Runoff=0.08 cfs 0.054 af
Subcatchment 47S: Sub 47 Flow Leng	Runoff Area=30.058 ac 1.25% Impervious Runoff Depth=0.02" th=1,895' Tc=43.3 min UI Adjusted CN=40 Runoff=0.07 cfs 0.040 af

Mill Pt Post 1

Prepared by TRC Companies HydroCAD® 10.20-5a s/n 01402 © 2023 HydroCAD Software Solutions LLC

 Type II 24-hr
 10-year Rainfall=3.50"

 Printed
 7/19/2024

 LLC
 Page 124

Reach 6R: W-NSD-35	Avg. Flow Depth=0.50' Max Vel=3.75 fps Inflow=25.13 cfs 4.687 af n=0.036 L=1,882.0' S=0.0276 '/' Capacity=88.34 cfs Outflow=24.38 cfs 4.687 af
Reach 13.1R:	Avg. Flow Depth=0.09' Max Vel=2.27 fps Inflow=1.50 cfs 1.277 af n=0.030 L=165.0' S=0.0727 '/' Capacity=48.67 cfs Outflow=1.50 cfs 1.277 af
Reach 13.2R:	Avg. Flow Depth=0.14' Max Vel=4.75 fps Inflow=1.50 cfs 1.277 af n=0.035 L=232.0' S=0.2069 '/' Capacity=1,230.81 cfs Outflow=1.50 cfs 1.277 af
Reach 20.1R: S-KCF-6	Avg. Flow Depth=1.68' Max Vel=2.94 fps Inflow=74.09 cfs 7.357 af n=0.030 L=1,405.0' S=0.0028 '/' Capacity=141.69 cfs Outflow=63.82 cfs 7.357 af
Reach 20.2R:	Avg. Flow Depth=1.21' Max Vel=4.34 fps Inflow=63.82 cfs 7.357 af n=0.035 L=1,322.0' S=0.0121 '/' Capacity=250.41 cfs Outflow=60.47 cfs 7.357 af
Reach 22.1R: S-KCF-5	Avg. Flow Depth=1.20' Max Vel=3.65 fps Inflow=60.04 cfs 8.714 af n=0.030 L=665.0' S=0.0060 '/' Capacity=89.91 cfs Outflow=59.61 cfs 8.714 af
Reach 22.2R:	Avg. Flow Depth=1.80' Max Vel=4.31 fps Inflow=119.45 cfs 16.071 af n=0.035 L=707.0' S=0.0075 '/' Capacity=86.27 cfs Outflow=118.14 cfs 16.071 af
Reach 44R:	Avg. Flow Depth=0.88' Max Vel=4.15 fps Inflow=23.12 cfs 3.020 af n=0.035 L=498.0' S=0.0321 '/' Capacity=8.70 cfs Outflow=22.92 cfs 3.020 af
Reach 45R:	Avg. Flow Depth=1.06' Max Vel=5.94 fps Inflow=47.62 cfs 6.369 af n=0.035 L=537.0' S=0.0372 '/' Capacity=16.21 cfs Outflow=47.30 cfs 6.369 af
Pond 4.1P: 4.1P	Peak Elev=496.84' Storage=35,035 cf Inflow=22.38 cfs 1.111 af Primary=0.35 cfs 0.690 af Secondary=0.00 cfs 0.000 af Outflow=0.35 cfs 0.690 af
Pond 7.1P:	Peak Elev=513.13' Storage=8,163 cf Inflow=2.02 cfs 0.187 af Primary=0.00 cfs 0.000 af Secondary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af
Pond 9.1P: 9.1P	Peak Elev=468.44' Storage=23,148 cf Inflow=7.88 cfs 0.882 af Primary=0.47 cfs 0.668 af Secondary=0.00 cfs 0.000 af Outflow=0.47 cfs 0.668 af
Pond 10.1P: 10.1P	Peak Elev=569.52' Storage=9,292 cf Inflow=3.27 cfs 0.254 af Primary=0.10 cfs 0.043 af Secondary=0.00 cfs 0.000 af Outflow=0.10 cfs 0.043 af
Pond 12P: 12P	Peak Elev=507.86' Storage=22,918 cf Inflow=23.14 cfs 1.277 af 8.0" Round Culvert n=0.013 L=172.7' S=0.0058 '/' Outflow=1.50 cfs 1.277 af
Pond 23.1P: 23.1P	Peak Elev=493.50' Storage=5,908 cf Inflow=6.33 cfs 0.309 af Primary=0.47 cfs 0.222 af Secondary=0.00 cfs 0.000 af Outflow=0.47 cfs 0.222 af
Pond 44.1P: 44.1P	Peak Elev=427.53' Storage=32,067 cf Inflow=16.76 cfs 0.802 af Primary=0.14 cfs 0.168 af Secondary=0.00 cfs 0.000 af Outflow=0.14 cfs 0.168 af
Pond 46.1P: 46.1P	Peak Elev=354.25' Storage=1,667 cf Inflow=0.05 cfs 0.038 af Primary=0.00 cfs 0.000 af Secondary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af

Mill Pt Post 1	Type II 24-hr 10-year Rainfall=3.50"
Prepared by TRC Companies HydroCAD® 10.20-5a s/n 01402 © 2023 HydroCAD Software Solution	Printed 7/19/2024 s LLC Page 125
Link SP1:	Inflow=1.74 cfs 0.183 af Primary=1.74 cfs 0.183 af
Link SP10:	Inflow=15.17 cfs 1.853 af Primary=15.17 cfs 1.853 af
Link SP11:	Inflow=12.71 cfs 1.103 af
	Primary=12.71 cfs 1.103 af
Link SP13:	Inflow=7.96 cfs 1.847 af
	Primary=7.96 cfs 1.847 af
Link SP14:	Inflow=31.66 cfs 5.152 af
	Primary=31.66 cfs 5.152 af
Link SP17:	Inflow=27.14 cfs 4.335 af
	Primary=27.14 cfs 4.335 af
Link SP18:	Inflow=26.15 cfs 3.623 af Primary=26.15 cfs 3.623 af
	·
Link SP2:	Inflow=4.76 cfs 0.523 af Primary=4.76 cfs 0.523 af
Link SP22:	Inflow=140.57 cfs 21.890 af Primary=140.57 cfs 21.890 af
	Filmary-140.57 Cis 21.690 al
Link SP23:	Inflow=8.66 cfs 1.203 af
	Primary=8.66 cfs 1.203 af
Link SP24:	Inflow=5.97 cfs 0.537 af
	Primary=5.97 cfs 0.537 af
Link SP3:	Inflow=11.88 cfs 1.505 af
	Primary=11.88 cfs 1.505 af
Link SP4:	Inflow=30.23 cfs 4.985 af
	Primary=30.23 cfs 4.985 af
Link SP43:	Inflow=54.76 cfs 7.926 af
	Primary=54.76 cfs 7.926 af
Link SP46:	Inflow=0.08 cfs_0.054 af
	Primary=0.08 cfs 0.054 af
Link SP47:	Inflow=0.07 cfs 0.040 af
	Primary=0.07 cfs 0.040 af
Link SP5:	Inflow=30.80 cfs 6.888 af
	Primary=30.80 cfs 6.888 af
Link SP7:	Inflow=11.99 cfs 2.352 af
	Primary=11.99 cfs 2.352 af

Link SP9:

Inflow=19.40 cfs 3.943 af Primary=19.40 cfs 3.943 af

Total Runoff Area = 1,129.454 ac Runoff Volume = 71.738 af Average Runoff Depth = 0.76" 98.80% Pervious = 1,115.935 ac 1.20% Impervious = 13.519 ac

#### Summary for Subcatchment 1S: Sub 1

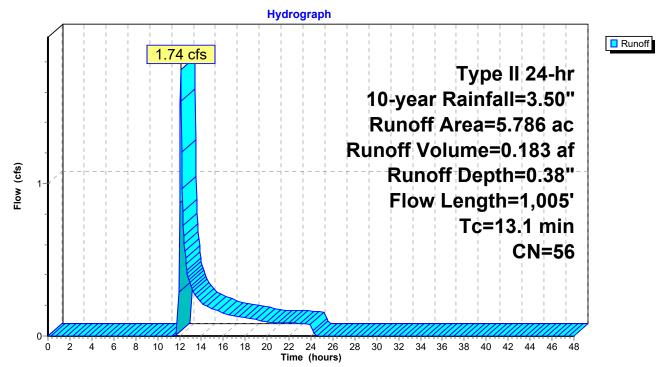
Runoff = 1.74 cfs @ 12.10 hrs, Volume= 0.183 af, Depth= 0.38" Routed to Link SP1 :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 10-year Rainfall=3.50"

Area	(ac) C	N Desc	cription		
				grazed, HS	G B
4.	149 5	5 <u>Woo</u>	ds, Good,	HSG B	
5.	786 5	6 Weig	ghted Aver	age	
5.	786	100.	00% Pervi	ous Area	
Tc	Length	Slope	Velocity	Capacity	Description
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
7.1	100	0.0620	0.24		Sheet Flow,
					Grass: Short n= 0.150 P2= 2.50"
2.9	427	0.2390	2.44		Shallow Concentrated Flow,
					Woodland Kv= 5.0 fps
2.0	263	0.0980	2.19		Shallow Concentrated Flow,
					Short Grass Pasture Kv= 7.0 fps
1.1	215	0.4050	3.18		Shallow Concentrated Flow,
					Woodland Kv= 5.0 fps

13.1 1,005 Total

### Subcatchment 1S: Sub 1



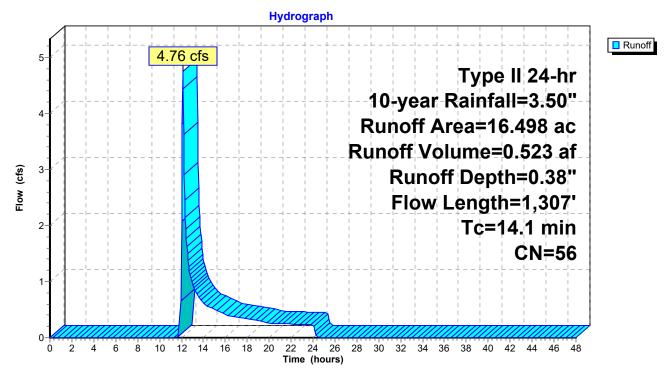
### Summary for Subcatchment 2S: Sub 2

Runoff = 4.76 cfs @ 12.11 hrs, Volume= 0.523 af, Depth= 0.38" Routed to Link SP2 :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 10-year Rainfall=3.50"

Area	(ac) C	N Desc	cription						
	0.124 30 Meadow, non-grazed, HSG A 8.883 58 Meadow, non-grazed, HSG B								
			ds, Good,						
	16.498 56 Weighted Average								
16.	16.498 100.00% Pervious Area								
Тс	Length	Slope	Velocity	Capacity	Description				
<u>(min)</u>	(feet)	(ft/ft)	(ft/sec)	(cfs)					
5.8	100	0.1010	0.29		Sheet Flow,				
					Grass: Short n= 0.150 P2= 2.50"				
2.8	407	0.2420	2.46		Shallow Concentrated Flow,				
4 5	005	0.4000	0.40		Woodland Kv= 5.0 fps				
1.5	225	0.1200	2.42		Shallow Concentrated Flow,				
1.3	169	0.1830	2.14		Short Grass Pasture Kv= 7.0 fps				
1.5	109	0.1030	Z.14		Shallow Concentrated Flow, Woodland Kv= 5.0 fps				
0.5	113	0.5100	3.57		Shallow Concentrated Flow,				
0.0	110	0.0100	0.07		Woodland Kv= 5.0 fps				
2.2	293	0.0220	2.22		Shallow Concentrated Flow,				
					Grassed Waterway Kv= 15.0 fps				
14.1	1,307	Total							

Subcatchment 2S: Sub 2



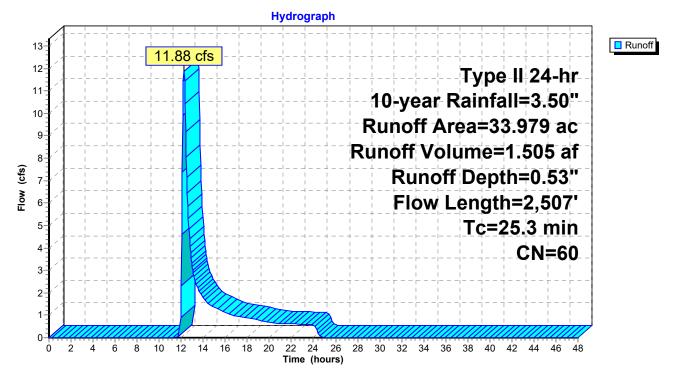
### Summary for Subcatchment 3S: Sub 3

Runoff = 11.88 cfs @ 12.25 hrs, Volume= 1.505 af, Depth= 0.53" Routed to Link SP3 :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 10-year Rainfall=3.50"

18.697       58       Meadow, non-grazed, HSG B         7.336       71       Meadow, non-grazed, HSG C         7.021       55       Woods, Good, HSG B         0.032       70       Woods, Good, HSG C         0.530       96       Gravel surface, HSG A         0.363       30       Meadow, non-grazed, HSG A         0.363       30       Meadow, non-grazed, HSG A         33.979       60       Weighted Average         33.979       100.00% Pervious Area         Tc       Length       Slope       Velocity       Capacity         (min)       (feet)       (ft/ft)       (ft/sec)       (cfs)         8.4       100       0.0640       1.77       Shallow Concentrated Flow, Short Grass Pasture       Kv= 7.0 fps         3.7       337       0.0940       1.53       Shallow Concentrated Flow, Woodland       Kv= 5.0 fps         2.5       632       4.29       Direct Entry, CF       1.3       436       5.59         25.3       2.507       Total       5.59       Direct Entry, CF	Area	(ac) C	N Dese	cription						
7.021       55       Woods, Good, HSG B         0.032       70       Woods, Good, HSG C         0.530       96       Gravel surface, HSG A         0.363       30       Meadow, non-grazed, HSG A         33.979       60       Weighted Average         33.979       100.00% Pervious Area         Tc       Length       Slope       Velocity       Capacity         (min)       (feet)       (ft/ft)       Capacity       Description         (min)       (feet)       Velocity       Capacity       Description         8.4       100       0.0400       0.20       Sheet Flow, Grass: Short n= 0.150 P2= 2.50"         9.4       1,002       0.0640       1.77       Shallow Concentrated Flow, Short Grass Pasture       Kv= 7.0 fps         3.7       337       0.0940       1.53       Shallow Concentrated Flow, Woodland       Kv= 5.0 fps         2.5       632       4.29       Direct Entry, CF       1.3       436       5.59	18	.697	58 Mea	Meadow, non-grazed, HSG B						
0.032       70       Woods, Good, HSG C         0.530       96       Gravel surface, HSG A         0.363       30       Meadow, non-grazed, HSG A         33.979       60       Weighted Average         33.979       100.00% Pervious Area         Tc       Length       Slope       Velocity       Capacity         (min)       (feet)       (ft/ft)       Capacity       Description         (min)       (feet)       (ft/ft)       (ft/sec)       (cfs)         8.4       100       0.0400       0.20       Sheet Flow, Grass: Short n= 0.150 P2= 2.50"         9.4       1,002       0.0640       1.77       Shallow Concentrated Flow, Short Grass Pasture       Kv= 7.0 fps         3.7       337       0.0940       1.53       Shallow Concentrated Flow, Woodland       Kv= 5.0 fps         2.5       632       4.29       Direct Entry, CF       Direct Entry, CF         1.3       436       5.59       Direct Entry, CF       Direct Entry, CF	7	.336	71 Mea	dow, non-	grazed, HS	GC				
0.530         96         Gravel surface, HSG A           0.363         30         Meadow, non-grazed, HSG A           33.979         60         Weighted Average           33.979         100.00% Pervious Area           Tc         Length         Slope         Velocity         Capacity         Description           (min)         (feet)         (ft/ft)         (ft/sec)         (cfs)         Carass: Short         n= 0.150         P2= 2.50"           8.4         100         0.0400         0.20         Sheet Flow, Grass: Short         Grass: Short         n= 0.150         P2= 2.50"           9.4         1,002         0.0640         1.77         Shallow Concentrated Flow, Short Grass Pasture         Kv= 7.0 fps           3.7         337         0.0940         1.53         Shallow Concentrated Flow, Woodland         Woodland           2.5         632         4.29         Direct Entry, CF         1.3         436	7	.021								
0.36330Meadow, non-grazed, HSG A33.97960Weighted Average33.979100.00% Pervious AreaTcLengthSlopeVelocityCapacityDescription(min)(feet)(ft/ft)(ft/sec)(cfs)8.41000.04000.20Sheet Flow, Grass: Short n= 0.150 P2= 2.50"9.41,0020.06401.77Shallow Concentrated Flow, Short Grass Pasture3.73370.09401.53Shallow Concentrated Flow, Woodland2.56324.29Direct Entry, CF1.34365.59Direct Entry, CF										
33.979       60       Weighted Average 33.979         33.979       100.00% Pervious Area         Tc       Length       Slope       Velocity       Capacity (cfs)       Description         (min)       (feet)       (ft/ft)       (ft/sec)       (cfs)         8.4       100       0.0400       0.20       Sheet Flow, Grass: Short n= 0.150 P2= 2.50"         9.4       1,002       0.0640       1.77       Shallow Concentrated Flow, Short Grass Pasture       Kv= 7.0 fps         3.7       337       0.0940       1.53       Shallow Concentrated Flow, Woodland       Woodland         2.5       632       4.29       Direct Entry, CF         1.3       436       5.59       Direct Entry, CF					,					
33.979       100.00% Pervious Area         Tc       Length       Slope       Velocity       Capacity       Description         (min)       (feet)       (ft/ft)       (ft/sec)       (cfs)       Description         8.4       100       0.0400       0.20       Sheet Flow, Grass: Short n= 0.150       P2= 2.50"         9.4       1,002       0.0640       1.77       Shallow Concentrated Flow, Short Grass Pasture       Kv= 7.0 fps         3.7       337       0.0940       1.53       Shallow Concentrated Flow, Woodland       Kv= 5.0 fps         2.5       632       4.29       Direct Entry, CF       Direct Entry, CF         1.3       436       5.59       Direct Entry, CF	0	.363 3	<u>30 Mea</u>	dow, non-g	grazed, HS	G A				
TcLength (min)Slope (ft/ft)Velocity (ft/sec)Capacity (cfs)Description8.41000.04000.20Sheet Flow, Grass: Short n= 0.150 P2= 2.50"9.41,0020.06401.77Shallow Concentrated Flow, Short Grass Pasture3.73370.09401.53Shallow Concentrated Flow, Woodland2.56324.29Direct Entry, CF1.34365.59Direct Entry, CF	33	.979 (								
(min)         (feet)         (ft/ft)         (ft/sec)         (cfs)           8.4         100         0.0400         0.20         Sheet Flow, Grass: Short n= 0.150 P2= 2.50"           9.4         1,002         0.0640         1.77         Shallow Concentrated Flow, Short Grass Pasture         Kv= 7.0 fps           3.7         337         0.0940         1.53         Shallow Concentrated Flow, Woodland         Kv= 5.0 fps           2.5         632         4.29         Direct Entry, CF         Direct Entry, CF           1.3         436         5.59         Direct Entry, CF         Direct Entry, CF	33	.979	100.	00% Pervi	ous Area					
(min)         (feet)         (ft/ft)         (ft/sec)         (cfs)           8.4         100         0.0400         0.20         Sheet Flow, Grass: Short n= 0.150 P2= 2.50"           9.4         1,002         0.0640         1.77         Shallow Concentrated Flow, Short Grass Pasture         Kv= 7.0 fps           3.7         337         0.0940         1.53         Shallow Concentrated Flow, Woodland         Kv= 5.0 fps           2.5         632         4.29         Direct Entry, CF         Direct Entry, CF           1.3         436         5.59         Direct Entry, CF         Direct Entry, CF										
8.4       100       0.0400       0.20       Sheet Flow, Grass: Short n= 0.150       P2= 2.50"         9.4       1,002       0.0640       1.77       Shallow Concentrated Flow, Short Grass Pasture       Kv= 7.0 fps         3.7       337       0.0940       1.53       Shallow Concentrated Flow, Woodland       Kv= 5.0 fps         2.5       632       4.29       Direct Entry, CF         1.3       436       5.59       Direct Entry, CF				,	• • •	Description				
9.4       1,002       0.0640       1.77       Shallow Concentrated Flow, Short Grass Pasture       Kv= 7.0 fps         3.7       337       0.0940       1.53       Shallow Concentrated Flow, Woodland       Kv= 5.0 fps         2.5       632       4.29       Direct Entry, CF         1.3       436       5.59       Direct Entry, CF			(ft/ft)	(ft/sec)	(cfs)					
9.4       1,002       0.0640       1.77       Shallow Concentrated Flow, Short Grass Pasture       Kv= 7.0 fps         3.7       337       0.0940       1.53       Shallow Concentrated Flow, Woodland       Kv= 5.0 fps         2.5       632       4.29       Direct Entry, CF         1.3       436       5.59       Direct Entry, CF	8.4	100	0.0400	0.20						
3.7       337       0.0940       1.53       Short Grass Pasture       Kv= 7.0 fps         3.7       337       0.0940       1.53       Shallow Concentrated Flow, Woodland       Kv= 5.0 fps         2.5       632       4.29       Direct Entry, CF         1.3       436       5.59       Direct Entry, CF										
3.7       337       0.0940       1.53       Shallow Concentrated Flow, Woodland Kv= 5.0 fps         2.5       632       4.29       Direct Entry, CF         1.3       436       5.59       Direct Entry, CF	9.4	1,002	0.0640	1.77		•				
2.5         632         4.29         Direct Entry, CF           1.3         436         5.59         Direct Entry, CF						•				
2.5         632         4.29         Direct Entry, CF           1.3         436         5.59         Direct Entry, CF	3.7	337	0.0940	1.53		•				
1.3         436         5.59         Direct Entry, CF										
25.3 2,507 Total	1.3	436		5.59		Direct Entry, CF				
	25.3	2,507	Total							

Subcatchment 3S: Sub 3



#### Summary for Subcatchment 4.1S:

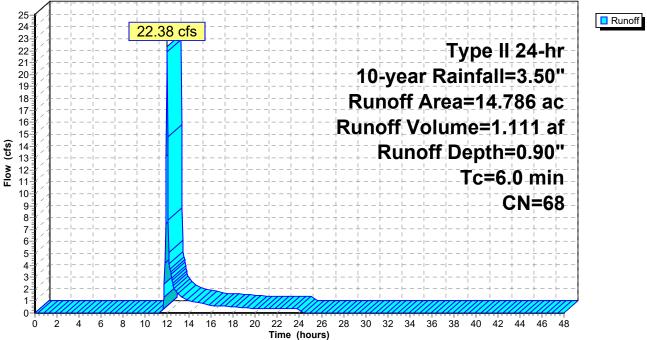
Runoff = 22.38 cfs @ 11.98 hrs, Volume= Routed to Pond 4.1P : 4.1P 1.111 af, Depth= 0.90"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 10-year Rainfall=3.50"

	Area	(ac)	CN	Desc	cription		
	10.	166	71	Mea	dow, non-g	grazed, HS	SG C
*	0.	489	96	Grav	/el	-	
	4.	131	58	Mea	dow, non-g	grazed, HS	SG B
	14.	.786 68 Weighted Average					
	14.	786		100.	00% Pervi	ous Area	
	Тс	Leng	ıth	Slope	Velocity	Capacity	Description
	(min)	(fee		(ft/ft)	(ft/sec)	(cfs)	
_	6.0						Direct Entry,

#### Subcatchment 4.1S:





### Summary for Subcatchment 4S: Sub 4

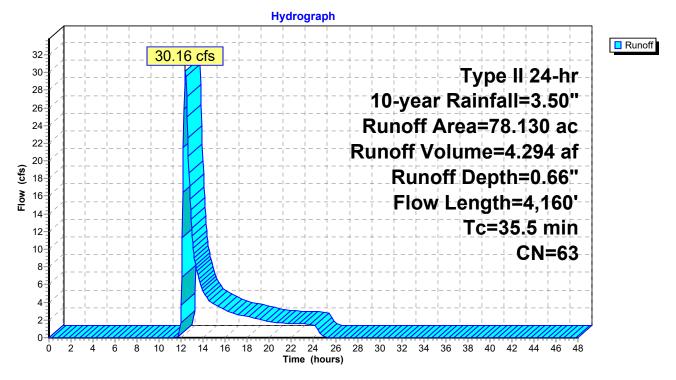
Runoff = 30.16 cfs @ 12.37 hrs, Volume= 4.294 a Routed to Link SP4 :

4.294 af, Depth= 0.66"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 10-year Rainfall=3.50"

_	Area	(ac) (	CN Des	cription							
	0.	192	48 Brus	Brush, Good, HSG B							
*	1.	938	96 Grav	vel surface							
*	0.	259	98 Unc	onnected r	oofs						
					grazed, HS						
					grazed, HS						
					grazed, HS	GC					
				ods, Good,							
_	3.	344	70 Woo	ods, Good,	HSG C						
				ghted Aver							
		871		7% Pervio							
		259		0.33% Impervious Area							
	0.	259	100	.00% Unco	nnected						
	-		<u>.</u>		<b>A B</b>						
	Tc	Length		Velocity	Capacity	Description					
_	(min)	(feet)		(ft/sec)	(cfs)						
	9.9	100	0.1900	0.17		Sheet Flow,					
	4.0	~~-	0 4550	0.70		Woods: Light underbrush n= 0.400 P2= 2.50"					
	1.8	295	0.1550	2.76		Shallow Concentrated Flow,					
	474	4 0 4 4	0.0050	4.04		Short Grass Pasture Kv= 7.0 fps					
	17.1	1,344	0.0350	1.31		Shallow Concentrated Flow,					
	67	0 401		6.02		Short Grass Pasture Kv= 7.0 fps					
_	6.7	2,421	<b>T</b> . ( . )	6.02		Direct Entry, CF					
	35.5	4,160	Total								

#### Subcatchment 4S: Sub 4



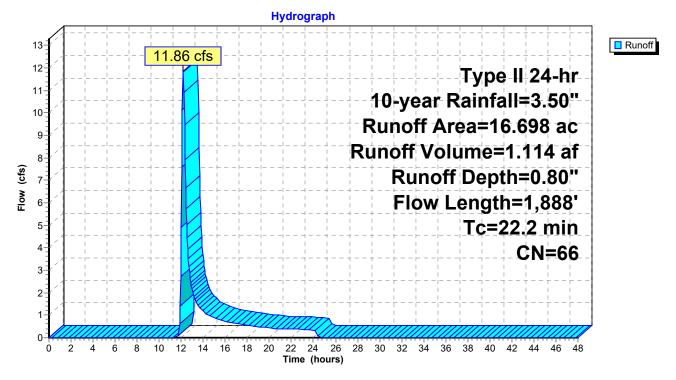
### Summary for Subcatchment 5S: Sub 5

Runoff = 11.86 cfs @ 12.18 hrs, Volume= 1.114 af, Depth= 0.80" Routed to Link SP5 :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 10-year Rainfall=3.50"

Area	(ac) C	N Dese	Description						
5.	916 5	58 Meadow, non-grazed, HSG B							
8.385 71 Meadow, non-grazed, HSG C									
			Woods, Good, HSG B						
			Woods, Good, HSG C						
0.	153 9	96 Grav	el surface	, HSG A					
-			ghted Aver	0					
16.	698	100.	00% Pervi	ous Area					
_									
Tc	Length	Slope	Velocity	Capacity	Description				
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)					
9.4	100	0.0300	0.18		Sheet Flow,				
					Grass: Short n= 0.150 P2= 2.50"				
6.4	549	0.0420	1.43		Shallow Concentrated Flow,				
					Short Grass Pasture Kv= 7.0 fps				
1.7	195	0.0780	1.95		Shallow Concentrated Flow,				
. –			- <b>-</b> -		Short Grass Pasture Kv= 7.0 fps				
4.7	1,044		3.70		Direct Entry, CF				
22.2	1,888	Total							

### Subcatchment 5S: Sub 5



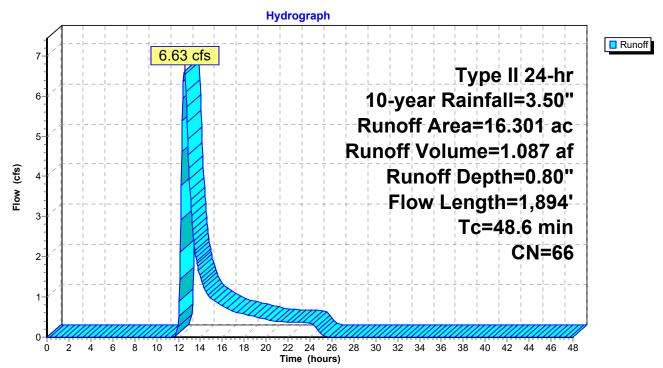
#### Summary for Subcatchment 6S: Sub 6

Runoff = 6.63 cfs @ 12.55 hrs, Volume= 1.087 af, Depth= 0.80" Routed to Link SP5 :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 10-year Rainfall=3.50"

Area	(ac) C	N Dese	cription				
6.	.064	58 Mea	dow, non-	grazed, HS	GB		
9.	461	71 Mea	dow, non-	grazed, HS	GC		
0.	126	55 Woo	Woods, Good, HSG B				
0.	650	70 Woo	Woods, Good, HSG C				
16.	.301	66 Weig	ghted Aver	age			
16.	16.301		100.00% Pervious Area				
Tc	Length	Slope	Velocity	Capacity	Description		
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)			
27.8	100	0.0020	0.06		Sheet Flow,		
					Grass: Short n= 0.150 P2= 2.50"		
19.8	1,554	0.0350	1.31		Shallow Concentrated Flow,		
					Short Grass Pasture Kv= 7.0 fps		
1.0	240		3.81		Direct Entry, CF		
48.6	1,894	Total					

#### Subcatchment 6S: Sub 6



#### Summary for Subcatchment 7.1S: Sub 7.1

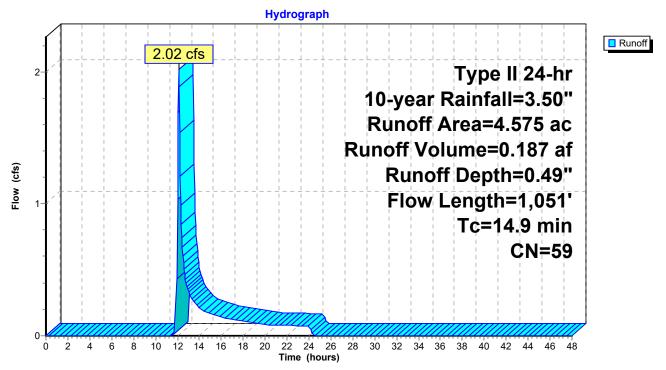
Runoff = 2.02 cfs @ 12.11 hrs, Volume= 0.187 af, Depth= 0.49" Routed to Pond 7.1P :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 10-year Rainfall=3.50"

Area	(ac) C	N Desc	cription				
4.	216 5	8 Mea	Meadow, non-grazed, HSG B				
0.	131 9	6 Grav	Gravel surface, HSG B				
0.	228 5	5 Woo	Woods, Good, HSG B				
4.	575 5	9 Weig	ghted Aver	age			
4.	575		100.00% Pervious Area				
Tc	Length	Slope	Velocity	Capacity	Description		
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)			
7.0	100	0.0640	0.24		Sheet Flow,		
					Grass: Short n= 0.150 P2= 2.50"		
0.7	90	0.1000	2.21		Shallow Concentrated Flow,		
					Short Grass Pasture Kv= 7.0 fps		
0.5	54	0.1100	1.66		Shallow Concentrated Flow,		
					Woodland Kv= 5.0 fps		
6.7	807	0.0820	2.00		Shallow Concentrated Flow,		
					Short Grass Pasture Kv= 7.0 fps		

14.9 1,051 Total

### Subcatchment 7.1S: Sub 7.1



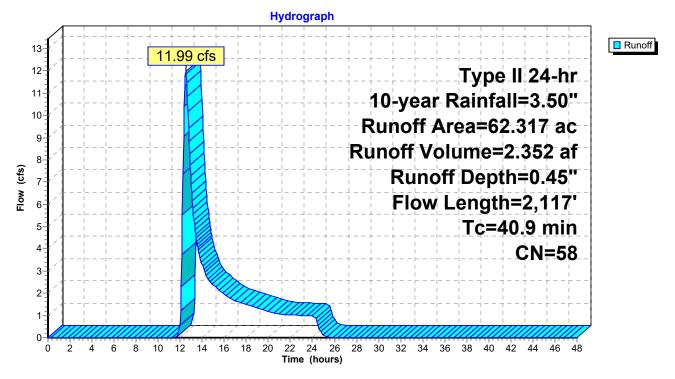
### Summary for Subcatchment 7S: Sub 7

Runoff = 11.99 cfs @ 12.50 hrs, Volume= 2.352 af, Depth= 0.45" Routed to Link SP7 :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 10-year Rainfall=3.50"

Area	(ac)	CN D	Description						
46.	288	58 M	Meadow, non-grazed, HSG B						
1.	123	78 M	eadow, non-	grazed, HS	G D				
12.	864	55 W	oods, Good,	HSG B					
0.	323	77 W	Woods, Good, HSG D						
	107		Pasture/grassland/range, Good, HSG C						
1.	155		ravel surface	,					
0.	457	48 B	rush, Good,	HSG B					
62.	317	58 W	Weighted Average						
62.	317	1(	100.00% Pervious Area						
_									
ŢĊ	Length		,	Capacity	Description				
(min)	(feet		, , ,	(cfs)					
27.8	100	0.002	0.06		Sheet Flow,				
					Grass: Short n= 0.150 P2= 2.50"				
9.7	786	0.037	0 1.35		Shallow Concentrated Flow,				
					Short Grass Pasture Kv= 7.0 fps				
3.4	1,231		6.01		Direct Entry,				
40.9	2,117	′ Total							

Subcatchment 7S: Sub 7



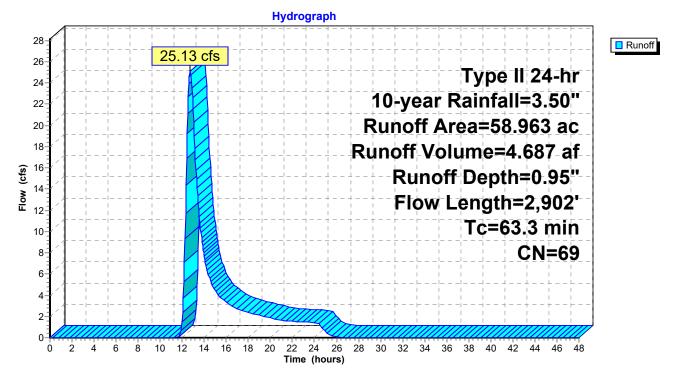
### Summary for Subcatchment 8S: Sub 8

Runoff = 25.13 cfs @ 12.74 hrs, Volume= 4.687 af, Depth= 0.95" Routed to Reach 6R : W-NSD-35

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 10-year Rainfall=3.50"

Area	(ac) C	N Dese	cription						
6.	209	58 Mea	Meadow, non-grazed, HSG B						
30.	343			grazed, HS					
8.	.033	78 Mea	dow, non-	grazed, HS	GD				
5.	.658		Woods, Good, HSG B						
6.	737	70 Woo	Woods, Good, HSG C						
1.	132	77 Woo	ds, Good,	HSG D					
0.	761	96 Grav	el surface	, HSG A					
0.	.090	30 Past	ure/grassl	and/range,	Good, HSG D				
58.	.963	69 Weig	ghted Aver	age					
58.	.963		100.00% Pervious Area						
Тс	Length	Slope	Velocity	Capacity	Description				
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)					
23.7	100	0.0030	0.07		Sheet Flow,				
					Grass: Short n= 0.150 P2= 2.50"				
6.6	315	0.0130	0.80		Shallow Concentrated Flow,				
					Short Grass Pasture Kv= 7.0 fps				
23.1	727	0.0110	0.52		Shallow Concentrated Flow,				
					Woodland Kv= 5.0 fps				
9.9	1,760		2.97		Direct Entry, CF				
63.3	2,902	Total							

#### Subcatchment 8S: Sub 8



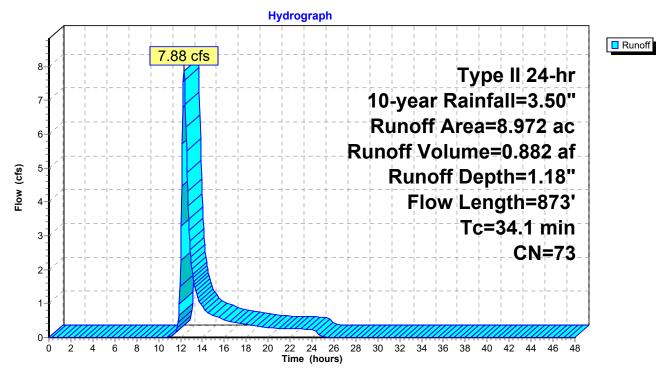
#### Summary for Subcatchment 9.1S: Sub 9.1

Runoff = 7.88 cfs @ 12.32 hrs, Volume= 0.882 af, Depth= 1.18" Routed to Pond 9.1P : 9.1P

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 10-year Rainfall=3.50"

Area	(ac) (	CN Dese	cription			
1.619 78 Meadow, non-grazed, HSG D						
0	.528	65 Brus	h, Good, H	ÍSG C		
4	.896			grazed, HS		
1	.929	74 >75 <sup>9</sup>	% Grass co	over, Good	, HSG C	
8	.972		ghted Aver			
8.972 100.00% Pervious Area						
Tc	Length	Slope	Velocity	Capacity	Description	
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)		
21.1	100	0.0040	0.08		Sheet Flow,	
					Grass: Short n= 0.150 P2= 2.50"	
13.0	773	0.0200	0.99		Shallow Concentrated Flow,	
					Short Grass Pasture Kv= 7.0 fps	
34.1	873	Total				

#### Subcatchment 9.1S: Sub 9.1



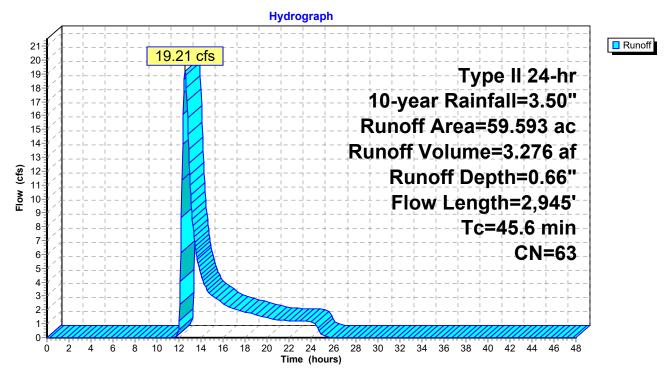
# Summary for Subcatchment 9S: Sub 9

Runoff = 19.21 cfs @ 12.52 hrs, Volume= Routed to Link SP9 :

3.276 af, Depth= 0.66"

Area	(ac) C	N Dese	cription						
2.	.871 4	18 Brus	Brush, Good, HSG B						
0.	.293 6	65 Brus	Brush, Good, HSG C						
0.	.014 7	73 Brus	sh, Good, H	ISG D					
3.			/el surface	, HSG D					
			onnected r	oofs, HSG	D				
23.	.963 5			grazed, HS					
2.	.179 7			grazed, HS					
0.				grazed, HS					
				over, Good,					
				over, Good,	, HSG C				
-			er Surface						
			ds, Good,						
1.	.580 7	70 Woo	ds, Good,	HSG C					
59.	.593 6	3 Weig	ghted Aver	age					
58.	.831	98.7	2% Pervio	us Area					
0.	762	1.28	% Impervi	ous Area					
0.	.332	43.5	7% Uncon	nected					
_				_					
Tc	Length	Slope	Velocity	Capacity	Description				
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)					
17.9	100	0.0060	0.09		Sheet Flow,				
					Grass: Short n= 0.150 P2= 2.50"				
13.8	841	0.0210	1.01		Shallow Concentrated Flow,				
					Short Grass Pasture Kv= 7.0 fps				
10.9	1,254	0.0750	1.92		Shallow Concentrated Flow,				
					Short Grass Pasture Kv= 7.0 fps				
1.6	156		1.63		Direct Entry,				
1.4	594		7.07		Direct Entry,				
45.6	2,945	Total							

Subcatchment 9S: Sub 9



### Summary for Subcatchment 10.1S: Sub 10.1

Runoff = 3.27 cfs @ 12.13 hrs, Volume= 0.254 af, Depth= 1.06" Routed to Pond 10.1P : 10.1P

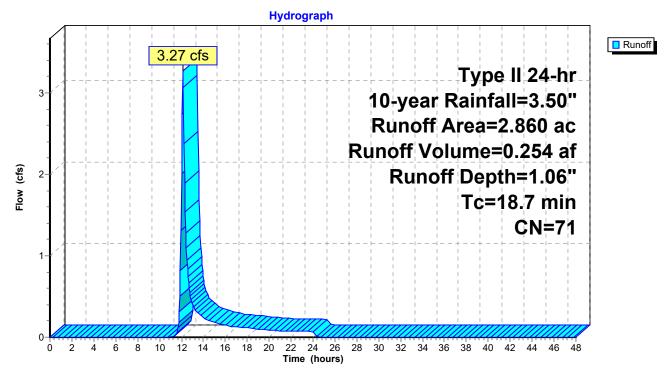
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 10-year Rainfall=3.50"

Area (ac)	CN	Description
0.026	61	>75% Grass cover, Good, HSG B
0.781	74	>75% Grass cover, Good, HSG C
0.447	80	>75% Grass cover, Good, HSG D
0.524	58	Meadow, non-grazed, HSG B
1.054	71	Meadow, non-grazed, HSG C
0.028	65	Brush, Good, HSG C
2.860	71	Weighted Average
2.860		100.00% Pervious Area
Tc Leng	gth 🖇	Slope Velocity Capacity Description
(min) (fe	et)	(ft/ft) (ft/sec) (cfs)

1	8.	7
---	----	---

**Direct Entry, Direct** 

#### Subcatchment 10.1S: Sub 10.1

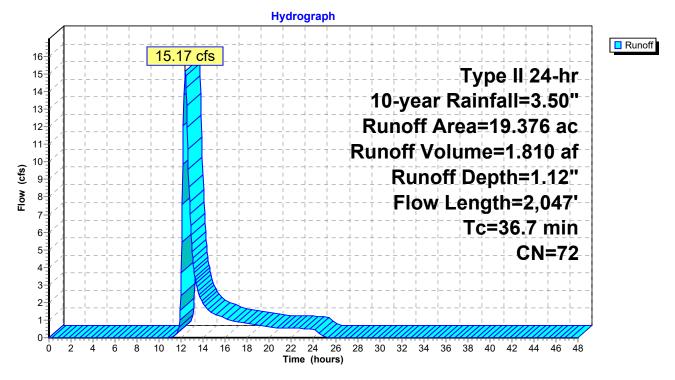


# Summary for Subcatchment 10S: Sub 10

Runoff = 15.17 cfs @ 12.35 hrs, Volume= Routed to Link SP10 : 1.810 af, Depth= 1.12"

Area	(ac)	CN	Desc	ription							
1	.008	98	8 Wate	Vater Surface, HSG D							
0	.081	98	3 Unco	Inconnected roofs, HSG D							
0	.828	96	6 Grav	el surface	, HSG D						
-	.200	48		h, Good, H							
1	.752	65	5 Brus	h, Good, H	ISG C						
	.996	73		h, Good, H							
-	.403	58			grazed, HS						
	.089	71			grazed, HS						
	.486	61			over, Good,						
	.211	74			over, Good,						
-	.204	80			over, Good,	, HSG D					
	.917	55		ds, Good,							
	.044	70		ds, Good,							
-	.157	77		ds, Good,							
	.376	72		hted Aver	•						
-	.287			8% Pervio							
	.089			% Impervi							
0	.081		7.44	% Unconn	ected						
Тс	Long	th	Slope	Velocity	Canacity	Description					
(min)	Leng (fee		Slope (ft/ft)	(ft/sec)	Capacity (cfs)	Description					
10.9	10	/	0.0210	0.15	(03)	Shoot Flow					
10.9		0	0.0210	0.15		Sheet Flow, Grass: Short n= 0.150 P2= 2.50"					
22.7	1,34	17	0.0200	0.99		Shallow Concentrated Flow,					
22.1	1,0-	T /	0.0200	0.00		Short Grass Pasture Kv= 7.0 fps					
3.1	60	00		3.18		Direct Entry, CF					
36.7	2,04	17	Total								

### Subcatchment 10S: Sub 10

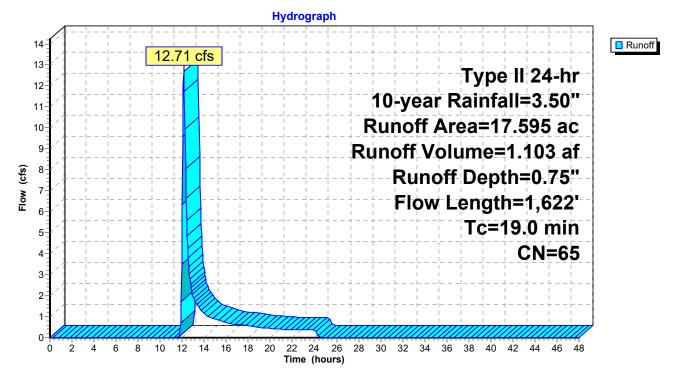


# Summary for Subcatchment 11S: Sub 11

Runoff = 12.71 cfs @ 12.15 hrs, Volume= Routed to Link SP11 : 1.103 af, Depth= 0.75"

Area	(ac) C	N Dese	cription							
0.	199 4	48 Brus	Brush, Good, HSG B							
0.	091 6	65 Brus	Brush, Good, HSG C							
			el surface							
				oofs, HSG						
				grazed, HS						
				grazed, HS						
				over, Good,						
				over, Good,	, HSG C					
			er Surface,							
			ds, Good,							
			ds, Good,							
			phted Aver							
	132		7% Pervio							
-	463		% Impervie							
0.	091	19.0	5% Uncon	neclea						
Тс	Length	Slope	Velocity	Capacity	Description					
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	Description					
9.2	100	0.0320	0.18	(013)	Shoot Elow					
9.2	100	0.0320	0.10		Sheet Flow, Grass: Short n= 0.150 P2= 2.50"					
3.9	579	0.0240	2.49		Shallow Concentrated Flow,					
0.0	515	0.0240	2.45		Unpaved Kv= 16.1 fps					
2.6	277	0.0620	1.74		Shallow Concentrated Flow,					
2.0	211	0.0020			Short Grass Pasture Kv= 7.0 fps					
0.7	102	0.2670	2.58		Shallow Concentrated Flow,					
•					Woodland Kv= 5.0 fps					
2.6	564		3.62		Direct Entry, CF					
19.0	1,622	Total								

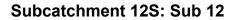
# Subcatchment 11S: Sub 11

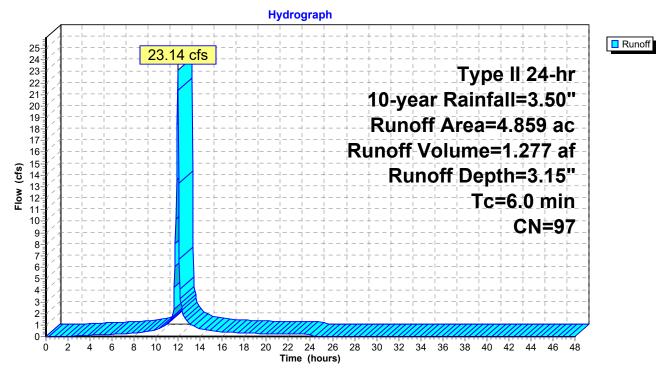


#### Summary for Subcatchment 12S: Sub 12

Runoff = 23.14 cfs @ 11.96 hrs, Volume= Routed to Pond 12P : 12P 1.277 af, Depth= 3.15"

Area	(ac)	CN	Desc	ription		
0.	038	98	Unco	nnected p	avement, H	HSG D
2.	251	96	Grav	el surface	, HSG D	
2.	570	98	Wate	er Surface,	HSG D	
4.	859	97	Weig	hted Aver	age	
2.	251		46.3	3% Pervio	us Area	
2.	608		53.6	7% Imperv	ious Area	
0.	038		1.46	Wunconn	ected	
Тс	Lengt	th	Slope	Velocity	Capacity	Description
(min)	(fee	t)	(ft/ft)	(ft/sec)	(cfs)	
6.0						Direct Entry, minimum



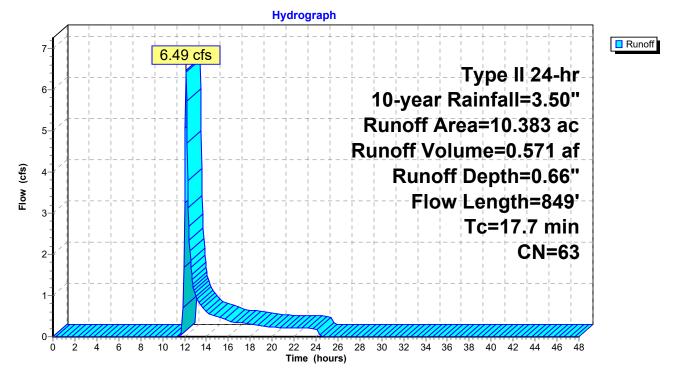


# Summary for Subcatchment 13S: Sub 13

Runoff = 6.49 cfs @ 12.13 hrs, Volume= 0.571 af, Depth= 0.66" Routed to Link SP13 :

Area	(ac) (	CN Desc	cription							
0	.019	98 Unco	Unconnected pavement, HSG D							
0.	.120	96 Grav	Gravel surface, HSG D							
1.	.784	58 Mea	dow, non-g	grazed, HS	G B					
4	.488	71 Mea	dow, non-g	grazed, HS	GC					
			ds, Good,							
0.	.325	70 Woo	ds, Good,	HSG C						
10.	.383	63 Weig	ghted Aver	age						
	.364		2% Pervio							
	.019		% Impervi							
0.	.019	100.	100.00% Unconnected							
т.	1	0	V. L	0	Description					
Tc	Length		Velocity	Capacity	Description					
<u>(min)</u>	(feet)	(ft/ft)	(ft/sec)	(cfs)	<b>A I I</b>					
10.1	100	0.0250	0.16		Sheet Flow,					
<b>-</b> 4	500	0.0540	4 00		Grass: Short n= 0.150 P2= 2.50"					
5.4	526	0.0540	1.63		Shallow Concentrated Flow,					
0.7	~~~	0.0070	4 50		Short Grass Pasture Kv= 7.0 fps					
0.7	62	0.0970	1.56		Shallow Concentrated Flow,					
1 5	161	0 4220	1 0 0		Woodland Kv= 5.0 fps					
1.5	161	0.1330	1.82		Shallow Concentrated Flow, Woodland Kv= 5.0 fps					
47.7	0.40	Tatal								
17.7	849	Total								

# Subcatchment 13S: Sub 13



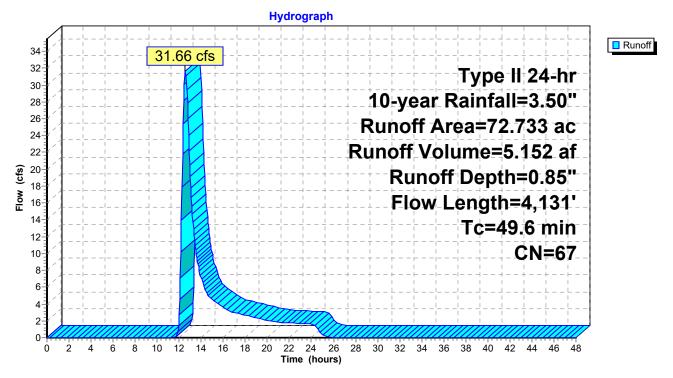
# Summary for Subcatchment 14S: Sub 14

- [47] Hint: Peak is 174% of capacity of segment #4 [47] Hint: Peak is 411% of capacity of segment #5
- Runoff = 31.66 cfs @ 12.56 hrs, Volume= Routed to Link SP14 :

5.152 af, Depth= 0.85"

Area	(ac) C	N Desc	cription							
0.	667 4	48 Brush, Good, HSG B								
0.	121 6	65 Brus	Brush, Good, HSG C							
1.	517 7	73 Brus	Brush, Good, HSG D							
				oofs, HSG						
				grazed, HS						
				grazed, HS						
				grazed, HS						
				over, Good	, HSG D					
			ds, Good,							
			ds, Good,							
			ds, Good,							
			phted Aver							
	426		8% Pervio							
	307		% Impervi							
0.	307	100.0	00% Unco	nnected						
Та	ما به مرجع ا	Clana	Valasity	Consister	Description					
Tc (min)	Length	Slope	Velocity	Capacity	Description					
(min)	(feet)	(ft/ft)	(ft/sec)	Capacity (cfs)						
					Sheet Flow,					
<u>(min)</u> 9.0	(feet) 50	(ft/ft) 0.0600	(ft/sec) 0.09		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.50"					
(min)	(feet)	(ft/ft)	(ft/sec)		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.50" Sheet Flow,					
<u>(min)</u> 9.0 5.6	(feet) 50 50	(ft/ft) 0.0600 0.0280	(ft/sec) 0.09 0.15		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.50" Sheet Flow, Grass: Short n= 0.150 P2= 2.50"					
<u>(min)</u> 9.0	(feet) 50	(ft/ft) 0.0600	(ft/sec) 0.09		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.50" Sheet Flow, Grass: Short n= 0.150 P2= 2.50" Shallow Concentrated Flow,					
(min) 9.0 5.6 6.7	(feet) 50 50 465	(ft/ft) 0.0600 0.0280 0.0270	(ft/sec) 0.09 0.15 1.15	(cfs)	Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.50" Sheet Flow, Grass: Short n= 0.150 P2= 2.50" Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps					
<u>(min)</u> 9.0 5.6	(feet) 50 50	(ft/ft) 0.0600 0.0280	(ft/sec) 0.09 0.15		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.50" Sheet Flow, Grass: Short n= 0.150 P2= 2.50" Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps Trap/Vee/Rect Channel Flow,					
(min) 9.0 5.6 6.7	(feet) 50 50 465	(ft/ft) 0.0600 0.0280 0.0270	(ft/sec) 0.09 0.15 1.15	(cfs)	Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.50" Sheet Flow, Grass: Short n= 0.150 P2= 2.50" Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps Trap/Vee/Rect Channel Flow, Bot.W=5.00' D=0.50' Z= 20.0 '/' Top.W=25.00'					
(min) 9.0 5.6 6.7 9.8	(feet) 50 50 465 1,433	(ft/ft) 0.0600 0.0280 0.0270 0.0120	(ft/sec) 0.09 0.15 1.15 2.43	(cfs) 18.23	Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.50" Sheet Flow, Grass: Short n= 0.150 P2= 2.50" Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps Trap/Vee/Rect Channel Flow, Bot.W=5.00' D=0.50' Z= 20.0 '/' Top.W=25.00' n= 0.030 Earth, grassed & winding					
(min) 9.0 5.6 6.7	(feet) 50 50 465	(ft/ft) 0.0600 0.0280 0.0270	(ft/sec) 0.09 0.15 1.15	(cfs)	Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.50" Sheet Flow, Grass: Short n= 0.150 P2= 2.50" Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps Trap/Vee/Rect Channel Flow, Bot.W=5.00' D=0.50' Z= 20.0 '/' Top.W=25.00' n= 0.030 Earth, grassed & winding Trap/Vee/Rect Channel Flow,					
(min) 9.0 5.6 6.7 9.8	(feet) 50 50 465 1,433	(ft/ft) 0.0600 0.0280 0.0270 0.0120	(ft/sec) 0.09 0.15 1.15 2.43	(cfs) 18.23	Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.50" Sheet Flow, Grass: Short n= 0.150 P2= 2.50" Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps Trap/Vee/Rect Channel Flow, Bot.W=5.00' D=0.50' Z= 20.0 '/' Top.W=25.00' n= 0.030 Earth, grassed & winding Trap/Vee/Rect Channel Flow, Bot.W=5.00' D=0.50' Z= 6.0 '/' Top.W=11.00'					
(min) 9.0 5.6 6.7 9.8	(feet) 50 50 465 1,433	(ft/ft) 0.0600 0.0280 0.0270 0.0120	(ft/sec) 0.09 0.15 1.15 2.43	(cfs) 18.23	Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.50" Sheet Flow, Grass: Short n= 0.150 P2= 2.50" Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps Trap/Vee/Rect Channel Flow, Bot.W=5.00' D=0.50' Z= 20.0 '/' Top.W=25.00' n= 0.030 Earth, grassed & winding Trap/Vee/Rect Channel Flow,					

Subcatchment 14S: Sub 14



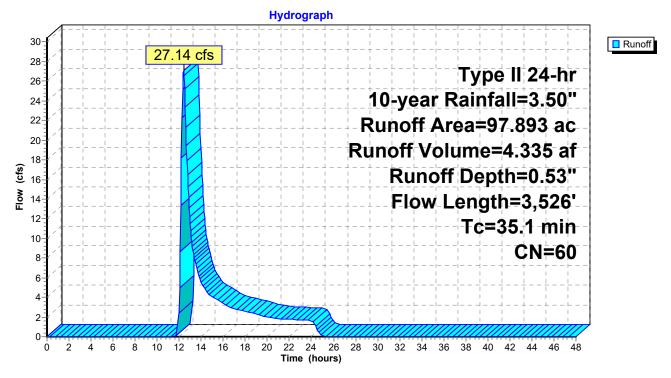
# Summary for Subcatchment 17S: Sub 17

[47] Hint: Peak is 405% of capacity of segment #4

Runoff = 27.14 cfs @ 12.39 hrs, Volume= Routed to Link SP17 : 4.335 af, Depth= 0.53"

Area	(ac) C	N Dese	cription						
1.	139 9	96 Grav	Gravel surface, HSG D						
1.	.153 9	98 Unco	onnected r	oofs, HSG	D				
77.	.902 5			grazed, HS					
-				grazed, HS					
				grazed, HS					
				over, Good					
				over, Good					
				over, Good	, HSG D				
-			ds, Good,						
			ds, Good,						
			ds, Good,						
-			ghted Aver						
	740		2% Pervio						
	153		% Impervi						
1.	153	100.	00% Unco	nnected					
То	Longth	Slope	Valaaity	Conocity	Description				
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description				
				(015)					
9.4	100	0.0300	0.18		Sheet Flow, Grass: Short n= 0.150 P2= 2.50"				
5.2	681	0.0990	2.20		Shallow Concentrated Flow,				
J.Z	001	0.0990	2.20		Short Grass Pasture Kv= 7.0 fps				
10.3	1,098	0.0650	1.78		Shallow Concentrated Flow,				
10.0	1,000	0.0000	1.70		Short Grass Pasture Kv= 7.0 fps				
10.2	1,647	0.0140	2.68	6.70	Trap/Vee/Rect Channel Flow,				
10.2	1,011	0.0110	2.00	0.10	Bot.W=2.00' D=0.50' Z= 6.0 '/' Top.W=8.00'				
					n= 0.030 Earth, grassed & winding				
35.1	3,526	Total							
00.1	0,020								

Subcatchment 17S: Sub 17

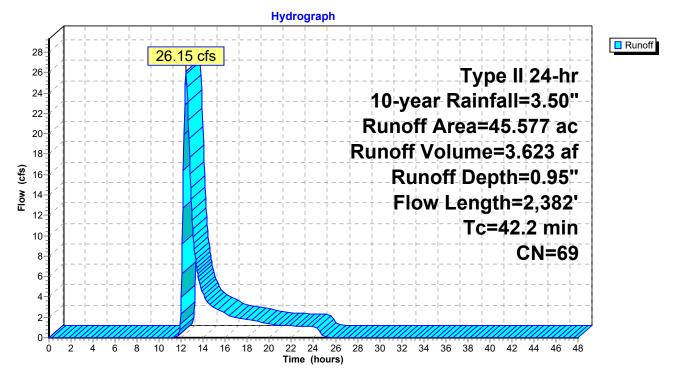


# Summary for Subcatchment 18S: Sub 18

Runoff = 26.15 cfs @ 12.44 hrs, Volume= Routed to Link SP18 : 3.623 af, Depth= 0.95"

	Area	(ac) C	N Dese	cription		
	2.	524	48 Brus	h, Good, H	ISG B	
	4.	116	73 Brus	h, Good, H	ISG D	
*	0.	335	98 Pave	ement		
	9.	706	58 Mea	dow, non-	grazed, HS	GB
	19.	493	71 Mea	dow, non-	grazed, HS	GC
	8.	101	78 Mea	dow, non-	grazed, HS	G D
	0.	649	77 Woo	ds, Good,	HSG D	
*	0.	653	96 Grav	/el road		
	45.	577	69 Weig	ghted Aver	age	
	45.	242	99.2	6% Pervio	us Area	
	0.335		0.74	% Impervi	ous Area	
	Тс	Length	Slope	Velocity	Capacity	Description
	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
	11.6	100	0.0180	0.14		Sheet Flow,
						Grass: Short n= 0.150 P2= 2.50"
	10.5	668	0.0230	1.06		Shallow Concentrated Flow,
						Short Grass Pasture Kv= 7.0 fps
	4.5	459	0.0590	1.70		Shallow Concentrated Flow,
						Short Grass Pasture Kv= 7.0 fps
	2.7	128	0.0130	0.80		Shallow Concentrated Flow,
						Short Grass Pasture Kv= 7.0 fps
	12.9	1,027		1.33		Direct Entry, CF
	42.2	2,382	Total			

Subcatchment 18S: Sub 18

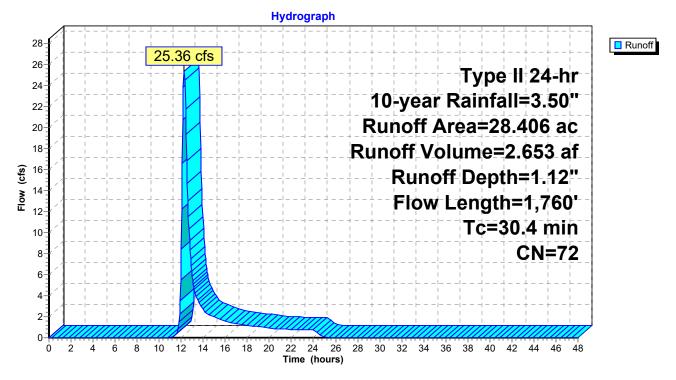


# Summary for Subcatchment 19S: Sub 19

Runoff = 25.36 cfs @ 12.27 hrs, Volume= Routed to Reach 20.1R : S-KCF-6 2.653 af, Depth= 1.12"

_	Area	(ac) C	N Dese	cription				
	0.	227	65 Brus	h, Good, H	ISG C			
	0.	105	73 Brus	h, Good, H	ISG D			
	2.	120	58 Mea	dow, non-g	grazed, HS	IG B		
	18.	358	71 Mea	dow, non-	grazed, HS	GC		
	7.	318	78 Mea	dow, non-g	grazed, HS	G D		
	0.	153	98 Wate	er Surface	, HSG D			
_	0.	125	77 Woo	ds, Good,	HSG D			
	28.	406	72 Weig	ghted Aver	age			
	28.	253	99.4	6% Pervio	us Area			
	0.	153	0.54	0.54% Impervious Area				
	Тс	Length	Slope	Velocity	Capacity	Description		
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)			
	8.2	100	0.0430	0.20		Sheet Flow,		
						Grass: Short n= 0.150 P2= 2.50"		
	1.5	212	0.1120	2.34		Shallow Concentrated Flow,		
						Short Grass Pasture Kv= 7.0 fps		
	10.0	635	0.0230	1.06		Shallow Concentrated Flow,		
						Short Grass Pasture Kv= 7.0 fps		
	10.7	813	0.0330	1.27		Shallow Concentrated Flow,		
_						Short Grass Pasture Kv= 7.0 fps		
	30.4	1,760	Total					

### Subcatchment 19S: Sub 19

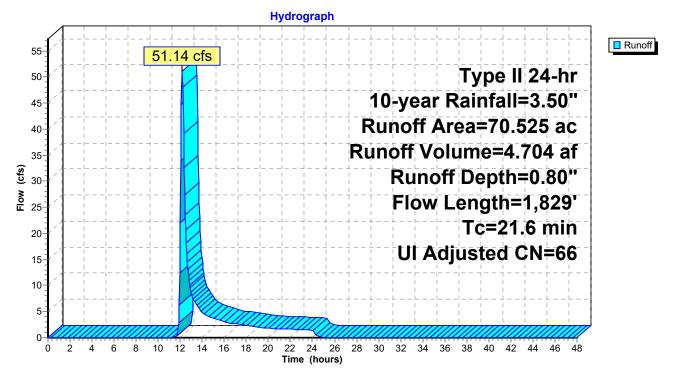


# Summary for Subcatchment 20S: Sub 20

Runoff = 51.14 cfs @ 12.17 hrs, Volume= 4.704 af, Depth= 0.80" Routed to Reach 20.1R : S-KCF-6

Area	(ac) (	CN Adj	Descript	tion					
0.	508	98	Unconn	ected roofs	, HSG D				
29.	509	58		/, non-graz					
		71		/, non-graz					
		78		/, non-graz					
		61			, Good, HSG B				
		55	,	Good, HSC					
		70		Good, HSC					
		77		Good, HSC					
		98		urface, HS					
		48		Good, HSG					
-		65		Good, HSG					
		73		Brush, Good, HSG D					
-		96		surface, HS					
		67 66		Weighted Average, UI Adjusted					
	973			99.22% Pervious Area 0.78% Impervious Area					
-	552								
0.	508		92.03%	Unconnect	ed				
Тс	Length	Slope	Velocity	Capacity	Description				
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	Decemption				
6.7	100		0.25	(0.0)	Sheet Flow,				
0.7	100	0.0700	0.20		Grass: Short n= 0.150 P2= 2.50"				
2.6	259	0.0580	1.69		Shallow Concentrated Flow,				
					Short Grass Pasture Kv= 7.0 fps				
8.8	703	0.0360	1.33		Shallow Concentrated Flow,				
					Short Grass Pasture Kv= 7.0 fps				
3.5	767		3.65		Direct Entry, CF				
21.6	1,829	Total							

Subcatchment 20S: Sub 20



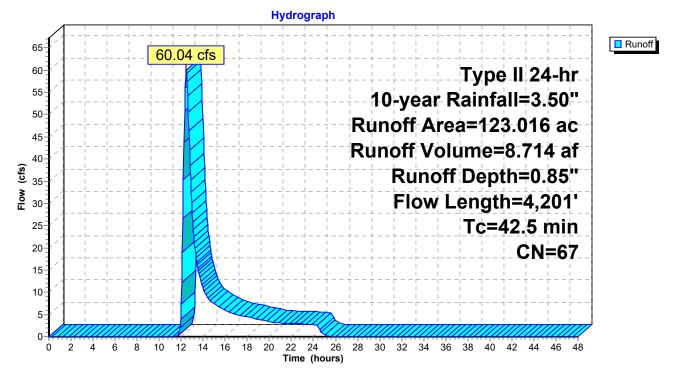
### Summary for Subcatchment 21S: Sub 21

[47] Hint: Peak is 444% of capacity of segment #3 [47] Hint: Peak is 396% of capacity of segment #4 [47] Hint: Peak is 463% of capacity of segment #5

60.04 cfs @ 12.45 hrs, Volume= 8.714 af, Depth= 0.85" Runoff = Routed to Reach 22.1R : S-KCF-5

Area	(ac) C	N Desc	cription						
2.	223	96 Gravel surface, HSG D							
0.	950	98 Unco	onnected r	oofs, HSG	D				
50.	366	58 Mea	dow, non-g	grazed, HS	IG B				
57.	844	71 Mea	Meadow, non-grazed, HSG C						
		78 Mea	Meadow, non-grazed, HSG D						
3.			er Surface,						
-			ds, Good,						
			ds, Good,						
				over, Good					
				over, Good	, HSG C				
			h, Good, F						
0.	344	65 Brus	h, Good, F	ISG C					
123.	016	67 Weig	ghted Aver	age					
118.	921	96.6	96.67% Pervious Area						
4.	095	3.33	3.33% Impervious Area						
0.	950	23.2	23.20% Unconnected						
Тс	Length	Slope	Velocity	Capacity	Description				
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)					
12.1	100	0.0160	0.14		Sheet Flow,				
					Grass: Short n= 0.150 P2= 2.50"				
12.6	1,112	0.0440	1.47		Shallow Concentrated Flow,				
					Short Grass Pasture Kv= 7.0 fps				
2.2	346	0.0150	2.58	13.52					
					Bot.W=6.00' D=0.50' Z= 9.0 '/' Top.W=15.00'				
					n= 0.035 Earth, dense weeds				
8.3	1,504	0.0150	3.03	15.15	Trap/Vee/Rect Channel Flow,				
					Bot.W=9.00' D=0.50' Z= 2.0 '/' Top.W=11.00'				
					n= 0.035 Earth, dense weeds				
7.3	1,139	0.0110	2.60	12.98	Trap/Vee/Rect Channel Flow,				
					Bot.W=9.00' D=0.50' Z= 2.0 '/' Top.W=11.00'				
					n= 0.035 Earth, dense weeds				
42.5	4,201	Total							

Subcatchment 21S: Sub 21



#### Summary for Subcatchment 22S: Sub 22

[47] Hint: Peak is 1083% of capacity of segment #6

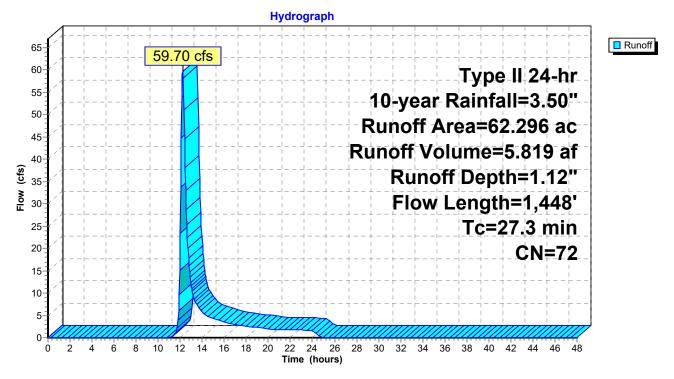
59.70 cfs @ 12.23 hrs, Volume= 5.819 af, Depth= 1.12" Runoff = Routed to Link SP22 :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 10-year Rainfall=3.50"

Area	i (ac) – C	N Desc	cription								
	.623	96 Grav	el surface	, HSG D							
		58 Mea	dow, non-g	grazed, HS	G B						
				grazed, HS							
			Meadow, non-grazed, HSG D								
			ds, Good,								
-			ds, Good,								
			ds, Good,								
				pavement, H	HSG D						
			h, Good, H								
-			h, Good, H								
			phted Aver								
	.923		0% Pervio								
	).373		0.60% Impervious Area								
(	).373	100.	00% Unco	nnected							
Тс	Longth	Slope	Velocity	Capacity	Description						
(min)	0	(ft/ft)	(ft/sec)	Capacity (cfs)	Description						
7.6	· · · ·	0.0520	0.22	(013)	Sheet Flow,						
7.0	100	0.0520	0.22		Grass: Short $n = 0.150$ P2= 2.50"						
1.7	319	0.0420	3.07		Shallow Concentrated Flow,						
1.7	515	0.0420	5.07		Grassed Waterway Kv= 15.0 fps						
7.8	360	0.0120	0.77		Shallow Concentrated Flow,						
7.0	500	0.0120	0.77		Short Grass Pasture Kv= 7.0 fps						
7.4	452	0.0210	1.01		Shallow Concentrated Flow,						
1.4	-102	5.0210	1.01		Short Grass Pasture Kv= 7.0 fps						
0.9	61	0.0490	1.11		Shallow Concentrated Flow,						
0.0	51	5.0100			Woodland Kv= 5.0 fps						
1.9	156	0.0020	1.38	5.51	Trap/Vee/Rect Channel Flow,						
		5.0020		0.01	Bot.W=2.00' D=1.00' Z= 2.0 '/' Top.W=6.00'						
					n=0.035 Earth, dense weeds						
	4 4 4 0	<b>T</b> . 4 . 1									

27.3 1,448 Total

Subcatchment 22S: Sub 22



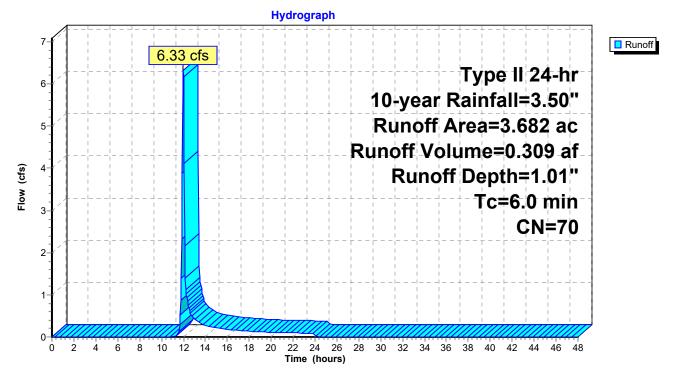
### Summary for Subcatchment 23.1S: Sub 23.1

Runoff = 6.33 cfs @ 11.98 hrs, Volume= Routed to Pond 23.1P : 23.1P 0.309 af, Depth= 1.01"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 10-year Rainfall=3.50"

	Area	(ac)	CN	Desc	cription						
*	0.	928	96	Grav	rel						
	2.	257	58	Mea	Meadow, non-grazed, HSG B						
	0.	497									
	3.	3.682 70 Weighted Average									
	3.682 100.00% Pervious Area										
	Тс	Leng		Slope	Velocity	Capacity	Description				
	(min)	(fee	et)	(ft/ft)	(ft/sec)	(cfs)					
	6.0						Direct Entry,				

# Subcatchment 23.1S: Sub 23.1

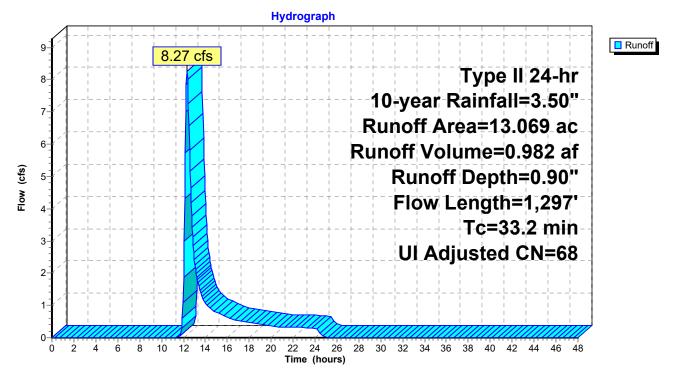


# Summary for Subcatchment 23S: Sub 23

Runoff = 8.27 cfs @ 12.32 hrs, Volume= 0.982 af, Depth= 0.90" Routed to Link SP23 :

Area	(ac) C	N Adj	Descrip	tion			
0.	.012 4	48	Brush, (	Good, HSG	B		
0.	.040	65	Brush, (	Good, HSG	C		
0.	.387 9	98	Unconn	ected roofs	s, HSG D		
2	.687	58	Meadov	v, non-graz	ed, HSG B		
9.	525	71	Meadov	v, non-graz	ed, HSG C		
0.	.031	55	Woods,	Good, HS0	GB		
0.	.387 (	61	>75% G	irass cover	, Good, HSG B		
13.	.069	68 68	Weighte	d Average	, UI Adjusted		
12.	12.682			Pervious A	Area		
0.	.387		2.96% Impervious Area				
0.	.387		100.00% Unconnected				
Tc	Length	Slope	Velocity	Capacity	Description		
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)			
14.2	100	0.0760	0.12		Sheet Flow,		
					Woods: Light underbrush n= 0.400 P2= 2.50"		
15.8	892	0.0180	0.94		Shallow Concentrated Flow,		
					Short Grass Pasture Kv= 7.0 fps		
2.8	262	0.0490	1.55		Shallow Concentrated Flow,		
					Short Grass Pasture Kv= 7.0 fps		
0.4	43		1.79		Direct Entry,		
33.2	1,297	Total					

# Subcatchment 23S: Sub 23



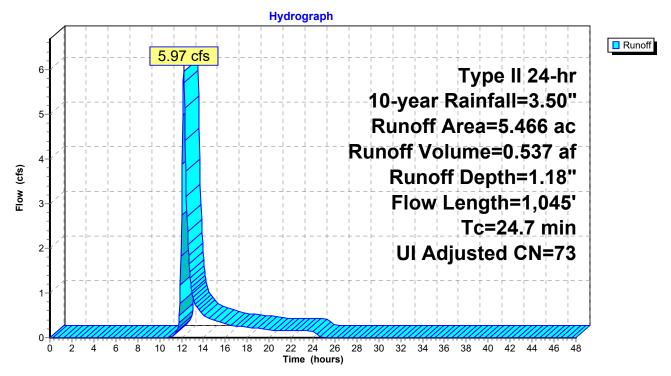
### Summary for Subcatchment 24S: Sub 24

[47] Hint: Peak is 126% of capacity of segment #4

5.97 cfs @ 12.20 hrs, Volume= 0.537 af, Depth= 1.18" Runoff = Routed to Link SP24 :

Area	(ac) C	N Adj	Descript	tion				
0.	036 9	96	Gravel surface, HSG D					
0	421 9	8		ected roofs				
0.		58		, non-graz	,			
2.	730 7	'1			ed, HSG C			
0.	093 6	61			, Good, HSG B			
1.	916 7	<b>'</b> 4			, Good, HSG C			
0.	018 7	'0	Woods,	Good, HSC	GC			
5.	466 7	<b>'</b> 4 73	Weighte	d Average.	, UI Adjusted			
5.	045			Pervious A				
0	421		7.70% l	mpervious /	Area			
0	421		100.00%	6 Unconne	cted			
Тс	Length	Slope	Velocity	Capacity	Description			
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	·			
17.9	100	0.0060	0.09		Sheet Flow,			
					Grass: Short n= 0.150 P2= 2.50"			
2.2	192	0.0450	1.48		Shallow Concentrated Flow,			
					Short Grass Pasture Kv= 7.0 fps			
1.4	100	0.0300	1.21		Shallow Concentrated Flow,			
					Short Grass Pasture Kv= 7.0 fps			
0.8	144	0.0220	3.15	4.73				
					Bot.W=2.00' D=0.50' Z= 2.0 '/' Top.W=4.00'			
					n= 0.035 Earth, dense weeds			
2.4	509	0.0220	3.47	13.02	Trap/Vee/Rect Channel Flow,			
					Bot.W=6.00' D=0.50' Z= 3.0 '/' Top.W=9.00'			
					n= 0.035 Earth, dense weeds			
24.7	1,045	Total						

Subcatchment 24S: Sub 24



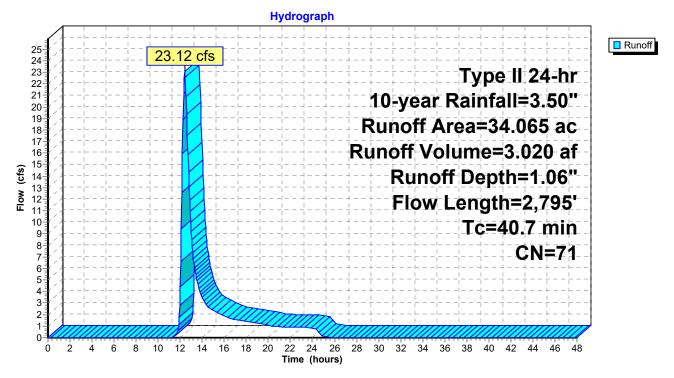
### Summary for Subcatchment 43S: Subcat 43

[47] Hint: Peak is 176% of capacity of segment #3

Runoff = 23.12 cfs @ 12.41 hrs, Volume= Routed to Reach 44R : 3.020 af, Depth= 1.06"

	Area	(ac)	CN	Desc	cription						
*	1.	452	96	Grav	Gravel Impervious						
		107		Brush, Good, HSG B							
		109			h, Good, H						
		252			h, Good, H						
	-	186				grazed, HS					
		295				grazed, HS					
		.175				grazed, HS					
		209				grazed, HS					
	-	.092				oofs, HSG	C				
		648			ds, Good,						
		349			ds, Good,						
		.914 .277			ds, Good, ds, Good,						
		.065									
	-	.005			hted Aver 3% Pervio						
		.092			% Impervi						
		.092			00% Unco						
	0.	002									
	Тс	Length	n Slo	ope	Velocity	Capacity	Description				
	(min)	(feet)		ft/ft)	(ft/sec)	(cfs)	·				
	9.4	100	0.0	300	0.18		Sheet Flow,				
							Grass: Short n= 0.150 P2= 2.50"				
	26.2	1,556	0.02	200	0.99		Shallow Concentrated Flow,				
							Short Grass Pasture Kv= 7.0 fps				
	5.1	1,139	0.0	320	3.76	13.15	Trap/Vee/Rect Channel Flow,				
							Bot.W=6.00' D=0.50' Z= 2.0 '/' Top.W=8.00'				
							n= 0.040 Winding stream, pools & shoals				
	40.7	2,795	5 Tot	al							

# Subcatchment 43S: Subcat 43



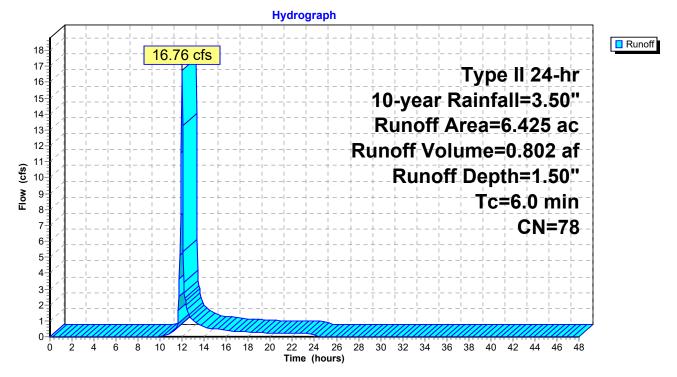
#### Summary for Subcatchment 44.1S: 44.1S

Runoff = 16.76 cfs @ 11.98 hrs, Volume= Routed to Pond 44.1P : 44.1P 0.802 af, Depth= 1.50"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 10-year Rainfall=3.50"

	Area	(ac)	CN	Desc	Description							
*	0.	766	96	Grav	Gravel							
	1.	461	77	Woo	ds, Good,	HSG D						
	1.	511	71	Mea	dow, non-g	grazed, HS	SG C					
	2.	687 78 Meadow, non-grazed, HSG D										
	6.	425	78	Weig	hted Aver	age						
	6.	6.425 100.00% Pervious Area										
	Tc (min)	Leng (fee		Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description					
	6.0						Direct Entry,					

#### Subcatchment 44.1S: 44.1S



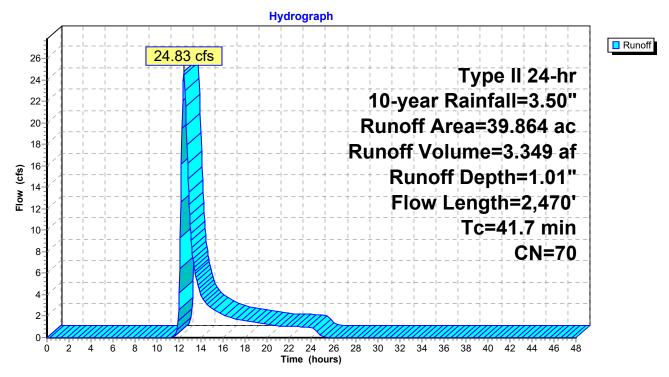
# Summary for Subcatchment 44S: 44S

- [47] Hint: Peak is 447% of capacity of segment #3 [47] Hint: Peak is 173% of capacity of segment #4
- Runoff = 24.83 cfs @ 12.43 hrs, Volume= Routed to Reach 45R :

3.349 af, Depth= 1.01"

	Area	(ac) C	N Dese	cription						
*	1.	144 9	96 Grav	Gravel						
	6.	222 3	55 Woo	ds, Good,	HSG B					
	7.	156	70 Woo	ds, Good,	HSG C					
	0.	180 5	58 Mea	dow, non-g	grazed, HS	G B				
	6.	882	71 Mea	Meadow, non-grazed, HSG C						
	1.	418 3	30 Woo	Woods, Good, HSG A						
	0.	291 3	30 Mea	dow, non-g	grazed, HS	G A				
	6.	908	78 Mea	dow, non-g	grazed, HS	G D				
	9.	663	77 Woo	ds, Good,	HSG D					
	39.	864	70 Weig	ghted Aver	age					
	39.	864	100.	00% Pervi	ous Area					
	Тс	Length	Slope	Velocity	Capacity	Description				
	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)					
	21.9	100	0.0260	0.08		Sheet Flow,				
						Woods: Light underbrush n= 0.400 P2= 2.50"				
	9.2	409	0.0220	0.74		Shallow Concentrated Flow,				
						Woodland Kv= 5.0 fps				
	5.2	715	0.0320	2.31	5.55	Parabolic Channel,				
						W=18.00' D=0.20' Area=2.4 sf Perim=18.0'				
						n= 0.030 Earth, grassed & winding				
	5.4	1,246	0.0350	3.83	14.37	Trap/Vee/Rect Channel Flow,				
						Bot.W=6.00' D=0.50' Z= 3.0 '/' Top.W=9.00'				
						n= 0.040 Earth, cobble bottom, clean sides				
	41.7	2,470	Total							

Subcatchment 44S: 44S

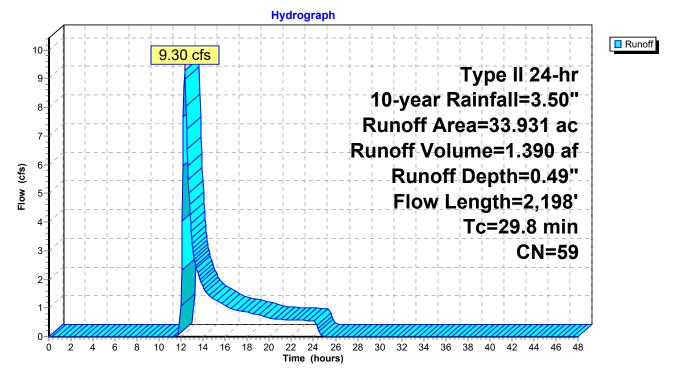


# Summary for Subcatchment 45S: Subcat 45

Runoff = 9.30 cfs @ 12.32 hrs, Volume= 1.390 af, Depth= 0.49" Routed to Link SP43 :

Area	(ac) C	N Dese	cription						
1.	.898 4	48 Brus	Brush, Good, HSG B						
			Brush, Good, HSG C						
				grazed, HS					
				grazed, HS					
				grazed, HS					
				grazed, HS					
-				oofs, HSG					
			ds, Good, ds, Good,						
			ids, Good, ids, Good,						
			ds, Good,						
-			ghted Aver						
	.857		8% Pervio						
0.	.074	0.22	0.22% Impervious Area						
0.	.074	100.	100.00% Unconnected						
-				<b>o</b> "					
Tc	Length	Slope	Velocity	Capacity	Description				
<u>(min)</u>	(feet)	(ft/ft)	(ft/sec)	(cfs)					
12.4	100	0.0150	0.13		Sheet Flow, Grass: Short n= 0.150 P2= 2.50"				
6.5	396	0.0210	1.01		Shallow Concentrated Flow,				
0.5	550	0.0210	1.01		Short Grass Pasture Kv= 7.0 fps				
1.8	223	0.0900	2.10		Shallow Concentrated Flow,				
					Short Grass Pasture Kv= 7.0 fps				
3.4	196	0.0360	0.95		Shallow Concentrated Flow,				
					Woodland Kv= 5.0 fps				
5.7	1,283	0.0370	3.77	10.38	Trap/Vee/Rect Channel Flow,				
					Bot.W=4.00' D=0.50' Z= 3.0 '/' Top.W=7.00'				
					n= 0.040 Winding stream, pools & shoals				
29.8	2,198	Total							

# Subcatchment 45S: Subcat 45



# Summary for Subcatchment 46.1S: 46.1S

Runoff = 0.05 cfs @ 13.92 hrs, Volume= 0 Routed to Pond 46.1P : 46.1P

0.038 af, Depth= 0.08"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 10-year Rainfall=3.50"

	Area	(ac) (	CN Dese	cription						
	0.	196		adow, non-grazed, HSG A						
	0.	132	58 Mea	dow, non-g	grazed, HS	G B				
	2.	928	55 Woo	ds, Good,	HSG B					
	0.	134	30 Brus	sh, Good, H	ISG A					
*	-		96 Grav							
	2.	010	30 Woo	ods, Good,	HSG A					
	5.	473	45 Weig	ghted Aver	age					
	5.	473	100.	00% Pervi	ous Area					
	Тс	Length	Slope	Velocity	Capacity	Description				
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)					
	22.2	100	0.0250	0.08		Sheet Flow,				
						Woods: Light underbrush n= 0.400 P2= 2.50"				
	7.7	389	0.0280	0.84		Shallow Concentrated Flow,				
						Woodland Kv= 5.0 fps				
	1.6	230	0.2300	2.40		Shallow Concentrated Flow,				
						Woodland Kv= 5.0 fps				
	31.5	719	Total							

0.005

Hydrograph 0.055 Runoff 0.05 cfs 0.05 Type II 24-hr 10-year Rainfall=3.50" 0.045 Runoff Area=5.473 ac 0.04 Runoff Volume=0.038 af 0.035 (cfs) Runoff Depth=0.08" 0.03 **6** 0.025 Flow Length=719' Tc=31.5 min 0.02 CN=45 0.015 0.01

Subcatchment 46.1S: 46.1S

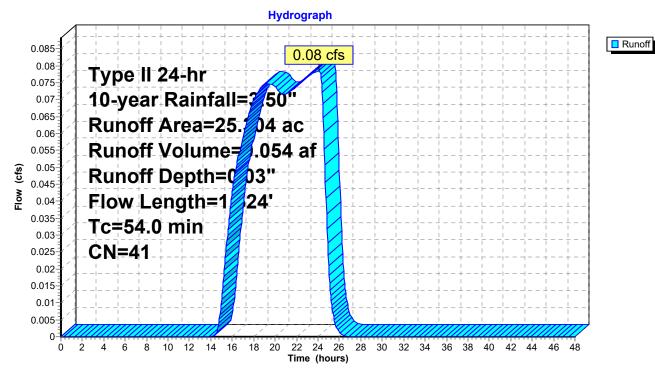
0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 Time (hours)

# Summary for Subcatchment 46S: Subcat 46

Runoff	=	0.08 cfs @	24.09 hrs,	Volume=	0.054 af,	Depth= 0.03"
Routed	l to Link	SP46 :				

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 10-year Rainfall=3.50"

	Area	(ac) C	N Dese	cription		
				h, Good, H		
0.182 48 Brush, Good, HSG B						
					grazed, HS	
					grazed, HS	G B
				ds, Good,		
				ds, Good,		
				ds, Good,	HSG D	
*	0.	506 9	96 Grav	/el		
	25.	304 4	41 Weig	ghted Aver	age	
	25.	304	100.	00% Pervi	ous Area	
	Тс	Length	Slope	Velocity	Capacity	Description
	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
	9.4	100	0.0300	0.18		Sheet Flow,
						Grass: Short n= 0.150 P2= 2.50"
	36.5	774	0.0050	0.35		Shallow Concentrated Flow,
						Woodland Kv= 5.0 fps
	5.2	153	0.0050	0.49		Shallow Concentrated Flow,
						Short Grass Pasture Kv= 7.0 fps
	1.3	245	0.4120	3.21		Shallow Concentrated Flow,
						Woodland Kv= 5.0 fps
	1.2	79	0.0510	1.13		Shallow Concentrated Flow,
						Woodland Kv= 5.0 fps
	0.4	173		6.95		Lake or Reservoir,
_						Mean Depth= 1.50'
	54.0	1,524	Total			



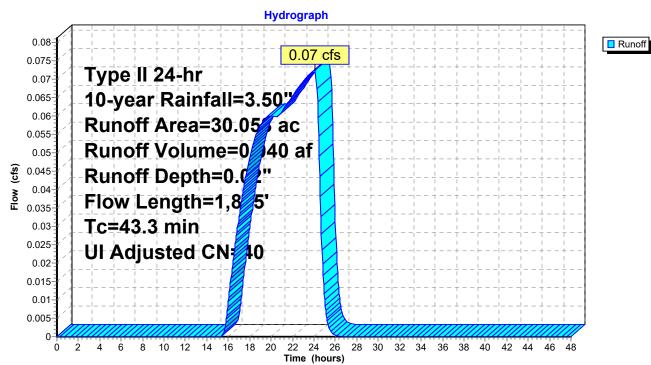
# Subcatchment 46S: Subcat 46

# Summary for Subcatchment 47S: Sub 47

Runoff = 0.07 cfs @ 24.07 hrs, Volume= 0.040 af, Depth= 0.02" Routed to Link SP47 :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 10-year Rainfall=3.50"

Are	ea (ac)	С	N Adj	Descript	tion	
0.377 98 Unconnected pavement, HSG D						
					surface, HS	G D
	0.498	3	89	>75% G	rass cover	, Good, HSG A
	2.024	6	61	>75% G	rass cover	, Good, HSG B
	17.600	3	80	Meadow	, non-graz	ed, HSG A
	2.644	5	58	Meadow	v, non-graz	ed, HSG B
	0.051	3	80	Brush, C	Good, HSG	A
	0.702	4	8	Brush, 0	Good, HSG	В
	1.083	3	80	Woods,	Good, HSC	G A
	4.647	5	55	Woods,	Good, HSC	G B
	30.058	4	1 40	Weighte	d Average	, UI Adjusted
	29.681				Pervious A	
	0.377			1.25% l	mpervious .	Area
	0.377			100.00%	6 Unconne	cted
Т	c Ler	ngth	Slope	Velocity	Capacity	Description
(mir	ר) (f	eet)	(ft/ft)	(ft/sec)	(cfs)	
15.	.3	100	0.2550	0.11		Sheet Flow,
						Woods: Dense underbrush n= 0.800 P2= 2.50"
25.	9 1,	688	0.0240	1.08		Shallow Concentrated Flow,
						Short Grass Pasture Kv= 7.0 fps
2.	.1	107	0.0280	0.84		Shallow Concentrated Flow,
						Woodland Kv= 5.0 fps
43.	.3 1,	895	Total			



# Subcatchment 47S: Sub 47

#### Summary for Reach 6R: W-NSD-35

Inflow Area = 58.963 ac. 0.00% Impervious, Inflow Depth = 0.95" for 10-year event Inflow 25.13 cfs @ 12.74 hrs, Volume= 4.687 af = 24.38 cfs @ 12.98 hrs, Volume= Outflow = 4.687 af, Atten= 3%, Lag= 14.6 min Routed to Link SP5 : Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Max. Velocity= 3.75 fps, Min. Travel Time= 8.4 min Avg. Velocity = 1.08 fps, Avg. Travel Time= 28.9 min Peak Storage= 12,243 cf @ 12.84 hrs Average Depth at Peak Storage= 0.50', Surface Width= 16.00' Bank-Full Depth= 1.00' Flow Area= 16.0 sf, Capacity= 88.34 cfs 10.00' x 1.00' deep channel, n= 0.036 Side Slope Z-value= 6.0 '/' Top Width= 22.00' Length= 1,882.0' Slope= 0.0276 '/' Inlet Invert= 542.00', Outlet Invert= 490.00' ‡ Reach 6R: W-NSD-35 Hydrograph Inflow 25.13 cfs 28 Outflow Inflow Area=58.963 ac 26 24.38 cfs 24 Avg. Flow Depth=0.50' 22 Max Vel=3.75 fps 20 n=0.036 18 (cfs) 16 L=1,882.0' 14 Flov S=0.0276 '/' 12 Capacity=88.34 cfs 10-8-6 4 2 0 12 14 16 18 20 Ż 4 6 8 10 22 24 26 28 30 32 34 36 38 40 42 44 46 48 0 Time (hours)

## Summary for Reach 13.1R:

[79] Warning: Submerged Pond 12P Primary device # 1 OUTLET by 0.09'

 Inflow Area =
 4.859 ac, 53.67% Impervious, Inflow Depth =
 3.15" for 10-year event

 Inflow =
 1.50 cfs @
 12.61 hrs, Volume=
 1.277 af

 Outflow =
 1.50 cfs @
 12.65 hrs, Volume=
 1.277 af, Atten= 0%, Lag= 2.3 min

 Routed to Reach 13.2R :
 12.65 hrs, Volume=
 1.277 af, Atten= 0%, Lag= 2.3 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Max. Velocity= 2.27 fps, Min. Travel Time= 1.2 min Avg. Velocity = 1.53 fps, Avg. Travel Time= 1.8 min

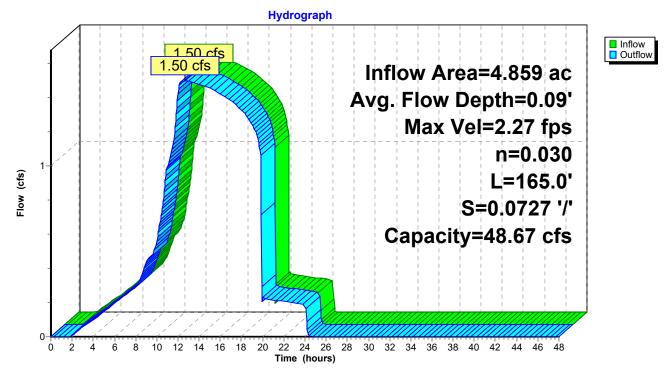
Peak Storage= 109 cf @ 12.63 hrs Average Depth at Peak Storage= 0.09', Surface Width= 9.42' Bank-Full Depth= 0.50' Flow Area= 8.0 sf, Capacity= 48.67 cfs

6.00' x 0.50' deep channel, n= 0.030 Earth, grassed & winding Side Slope Z-value= 20.0 '/' Top Width= 26.00' Length= 165.0' Slope= 0.0727 '/' Inlet Invert= 504.00', Outlet Invert= 492.00'

‡

Printed 7/19/2024 Page 188

Reach 13.1R:



## Summary for Reach 13.2R:

[62] Hint: Exceeded Reach 13.1R OUTLET depth by 0.05' @ 12.70 hrs

 Inflow Area =
 4.859 ac, 53.67% Impervious, Inflow Depth =
 3.15" for 10-year event

 Inflow =
 1.50 cfs @
 12.65 hrs, Volume=
 1.277 af

 Outflow =
 1.50 cfs @
 12.68 hrs, Volume=
 1.277 af, Atten= 0%, Lag= 1.3 min

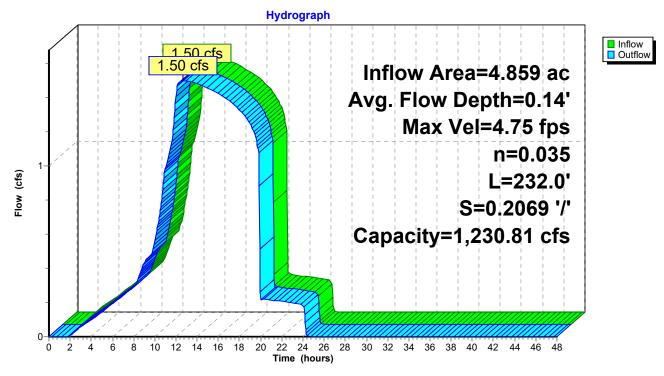
 Routed to Link SP13 :
 1
 1
 1

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Max. Velocity= 4.75 fps, Min. Travel Time= 0.8 min Avg. Velocity = 3.31 fps, Avg. Travel Time= 1.2 min

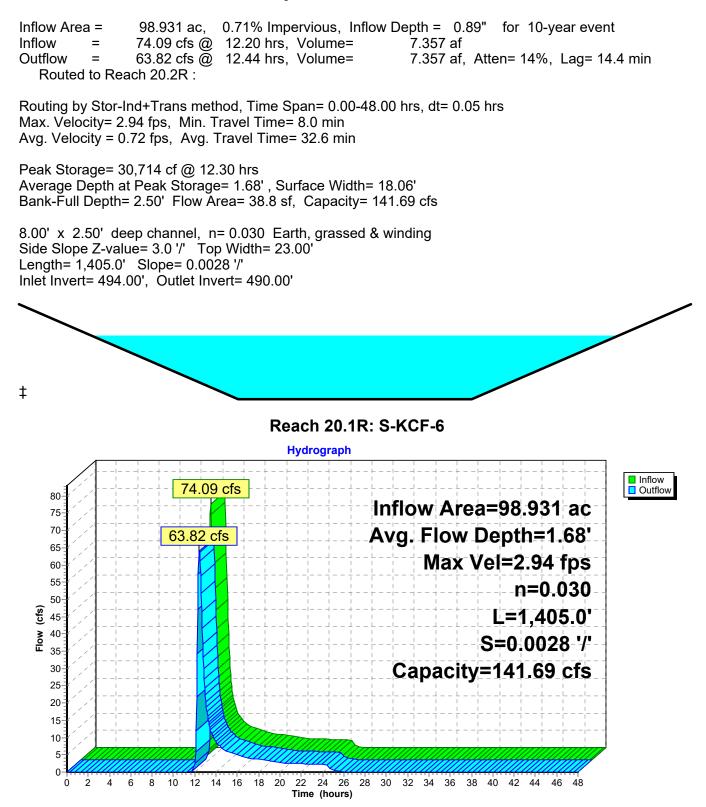
Peak Storage= 73 cf @ 12.66 hrs Average Depth at Peak Storage= 0.14', Surface Width= 2.55' Bank-Full Depth= 4.00' Flow Area= 40.0 sf, Capacity= 1,230.81 cfs

2.00' x 4.00' deep channel, n= 0.035 Earth, dense weeds Side Slope Z-value= 2.0 '/' Top Width= 18.00' Length= 232.0' Slope= 0.2069 '/' Inlet Invert= 492.00', Outlet Invert= 444.00'

Reach 13.2R:



### Summary for Reach 20.1R: S-KCF-6



## Summary for Reach 20.2R:

[62] Hint: Exceeded Reach 20.1R OUTLET depth by 0.01' @ 25.05 hrs

 Inflow Area =
 98.931 ac, 0.71% Impervious, Inflow Depth =
 0.89" for 10-year event

 Inflow =
 63.82 cfs @
 12.44 hrs, Volume=
 7.357 af

 Outflow =
 60.47 cfs @
 12.60 hrs, Volume=
 7.357 af, Atten= 5%, Lag= 9.5 min

 Routed to Reach 22.2R :
 12.60 hrs, Volume=
 12.60 hrs, Volume=

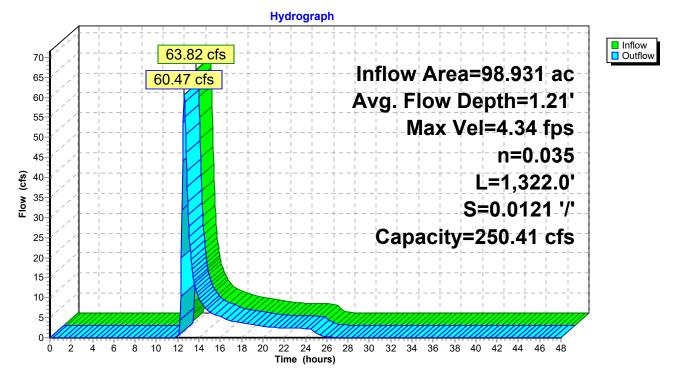
Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Max. Velocity= 4.34 fps, Min. Travel Time= 5.1 min Avg. Velocity = 1.08 fps, Avg. Travel Time= 20.4 min

Peak Storage= 18,524 cf @ 12.51 hrs Average Depth at Peak Storage= 1.21', Surface Width= 15.24' Bank-Full Depth= 2.50' Flow Area= 38.8 sf, Capacity= 250.41 cfs

8.00' x 2.50' deep channel, n= 0.035 Earth, dense weeds Side Slope Z-value= 3.0 '/' Top Width= 23.00' Length= 1,322.0' Slope= 0.0121 '/' Inlet Invert= 490.00', Outlet Invert= 474.00'

‡

### Reach 20.2R:



### Summary for Reach 22.1R: S-KCF-5

Inflow Area = 123.016 ac. 3.33% Impervious, Inflow Depth = 0.85" for 10-year event Inflow 60.04 cfs @ 12.45 hrs, Volume= 8.714 af = 59.61 cfs @ 12.54 hrs, Volume= Outflow = 8.714 af, Atten= 1%, Lag= 5.3 min Routed to Reach 22.2R : Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Max. Velocity= 3.65 fps, Min. Travel Time= 3.0 min Avg. Velocity = 1.17 fps, Avg. Travel Time= 9.5 min Peak Storage= 10,850 cf @ 12.49 hrs Average Depth at Peak Storage= 1.20', Surface Width= 17.20' Bank-Full Depth= 1.50' Flow Area= 21.8 sf, Capacity= 89.91 cfs 10.00' x 1.50' deep channel, n= 0.030 Earth, grassed & winding Side Slope Z-value= 3.0 '/' Top Width= 19.00' Length= 665.0' Slope= 0.0060 '/' Inlet Invert= 478.00', Outlet Invert= 474.00' ‡ Reach 22.1R: S-KCF-5 Hydrograph Inflow 60.04 cfs Outflow 65 59.61 cfs Inflow Area=123.016 ac 60 Avg. Flow Depth=1.20' 55 Max Vel=3.65 fps 50 45 n=0.030 40 L=665.0' (classification) (class S=0.0060 '/' **8** 30 Capacity=89.91 cfs 25 20 15 10 5 0 12 14 16 18 20 Ż 4 6 8 10 22 24 26 28 30 32 34 36 38 40 42 44 46 48 0

Time (hours)

### Summary for Reach 22.2R:

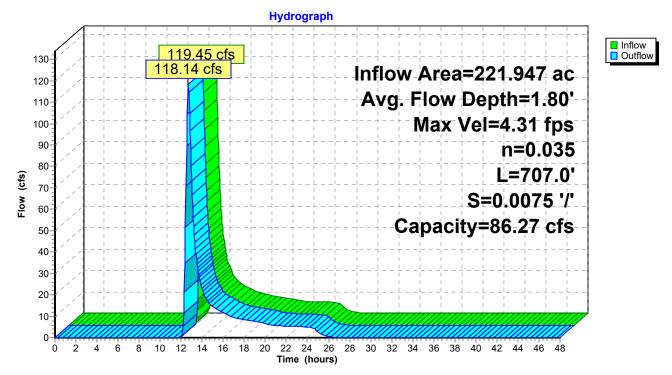
[91] Warning: Storage range exceeded by 0.30' [55] Hint: Peak inflow is 138% of Manning's capacity [62] Hint: Exceeded Reach 20.2R OUTLET depth by 0.69' @ 12.70 hrs [62] Hint: Exceeded Reach 22.1R OUTLET depth by 0.67' @ 12.70 hrs [64] Warning: Exceeded Reach 22.1R outlet bank by 0.30' @ 12.62 hrs 221.947 ac, 2.16% Impervious, Inflow Depth = 0.87" for 10-year event Inflow Area = 119.45 cfs @ 12.58 hrs, Volume= Inflow 16.071 af = 118.14 cfs @ 12.66 hrs, Volume= Outflow = 16.071 af, Atten= 1%, Lag= 5.1 min Routed to Link SP22 : Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Max. Velocity= 4.31 fps, Min. Travel Time= 2.7 min Avg. Velocity = 1.00 fps, Avg. Travel Time= 11.7 min

Peak Storage= 19,414 cf @ 12.62 hrs Average Depth at Peak Storage= 1.80', Surface Width= 20.81' Bank-Full Depth= 1.50' Flow Area= 21.8 sf, Capacity= 86.27 cfs

10.00' x 1.50' deep channel, n= 0.035 Earth, dense weeds Side Slope Z-value= 3.0 '/' Top Width= 19.00' Length= 707.0' Slope= 0.0075 '/' Inlet Invert= 474.00', Outlet Invert= 468.67'

‡

Reach 22.2R:



# Summary for Reach 44R:

[91] Warning: Storage range exceeded by 0.38' [55] Hint: Peak inflow is 266% of Manning's capacity

 Inflow Area =
 34.065 ac, 0.27% Impervious, Inflow Depth =
 1.06" for 10-year event

 Inflow =
 23.12 cfs @
 12.41 hrs, Volume=
 3.020 af

 Outflow =
 22.92 cfs @
 12.48 hrs, Volume=
 3.020 af, Atten= 1%, Lag= 3.8 min

 Routed to Reach 45R :
 12.48 hrs, Volume=
 3.020 af, Atten= 1%, Lag= 3.8 min

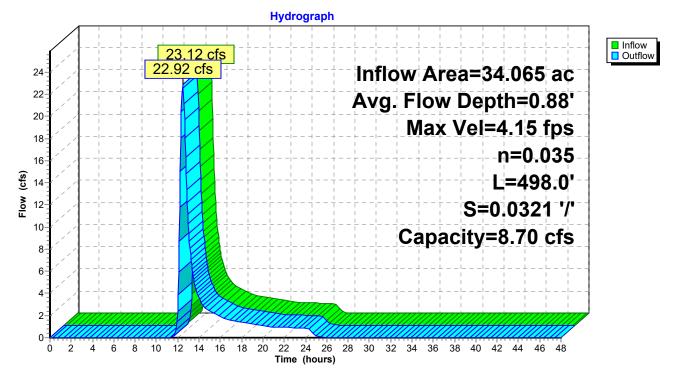
Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Max. Velocity= 4.15 fps, Min. Travel Time= 2.0 min Avg. Velocity = 1.75 fps, Avg. Travel Time= 4.7 min

Peak Storage= 2,762 cf @ 12.44 hrs Average Depth at Peak Storage= 0.88', Surface Width= 12.59' Bank-Full Depth= 0.50' Flow Area= 2.5 sf, Capacity= 8.70 cfs

2.00' x 0.50' deep channel, n= 0.035 Earth, dense weeds Side Slope Z-value= 6.0 '/' Top Width= 8.00' Length= 498.0' Slope= 0.0321 '/' Inlet Invert= 404.00', Outlet Invert= 388.00'

‡

### Reach 44R:



# Summary for Reach 45R:

[91] Warning: Storage range exceeded by 0.56'
[55] Hint: Peak inflow is 294% of Manning's capacity
[62] Hint: Exceeded Reach 44R OUTLET depth by 0.19' @ 12.55 hrs
[64] Warning: Exceeded Reach 44R outlet bank by 0.56' @ 12.48 hrs
Inflow Area = 73.929 ac, 0.12% Impervious, Inflow Depth = 1.03" for 10-year event
Inflow = 47.62 cfs @ 12.45 hrs, Volume= 6.369 af
Outflow = 47.30 cfs @ 12.50 hrs, Volume= 6.369 af, Atten= 1%, Lag= 2.9 min
Routed to Link SP43 :

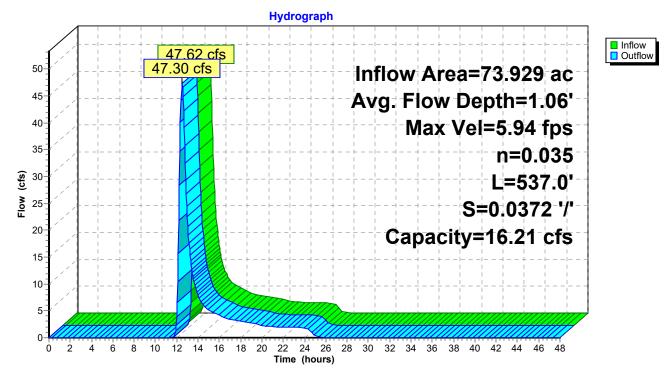
Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Max. Velocity= 5.94 fps, Min. Travel Time= 1.5 min Avg. Velocity = 2.01 fps, Avg. Travel Time= 4.5 min

Peak Storage= 4,288 cf @ 12.48 hrs Average Depth at Peak Storage= 1.06', Surface Width= 10.25' Bank-Full Depth= 0.50' Flow Area= 3.5 sf, Capacity= 16.21 cfs

6.00' x 0.50' deep channel, n= 0.035 Earth, dense weeds Side Slope Z-value= 2.0 '/' Top Width= 8.00' Length= 537.0' Slope= 0.0372 '/' Inlet Invert= 388.00', Outlet Invert= 368.00'



## Reach 45R:



# Summary for Pond 4.1P: 4.1P

Inflow Area = 14.786 ac. 0.00% Impervious, Inflow Depth = 0.90" for 10-year event Inflow 22.38 cfs @ 11.98 hrs, Volume= 1.111 af = 0.35 cfs @ 23.12 hrs, Volume= Outflow = 0.690 af, Atten= 98%, Lag= 667.9 min 0.35 cfs @ 23.12 hrs, Volume= Primary = 0.690 af Routed to Link SP4 : Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af Routed to Link SP4 :

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 496.84' @ 23.12 hrs Surf.Area= 25,272 sf Storage= 35,035 cf

Plug-Flow detention time= 854.8 min calculated for 0.690 af (62% of inflow) Center-of-Mass det. time= 722.8 min (1,595.7 - 872.9)

Volume	Invert	: Avail.S	torage	Storage Description	on		
#1	495.40	121,	979 cf	Custom Stage D	<b>ata (Irregular)</b> Liste	d below (Recalc)	
	_						
Elevatio		urf.Area	Perim.	Inc.Store	Cum.Store	Wet.Area	
(fee	et)	(sq-ft)	(feet)	(cubic-feet)	(cubic-feet)	<u>(sq-ft)</u>	
495.4	10	23,410	686.0	0	0	23,410	
496.0	00	24,099	692.0	14,252	14,252	24,187	
497.0	00	25,495	704.0	24,794	39,046	25,692	
498.0	00	26,916	717.0	26,202	65,248	27,325	
499.0	00	28,362	729.0	27,636	92,884	28,883	
500.0	00	29,834	742.0	29,095	121,979	30,573	
Device	Routing	Inver	t Outle	et Devices			
#1	Primary	495.50	' 12.0	" Round Culvert			
	2		L= 3	5.0' CPP, projecti	ng, no headwall, k	(e= 0.900	
			Inlet	/ Outlet Invert= 49	5.50'/495.00' S=	0.0143 '/' Cc= 0.900	
			n= 0	.013 Corrugated F	PE, smooth interior,	Flow Area= 0.79 sf	
#2	Device 1	499.40	' 48.0	" Horiz. Orifice/Gr	ate C= 0.600		
			Limit	ted to weir flow at l	ow heads		
#3	Device 1	496.00	' 4.0"	Vert. Orifice/Grate	e C= 0.600 Limit	ed to weir flow at low h	eads
#4	Secondary	499.50	' 6. <b>0'</b>	long + 2.0 '/' Side	Z x 4.0' breadth E	road-Crested Rectan	gular Weir
						.20 1.40 1.60 1.80 2	
				3.00 3.50 4.00 4			
			Coet	f. (English) 2.38 2	.54 2.69 2.68 2.6	7 2.67 2.65 2.66 2.6	6
					2.79 2.88 3.07 3.3		
				-	-		
Primary		/ax=0.35.cfs	@ 23 1	2 hrs HW=496 84	' (Free Discharge	)	

**Primary OutFlow** Max=0.35 cfs @ 23.12 hrs HW=496.84' (Free Discharge)

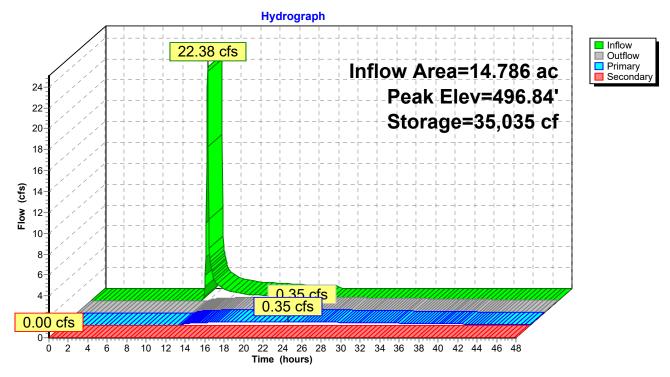
-1=Culvert (Passes 0.35 cfs of 2.74 cfs potential flow)

2=Orifice/Grate (Controls 0.00 cfs)

-3=Orifice/Grate (Orifice Controls 0.35 cfs @ 3.96 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=495.40' (Free Discharge)

Pond 4.1P: 4.1P



# Summary for Pond 7.1P:

Inflow Area	a =	4.575 ac,	0.00% Impervious, Inflow	Depth = 0.49" for 10-year event
Inflow	=	2.02 cfs @	12.11 hrs, Volume=	0.187 af
Outflow	=	0.00 cfs @	0.00 hrs, Volume=	0.000 af, Atten= 100%, Lag= 0.0 min
Primary	=	0.00 cfs @	0.00 hrs, Volume=	0.000 af
Routed	to Link	SP7 :		
Secondary	/ =	0.00 cfs @	0.00 hrs, Volume=	0.000 af
Routed	to Link	SP7 :		

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 513.13' @ 24.90 hrs Surf.Area= 8,073 sf Storage= 8,163 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow) Center-of-Mass det. time= (not calculated: no outflow)

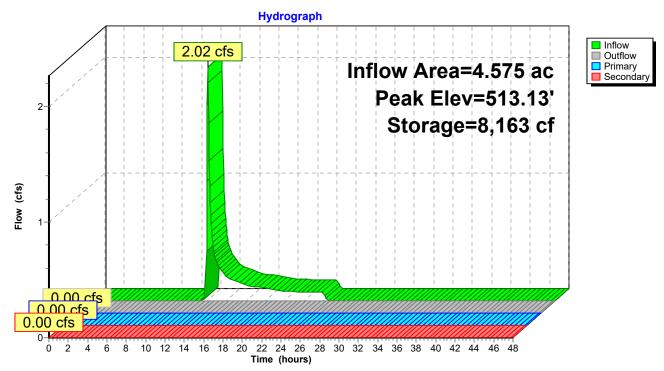
Volume	Invert	Avail.Sto	rage Storage	e Description	
#1	512.00'	37,7	73 cf Custon	n Stage Data (Pi	<b>ismatic)</b> Listed below (Recalc)
				-	
Elevatio		urf.Area	Inc.Store	Cum.Store	
(fee		(sq-ft)	(cubic-feet)	(cubic-feet)	
512.0		6,414	0	0	
513.0		7,879	7,147	7,147	
514.0		9,401	8,640	15,787	
515.0		10,979	10,190	25,977	
516.0	00	12,614	11,797	37,773	
Device	Routing	Invert	Outlet Device	es	
#1	Primary	512.00'	12.0" Round	d Culvert	
	,				headwall, Ke= 0.900
					510.00' S= 0.0606 '/' Cc= 0.900
			n= 0.013 Co	rrugated PE, sm	ooth interior, Flow Area= 0.79 sf
#2	Device 1	515.00'	48.0" Horiz.	Orifice/Grate	c= 0.600
			Limited to we	ir flow at low hea	ads
#3	Device 1	512.25'	4.0" Vert. Or	ifice/Grate X 0.0	<b>0</b> C= 0.600
			Limited to we	ir flow at low hea	ads
#4	Secondary	515.50'	10.0' long +	3.0 '/' SideZ x 4	.0' breadth Broad-Crested Rectangular Weir
					0.80 1.00 1.20 1.40 1.60 1.80 2.00
				50 4.00 4.50 5	
					69 2.68 2.67 2.67 2.65 2.66 2.66
			2.68 2.72 2.	73 2.76 2.79 2	.88 3.07 3.32
Primary		1ax=0.00 cfs (	2)0.00 hrs HW	/=512.00' (Free	Discharge)

-1=Culvert (Controls 0.00 cfs)

-2=Orifice/Grate (Controls 0.00 cfs) -3=Orifice/Grate (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=512.00' (Free Discharge) 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

# Pond 7.1P:



# Summary for Pond 9.1P: 9.1P

Inflow Area = 8.972 ac, 0.00% Impervious, Inflow Depth = 1.18" for 10-year event Inflow 7.88 cfs @ 12.32 hrs, Volume= 0.882 af = 0.47 cfs @ 16.40 hrs, Volume= Outflow = 0.668 af, Atten= 94%, Lag= 245.1 min 0.47 cfs @ 16.40 hrs, Volume= Primary = 0.668 af Routed to Link SP9 : 0.00 hrs, Volume= Secondary = 0.00 cfs @ 0.000 af Routed to Link SP9 :

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 468.44' @ 16.40 hrs Surf.Area= 10,611 sf Storage= 23,148 cf

Plug-Flow detention time= 555.2 min calculated for 0.667 af (76% of inflow) Center-of-Mass det. time= 457.2 min (1,339.6 - 882.4)

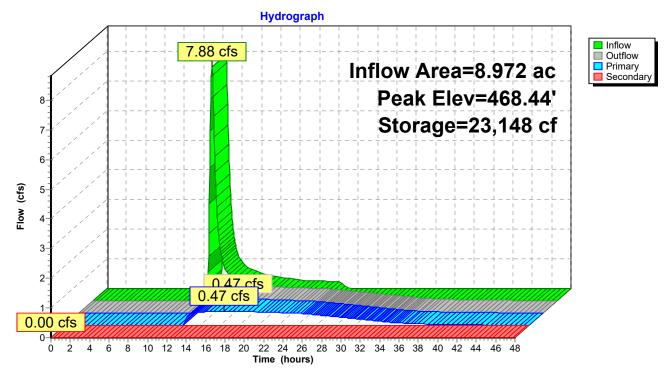
Volume	Invert	Avail.Sto	rage Storag	ge Description
#1	466.00'	40,83	33 cf Custo	om Stage Data (Prismatic)Listed below (Recalc)
	_			
Elevatio		urf.Area	Inc.Store	Cum.Store
(fee	1	(sq-ft)	(cubic-feet)	(cubic-feet)
466.0		8,356	0	0
467.0		9,263	8,810	8,810
468.0		10,188	9,726	18,535
469.0		11,142	10,665	29,200
470.0	00	12,124	11,633	40,833
Device	Routing	Invert	Outlet Devi	ces
#1	Primary	466.00'	12.0" Rou	
	, <b>,</b>			CPP, projecting, no headwall, Ke= 0.900
				et Invert= 466.00' / 462.00' S= 0.1333 '/' Cc= 0.900
			n= 0.013 C	Corrugated PE, smooth interior, Flow Area= 0.79 sf
#2	Device 1	469.50'	48.0" Horiz	z. Orifice/Grate C= 0.600
			Limited to v	veir flow at low heads
#3	Device 1	467.00'	4.0" Vert. C	<b>Drifice/Grate</b> C= 0.600 Limited to weir flow at low heads
#4	Secondary	469.50'		+ 3.0 '/' SideZ x 4.0' breadth Broad-Crested Rectangular Weir
			( )	0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00
				3.50 4.00 4.50 5.00 5.50
				ish) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66
			2.68 2.72	2.73 2.76 2.79 2.88 3.07 3.32
		lax=0.47 cfs (		HW=468.44' (Free Discharge)

-1=Culvert (Passes 0.47 cfs of 4.16 cfs potential flow)

**2=Orifice/Grate** (Controls 0.00 cfs)

-3=Orifice/Grate (Orifice Controls 0.47 cfs @ 5.44 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=466.00' (Free Discharge) 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs) Pond 9.1P: 9.1P



## Summary for Pond 10.1P: 10.1P

Inflow Area = 2.860 ac, 0.00% Impervious, Inflow Depth = 1.06" for 10-year event Inflow 3.27 cfs @ 12.13 hrs, Volume= 0.254 af = 0.10 cfs @ 19.15 hrs, Volume= Outflow = 0.043 af, Atten= 97%, Lag= 421.2 min 0.10 cfs @ 19.15 hrs, Volume= Primary = 0.043 af Routed to Link SP10 : 0.00 hrs, Volume= 0.000 af Secondary = 0.00 cfs @ Routed to Link SP10 :

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 569.52' @ 19.15 hrs Surf.Area= 7,090 sf Storage= 9,292 cf

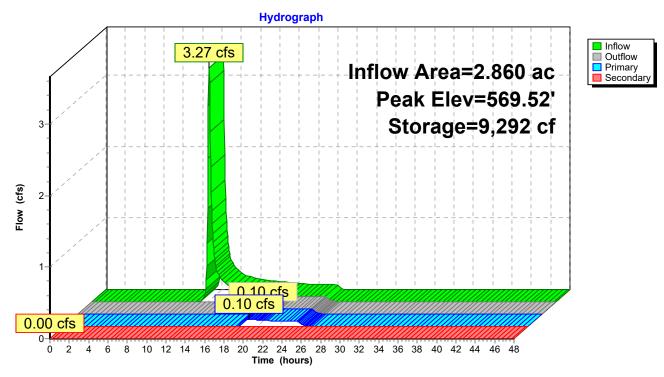
Plug-Flow detention time= 558.4 min calculated for 0.043 af (17% of inflow) Center-of-Mass det. time= 402.5 min (1,277.0 - 874.5)

Volume	Invert	Avail.Sto	rage Storage	Description		
#1	568.00'	30,34	12 cf Custom	Stage Data (Prismatic	Listed below (Recalc)	
_	-	<b>.</b> .				
Elevatio		Irf.Area	Inc.Store	Cum.Store		
(fee	1	(sq-ft)	(cubic-feet)	(cubic-feet)		
568.0		5,183	0	0		
569.0		6,419	5,801	5,801		
570.0	0	7,717	7,068	12,869		
571.0		9,076	8,397	21,266		
572.0	0	9,077	9,077	30,342		
<b>_</b> .						
Device	Routing	Invert	Outlet Device			
#1	Primary	568.00'	12.0" Round			
				, projecting, no headwa		
					S= 0.0063 '/' Cc= 0.900	
					erior, Flow Area= 0.79 sf	
#2	Device 1	569.50'		prifice/Grate C= 0.600		
				flow at low heads		_
#3	Secondary	571.00'			dth Broad-Crested Rectangular We	ir
					00 1.20 1.40 1.60 1.80 2.00	
				0 4.00 4.50 5.00 5.50		
					2.67 2.67 2.65 2.66 2.66	
			2.68 2.72 2.	3 2.76 2.79 2.88 3.07	7 3.32	
<b>.</b> .						
· · ·			2) 19.15 hrs HV 3 01 cfs potenti	/=569.52' (Free Discha al flow)	arge)	

**1=Culvert** (Passes 0.09 cfs of 3.01 cfs potential flow) **2=Orifice/Grate** (Weir Controls 0.09 cfs @ 0.42 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=568.00' (Free Discharge) -3=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 10.1P: 10.1P



## Summary for Pond 12P: 12P

[44] Hint: Outlet device #1 is below defined storage

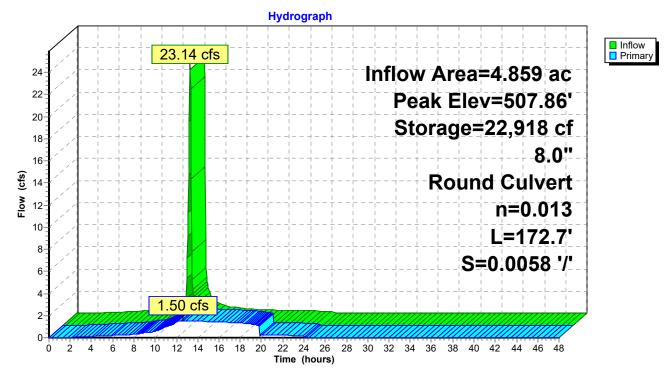
Inflow Are	a =	4.859 ac, 5	53.67% Impervious, Inf	flow Depth = 3.15" for 10-year event
Inflow	=	23.14 cfs @	11.96 hrs, Volume=	1.277 af
Outflow	=	1.50 cfs @	12.61 hrs, Volume=	1.277 af, Atten= 94%, Lag= 39.2 min
Primary	=	1.50 cfs @	12.61 hrs, Volume=	1.277 af
Routed	to Rea	ach 13.1R :		

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs / 3 Peak Elev= 507.86' @ 12.61 hrs Surf.Area= 34,642 sf Storage= 22,918 cf

Plug-Flow detention time= 114.8 min calculated for 1.277 af (100% of inflow) Center-of-Mass det. time= 114.4 min (874.5 - 760.1)

Volume	Inve	ert Avai	I.Storage	Storage Description	on		
#1	506.0	00' 3	49,842 cf	Custom Stage D	<b>ata (Irregular)</b> Liste	ed below (Recalc)	
Elevatio (fee	•••	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft <u>)</u>	
506.0 508.0 510.0 512.0	0	138 39,705 80,589 124,830	45.5 811.5 1,415.9 2,053.3	0 28,123 117,907 203,812	0 28,123 146,030 349,842	138 52,385 159,538 335,540	
Device	Routing	In	vert Outle	et Devices			
#1	Primary	505	L= 1 Inlet		5.00'/504.00' S=	Ke= 0.900 = 0.0058 '/'    Cc= 0.900 ;   Flow Area= 0.35 sf	

Primary OutFlow Max=1.50 cfs @ 12.61 hrs HW=507.86' (Free Discharge) ☐ 1=Culvert (Barrel Controls 1.50 cfs @ 4.28 fps) Pond 12P: 12P



## Summary for Pond 23.1P: 23.1P

Inflow Area = 3.682 ac, 0.00% Impervious, Inflow Depth = 1.01" for 10-year event Inflow = 6.33 cfs @ 11.98 hrs, Volume= 0.309 af 0.47 cfs @ 12.87 hrs, Volume= Outflow = 0.222 af, Atten= 93%, Lag= 53.4 min 0.47 cfs @ 12.87 hrs, Volume= Primary = 0.222 af Routed to Link SP23 : 0.00 cfs @ 0.00 hrs, Volume= 0.000 af Secondary = Routed to Link SP23 :

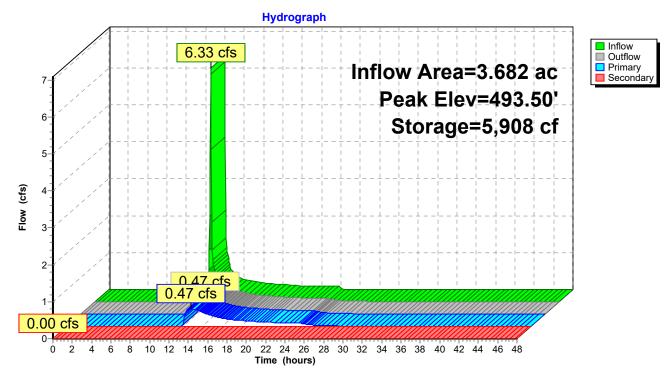
Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 493.50' @ 12.87 hrs Surf.Area= 4,352 sf Storage= 5,908 cf

Plug-Flow detention time= 274.2 min calculated for 0.222 af (72% of inflow) Center-of-Mass det. time= 163.2 min (1,029.2 - 866.0)

Volume	Invert	Avail.Sto	rade Storad	ge Description
#1	492.00'			om Stage Data (Prismatic)Listed below (Recalc)
Elevatio	on Su	ırf.Area	Inc.Store	Cum.Store
(fee		(sq-ft)	(cubic-feet)	(cubic-feet)
492.0	00	3,530	0	0
493.0		4,069	3,800	3,800
494.0		4,634	4,352	8,151
495.0		5,223	4,929	
496.0		5,838	5,531	18,610
497.0	00	6,477	6,158	24,768
Device	Routing	Invert	Outlet Devic	ices
#1	Primary	492.00'	24.0" Roun	nd Culvert
	-			CPP, projecting, no headwall, Ke= 0.900
				et Invert= 492.00' / 489.00' S= 0.1071 '/' Cc= 0.900
	<b>D</b> · · · ·	100.001		Corrugated PE, smooth interior, Flow Area= 3.14 sf
#2	Device 1	493.00'		<b>Orifice/Grate</b> C= 0.600 Limited to weir flow at low heads
#3	Device 1	494.00'		z. Orifice/Grate C= 0.600
#4	Secondary	496.50'		weir flow at low heads
#4	Secondary	490.00		+ 3.0 '/' SideZ x 4.0' breadth Broad-Crested Rectangular Wei 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00
			( )	3.50 4.00 4.50 5.00 5.50
				lish) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66
			( U	2.73 2.76 2.79 2.88 3.07 3.32
				HW=493.50' (Free Discharge)
			8.33 cfs poter	
				fs @ 2.41 fps)
3=	Orifice/Grat	e (Controls (	J.UU CIS)	
Coord	am / 0.451a			LINA-102 001 (Erec Discharge)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=492.00' (Free Discharge) 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 23.1P: 23.1P



### Summary for Pond 44.1P: 44.1P

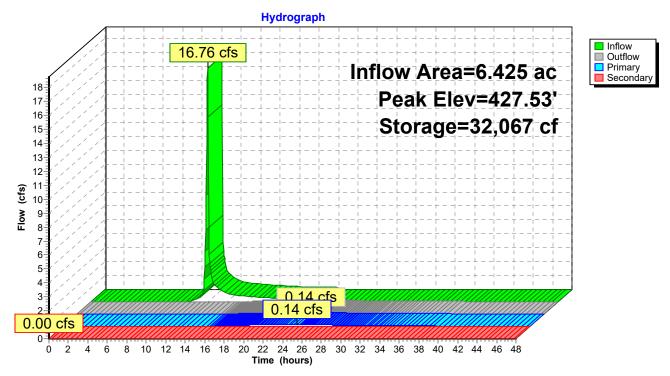
Inflow Area = 6.425 ac, 0.00% Impervious, Inflow Depth = 1.50" for 10-year event Inflow 16.76 cfs @ 11.98 hrs, Volume= 0.802 af = 0.14 cfs @ 24.05 hrs, Volume= Outflow = 0.168 af, Atten= 99%, Lag= 724.5 min 0.14 cfs @ 24.05 hrs, Volume= Primary = 0.168 af Routed to Link SP43 : 0.00 cfs @ 0.00 hrs, Volume= 0.000 af Secondary = Routed to Link SP43 :

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 427.53' @ 24.05 hrs Surf.Area= 21,990 sf Storage= 32,067 cf

Plug-Flow detention time= 951.0 min calculated for 0.168 af (21% of inflow) Center-of-Mass det. time= 813.0 min (1,654.0 - 841.1)

Volume	Invert	Avail.Sto	rage Storage D	Description				
#1	426.00'	90,7	04 cf Custom	Stage Data (Pi	rismatic)Listed below (Recalc)			
_		<b>C</b> A		<b>a a</b> <i>i</i>				
Elevatio		urf.Area	Inc.Store	Cum.Store				
(fee	1	(sq-ft)	(cubic-feet)	(cubic-feet)				
426.0		19,818	0	0				
427.0	-	21,225	20,522	20,522				
428.0		22,657	21,941	42,463				
429.0	-	24,114	23,386	65,848				
430.0	0	25,597	24,856	90,704				
Device	Routing	Invert	Outlet Devices					
#1	Primary	426.00'	12.0" Round (	Culvert				
	,		L= 22.0' CPP,	, projecting, no	headwall, Ke= 0.900			
			Inlet / Outlet Inv	vert= 426.00' /	425.50' S= 0.0227 '/' Cc= 0.900			
					ooth interior, Flow Area= 0.79 sf			
#2	Device 1	427.25'						
#3	Device 1	428.50'						
			Limited to weir					
#4	Secondary	428.50'			I.0' breadth Broad-Crested Rectangular Weir			
					0.80 1.00 1.20 1.40 1.60 1.80 2.00			
			2.50 3.00 3.50					
					69 2.68 2.67 2.67 2.65 2.66 2.66			
			2.68 2.72 2.73	3 2.10 2.19 2	.88 3.07 3.32			
<b>Primary OutFlow</b> Max=0.14 cfs @ 24.05 hrs HW=427.53' (Free Discharge) <b>1</b> - <b>1</b> =Culvert (Passes 0.14 cfs of 3.04 cfs potential flow)								
<b>2=Orifice/Grate</b> (Orifice Controls 0.14 cfs @ 1.82 fps)								
-3=Orifice/Grate (Controls 0.00 cfs)								

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=426.00' (Free Discharge) 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs) Pond 44.1P: 44.1P



## Summary for Pond 46.1P: 46.1P

Inflow Area = 5.473 ac, 0.00% Impervious, Inflow Depth = 0.08" for 10-year event Inflow 0.05 cfs @ 13.92 hrs. Volume= 0.038 af = 0.00 cfs @ 0.00 hrs, Volume= Outflow = 0.000 af, Atten= 100%, Lag= 0.0 min 0.00 hrs, Volume= 0.000 af Primary = 0.00 cfs @ Routed to Link SP46 : 0.00 hrs, Volume= 0.000 af Secondary = 0.00 cfs @ Routed to Link SP46 :

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 354.25' @ 25.80 hrs Surf.Area= 6,958 sf Storage= 1,667 cf

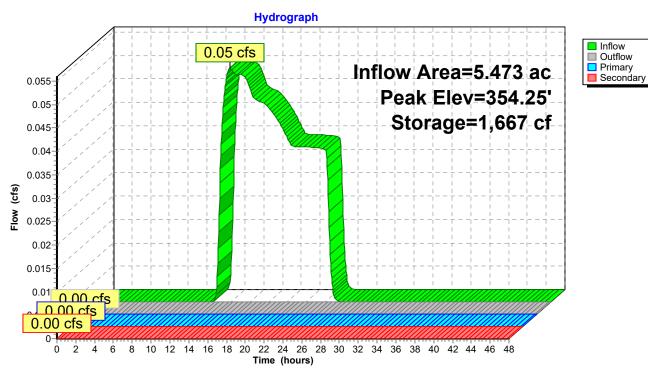
Plug-Flow detention time= (not calculated: initial storage exceeds outflow) Center-of-Mass det. time= (not calculated: no outflow)

Volume	Invert	Avail.Sto	rage Storag	ge Description			
#1	354.00'			om Stage Data (Prismatic)Listed below (Recalc)			
				- · · · · ·			
Elevatio		urf.Area	Inc.Store	Cum.Store			
(fee	et)	(sq-ft)	(cubic-feet)	(cubic-feet)			
354.0	00	6,512	0	0			
355.0	00	8,313	7,413	7,413			
356.0	00	10,140	9,227	16,639			
357.0	00	11,992	11,066	27,705			
Device	Routing	Invert	Outlet Devic	Ces			
#1	Primary	354.00'	24.0" Rour				
				PP, projecting, no headwall, Ke= 0.900			
				t Invert= 354.00' / 353.75' S= 0.0125 '/' Cc= 0.900			
				Corrugated PE, smooth interior, Flow Area= 3.14 sf			
#2	Device 1	354.83'	4.0" Vert. O	<b>Drifice/Grate</b> C= 0.600 Limited to weir flow at low heads			
#3	Device 1	355.50'		z. Orifice/Grate C= 0.600			
			Limited to w	veir flow at low heads			
#4	Secondary	355.50'		+ 3.0 '/' SideZ x 4.0' breadth Broad-Crested Rectangular Weir			
			Head (feet)	0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00			
			2.50 3.00 3	3.50 4.00 4.50 5.00 5.50			
			Coef. (Engli	ish) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66			
			2.68 2.72 2	2.73 2.76 2.79 2.88 3.07 3.32			
Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=354.00' (Free Discharge)							

-1=Culvert (Controls 0.00 cfs)

2=Orifice/Grate (Controls 0.00 cfs) 3=Orifice/Grate (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=354.00' (Free Discharge) 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

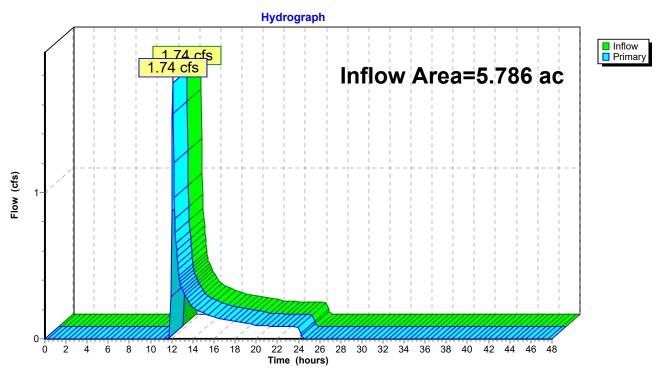


Pond 46.1P: 46.1P

# Summary for Link SP1:

Inflow Area =	5.786 ac,	0.00% Impervious, Inflo	w Depth = 0.38"	for 10-year event
Inflow =	1.74 cfs @	12.10 hrs, Volume=	0.183 af	-
Primary =	1.74 cfs @	12.10 hrs, Volume=	0.183 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

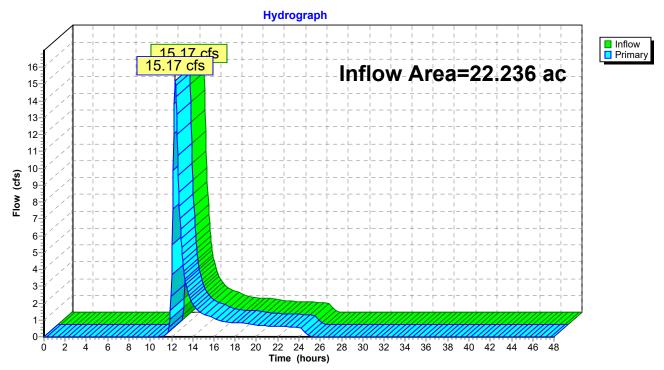


#### Link SP1:

# Summary for Link SP10:

Inflow Area	a =	22.236 ac,	4.90% Impervious, In	flow Depth = 1.00"	for 10-year event
Inflow	=	15.17 cfs @	12.35 hrs, Volume=	1.853 af	
Primary	=	15.17 cfs @	12.35 hrs, Volume=	1.853 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

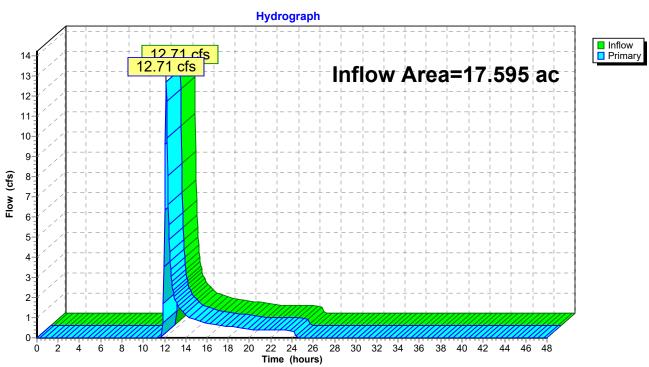


### Link SP10:

# Summary for Link SP11:

Inflow Area	a =	17.595 ac,	2.63% Impervious,	Inflow Depth = (	0.75" for 10-year event
Inflow	=	12.71 cfs @	12.15 hrs, Volume	= 1.103 a	f
Primary	=	12.71 cfs @	12.15 hrs, Volume	= 1.103 a	f, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

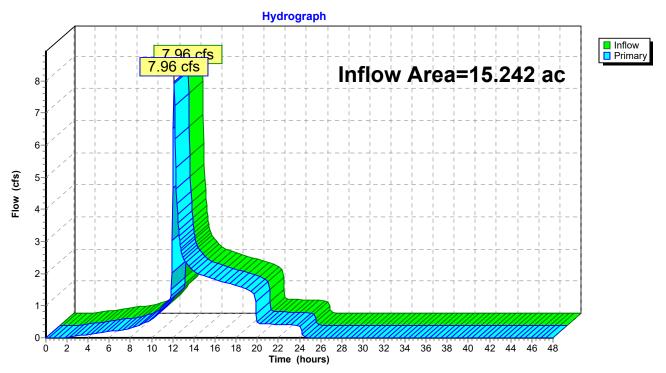


### Link SP11:

# Summary for Link SP13:

Inflow Area =	15.242 ac, 17.24% Impervious, In	flow Depth = 1.45" for 10-year event
Inflow =	7.96 cfs @ 12.13 hrs, Volume=	1.847 af
Primary =	7.96 cfs @ 12.13 hrs, Volume=	1.847 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

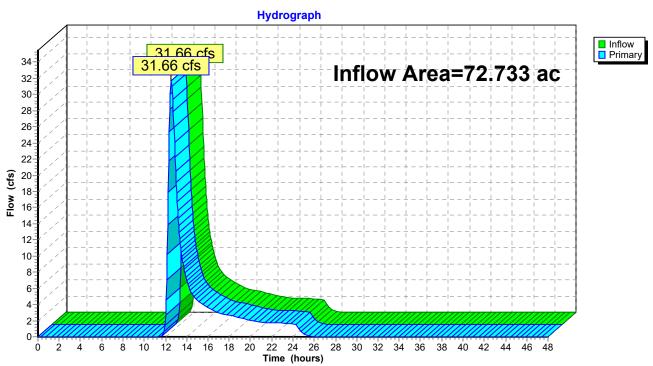


### Link SP13:

# Summary for Link SP14:

Inflow Area	a =	72.733 ac,	0.42% Impervious, Inf	low Depth = 0.85"	for 10-year event
Inflow	=	31.66 cfs @	12.56 hrs, Volume=	5.152 af	
Primary	=	31.66 cfs @	12.56 hrs, Volume=	5.152 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

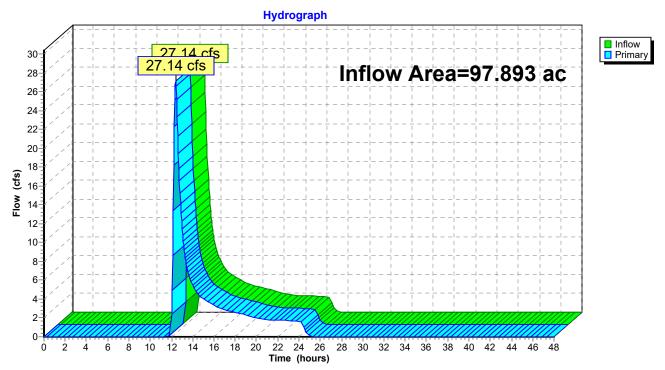


# Link SP14:

# Summary for Link SP17:

Inflow Area	a =	97.893 ac,	1.18% Impervious, Inflow	/ Depth = 0.53"	for 10-year event
Inflow	=	27.14 cfs @	12.39 hrs, Volume=	4.335 af	
Primary	=	27.14 cfs @	12.39 hrs, Volume=	4.335 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

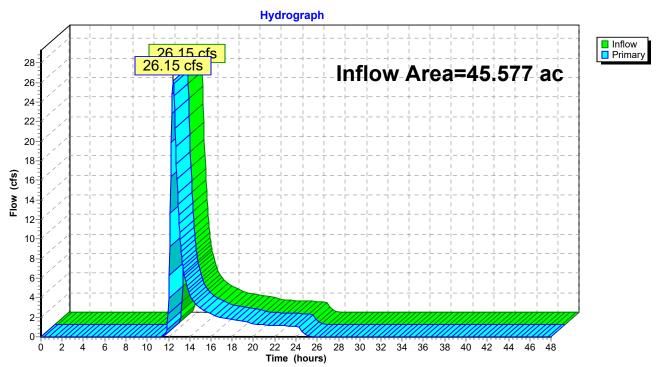


### Link SP17:

# Summary for Link SP18:

Inflow Area	a =	45.577 ac,	0.74% Impervious, Ir	nflow Depth = 0.95"	for 10-year event
Inflow	=	26.15 cfs @	12.44 hrs, Volume=	3.623 af	
Primary	=	26.15 cfs @	12.44 hrs, Volume=	3.623 af, Att	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

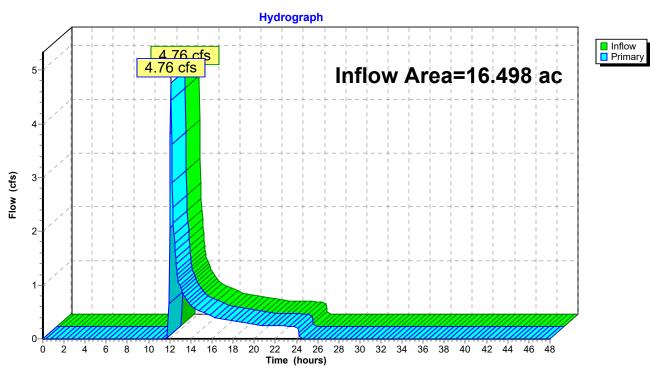


#### Link SP18:

# Summary for Link SP2:

Inflow Area =	16.498 ac,	0.00% Impervious, Inflow D	epth = 0.38"	for 10-year event
Inflow =	4.76 cfs @	12.11 hrs, Volume=	0.523 af	
Primary =	4.76 cfs @	12.11 hrs, Volume=	0.523 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

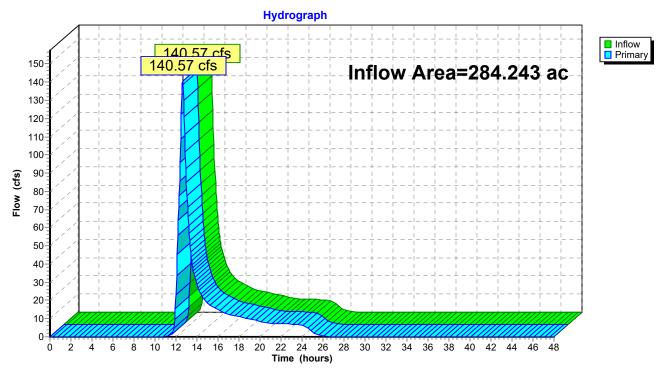


#### Link SP2:

# Summary for Link SP22:

Inflow Area	a =	284.243 ac,	1.82% Impervious, Inflow	Depth = 0.92"	for 10-year event
Inflow	=	140.57 cfs @	12.64 hrs, Volume=	21.890 af	
Primary	=	140.57 cfs @	12.64 hrs, Volume=	21.890 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

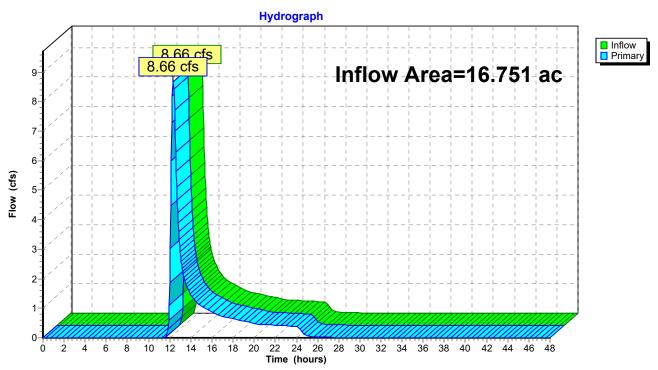


### Link SP22:

# Summary for Link SP23:

Inflow Area =	16.751 ac,	2.31% Impervious, I	nflow Depth = 0.86"	for 10-year event
Inflow =	8.66 cfs @	12.32 hrs, Volume=	1.203 af	
Primary =	8.66 cfs @	12.32 hrs, Volume=	1.203 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

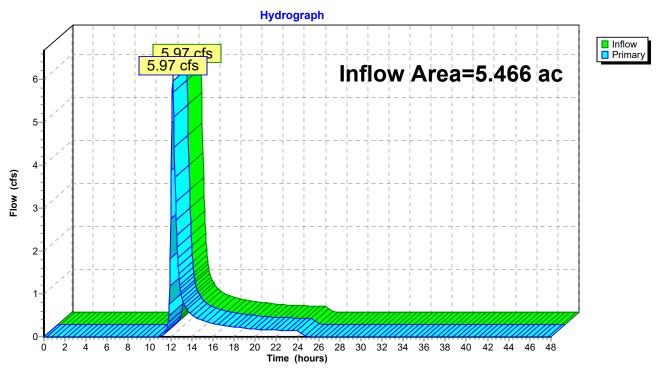


#### Link SP23:

# Summary for Link SP24:

Inflow Area =	5.466 ac,	7.70% Impervious, Inflow	v Depth = 1.18"	for 10-year event
Inflow =	5.97 cfs @	12.20 hrs, Volume=	0.537 af	
Primary =	5.97 cfs @	12.20 hrs, Volume=	0.537 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

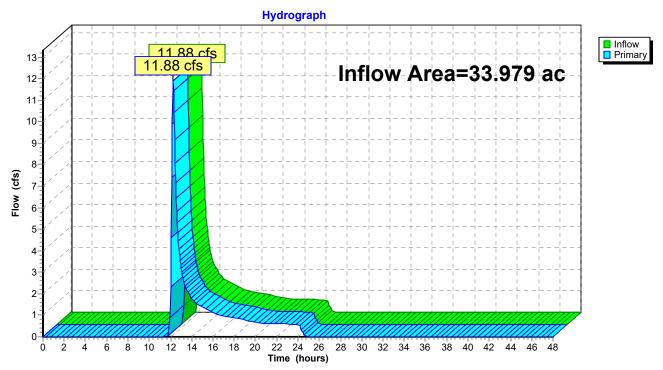


### Link SP24:

# Summary for Link SP3:

Inflow Area =	33.979 ac,	0.00% Impervious, Inflow	Depth = 0.53"	for 10-year event
Inflow =	11.88 cfs @	12.25 hrs, Volume=	1.505 af	
Primary =	11.88 cfs @	12.25 hrs, Volume=	1.505 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

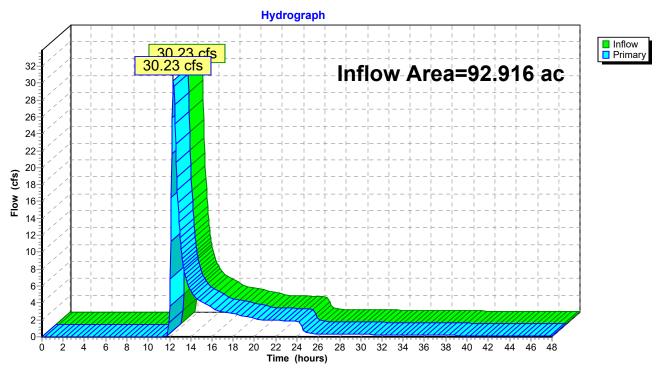


### Link SP3:

# Summary for Link SP4:

Inflow Area =	92.916 ac,	0.28% Impervious, Inflo	w Depth > 0.64"	for 10-year event
Inflow =	30.23 cfs @	12.38 hrs, Volume=	4.985 af	-
Primary =	30.23 cfs @	12.38 hrs, Volume=	4.985 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

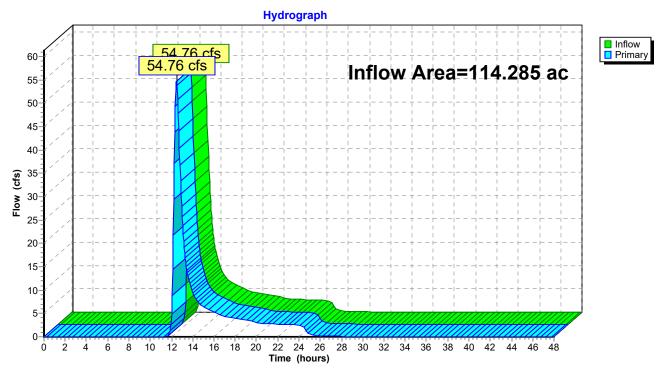


### Link SP4:

# Summary for Link SP43:

Inflow Area	a =	114.285 ac,	0.15% Impervious,	Inflow Depth > 0.83	3" for 10-year event
Inflow	=	54.76 cfs @	12.47 hrs, Volume=	= 7.926 af	
Primary	=	54.76 cfs @	12.47 hrs, Volume=	= 7.926 af, <i>i</i>	Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

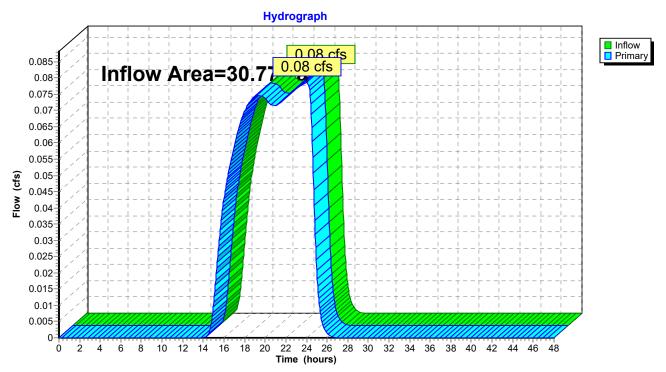


### Link SP43:

# Summary for Link SP46:

Inflow Area =	30.777 ac,	0.00% Impervious, I	nflow Depth = 0.02"	for 10-year event
Inflow =	0.08 cfs @	24.09 hrs, Volume=	0.054 af	
Primary =	0.08 cfs @	24.09 hrs, Volume=	0.054 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

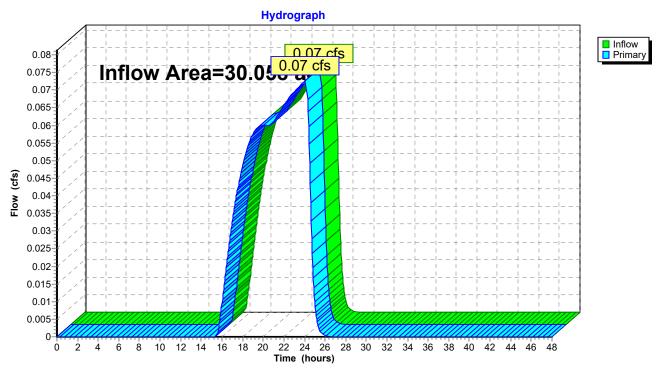


#### Link SP46:

# Summary for Link SP47:

Inflow Area =	30.058 ac,	1.25% Impervious, Inflow D	epth = 0.02"	for 10-year event
Inflow =	0.07 cfs @	24.07 hrs, Volume=	0.040 af	
Primary =	0.07 cfs @	24.07 hrs, Volume=	0.040 af, Att	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

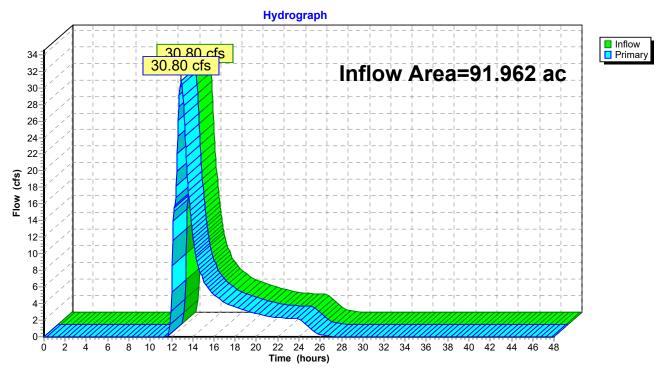


### Link SP47:

# Summary for Link SP5:

Inflow Area	a =	91.962 ac,	0.00% Impervious,	Inflow Depth = 0.	.90" for 10-year event
Inflow	=	30.80 cfs @	12.91 hrs, Volume=	= 6.888 af	
Primary	=	30.80 cfs @	12.91 hrs, Volume=	= 6.888 af	, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

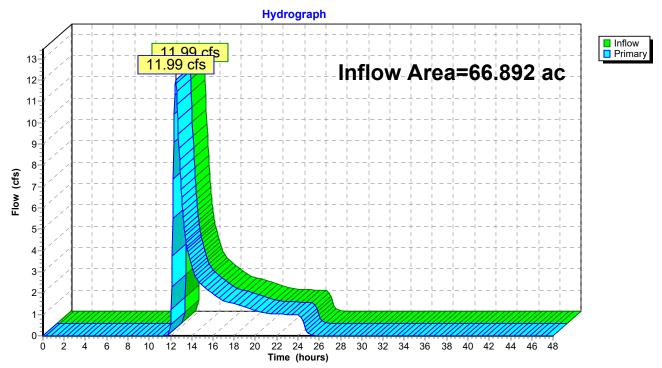


### Link SP5:

# Summary for Link SP7:

Inflow Area =	66.892 ac,	0.00% Impervious,	Inflow Depth = 0	.42" for 10-year event
Inflow =	11.99 cfs @	12.50 hrs, Volume=	= 2.352 af	
Primary =	11.99 cfs @	12.50 hrs, Volume=	= 2.352 af	, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

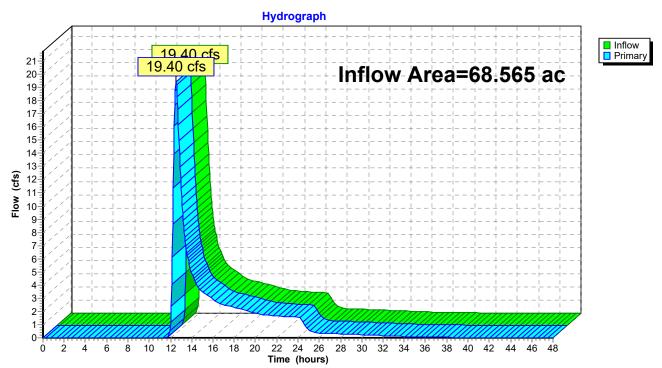


### Link SP7:

# Summary for Link SP9:

Inflow Area	a =	68.565 ac,	1.11% Impervious, Inflow	Depth > 0.69"	for 10-year event
Inflow	=	19.40 cfs @	12.53 hrs, Volume=	3.943 af	-
Primary	=	19.40 cfs @	12.53 hrs, Volume=	3.943 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs



### Link SP9:

Time span=0.00-48.00 hrs, dt=0.05 hrs, 961 points Runoff by SCS TR-20 method, UH=SCS, Weighted-CN Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: Sub 1	Runoff Area=5.786 ac 0.00% Impervious Runoff Depth=1.43" Flow Length=1,005' Tc=13.1 min CN=56 Runoff=10.41 cfs 0.691 af
Subcatchment 2S: Sub 2	Runoff Area=16.498 ac 0.00% Impervious Runoff Depth=1.43" Flow Length=1,307' Tc=14.1 min CN=56 Runoff=28.42 cfs 1.971 af
Subcatchment 3S: Sub 3	Runoff Area=33.979 ac 0.00% Impervious Runoff Depth=1.74" Flow Length=2,507' Tc=25.3 min CN=60 Runoff=52.70 cfs 4.930 af
Subcatchment 4.1S:	Runoff Area=14.786 ac 0.00% Impervious Runoff Depth=2.41" Tc=6.0 min CN=68 Runoff=62.02 cfs 2.967 af
Subcatchment 4S: Sub 4	Runoff Area=78.130 ac 0.33% Impervious Runoff Depth=1.98" Flow Length=4,160' Tc=35.5 min CN=63 Runoff=112.81 cfs 12.912 af
Subcatchment 5S: Sub 5	Runoff Area=16.698 ac 0.00% Impervious Runoff Depth=2.23" Flow Length=1,888' Tc=22.2 min CN=66 Runoff=37.95 cfs 3.110 af
Subcatchment 6S: Sub 6	Runoff Area=16.301 ac 0.00% Impervious Runoff Depth=2.23" Flow Length=1,894' Tc=48.6 min CN=66 Runoff=21.70 cfs 3.036 af
Subcatchment 7.1S: Sub 7.1	Runoff Area=4.575 ac 0.00% Impervious Runoff Depth=1.66" Flow Length=1,051' Tc=14.9 min CN=59 Runoff=9.21 cfs 0.634 af
Subcatchment 7S: Sub 7	Runoff Area=62.317 ac 0.00% Impervious Runoff Depth=1.58" Flow Length=2,117' Tc=40.9 min CN=58 Runoff=61.20 cfs 8.231 af
Subcatchment 8S: Sub 8	Runoff Area=58.963 ac 0.00% Impervious Runoff Depth=2.50" Flow Length=2,902' Tc=63.3 min CN=69 Runoff=73.45 cfs 12.263 af
Subcatchment 9.1S: Sub 9.1	Runoff Area=8.972 ac 0.00% Impervious Runoff Depth=2.86" Flow Length=873' Tc=34.1 min CN=73 Runoff=20.26 cfs 2.137 af
Subcatchment9S: Sub 9	Runoff Area=59.593 ac 1.28% Impervious Runoff Depth=1.98" Flow Length=2,945' Tc=45.6 min CN=63 Runoff=71.86 cfs 9.848 af
Subcatchment 10.1S: Sub 10.1	Runoff Area=2.860 ac 0.00% Impervious Runoff Depth=2.67" Tc=18.7 min CN=71 Runoff=8.75 cfs 0.638 af
Subcatchment 10S: Sub 10	Runoff Area=19.376 ac 5.62% Impervious Runoff Depth=2.77" Flow Length=2,047' Tc=36.7 min CN=72 Runoff=40.15 cfs 4.466 af
Subcatchment 11S: Sub 11	Runoff Area=17.595 ac 2.63% Impervious Runoff Depth=2.15" Flow Length=1,622' Tc=19.0 min CN=65 Runoff=41.84 cfs 3.152 af
Subcatchment 12S: Sub 12	Runoff Area=4.859 ac 53.67% Impervious Runoff Depth=5.36" Tc=6.0 min CN=97 Runoff=38.33 cfs 2.172 af

Mill Pt Post 1

Prepared by TRC Companies HydroCAD® 10.20-5a s/n 01402 © 2023 HydroCAD Software Solutions LLC

Printed 7/19/2024 ELLC Page 237

Subcatchment 13S: Sub 13	Runoff Area=10.383 ac 0.18% Impervious Runoff Depth=1.98" Flow Length=849' Tc=17.7 min CN=63 Runoff=23.52 cfs 1.716 af
Subcatchment14S: Sub14	Runoff Area=72.733 ac 0.42% Impervious Runoff Depth=2.32" Flow Length=4,131' Tc=49.6 min CN=67 Runoff=99.70 cfs 14.066 af
Subcatchment17S: Sub17	Runoff Area=97.893 ac 1.18% Impervious Runoff Depth=1.74" Flow Length=3,526' Tc=35.1 min CN=60 Runoff=121.08 cfs 14.202 af
Subcatchment18S: Sub18	Runoff Area=45.577 ac 0.74% Impervious Runoff Depth=2.50" Flow Length=2,382' Tc=42.2 min CN=69 Runoff=76.28 cfs 9.479 af
Subcatchment 19S: Sub 19	Runoff Area=28.406 ac 0.54% Impervious Runoff Depth=2.77" Flow Length=1,760' Tc=30.4 min CN=72 Runoff=66.82 cfs 6.547 af
Subcatchment 20S: Sub 20 Flow Leng	Runoff Area=70.525 ac 0.78% Impervious Runoff Depth=2.23" th=1,829' Tc=21.6 min UI Adjusted CN=66 Runoff=162.87 cfs 13.134 af
Subcatchment 21S: Sub 21	Runoff Area=123.016 ac 3.33% Impervious Runoff Depth=2.32" Flow Length=4,201' Tc=42.5 min CN=67 Runoff=188.59 cfs 23.791 af
Subcatchment 22S: Sub 22	Runoff Area=62.296 ac 0.60% Impervious Runoff Depth=2.77" Flow Length=1,448' Tc=27.3 min CN=72 Runoff=157.15 cfs 14.358 af
Subcatchment 23.1S: Sub 23.1	Runoff Area=3.682 ac 0.00% Impervious Runoff Depth=2.58" Tc=6.0 min CN=70 Runoff=16.42 cfs 0.793 af
Subcatchment 23S: Sub 23 Flow Le	Runoff Area=13.069 ac 2.96% Impervious Runoff Depth=2.41" ngth=1,297' Tc=33.2 min UI Adjusted CN=68 Runoff=24.81 cfs 2.622 af
Subcatchment 24S: Sub 24 Flow Le	Runoff Area=5.466 ac 7.70% Impervious Runoff Depth=2.86" ngth=1,045' Tc=24.7 min UI Adjusted CN=73 Runoff=15.20 cfs 1.302 af
Subcatchment 43S: Subcat 43	Runoff Area=34.065 ac 0.27% Impervious Runoff Depth=2.67" Flow Length=2,795' Tc=40.7 min CN=71 Runoff=63.14 cfs 7.593 af
Subcatchment 44.1S: 44.1S	Runoff Area=6.425 ac 0.00% Impervious Runoff Depth=3.33" Tc=6.0 min CN=78 Runoff=36.50 cfs 1.784 af
Subcatchment 44S: 44S	Runoff Area=39.864 ac 0.00% Impervious Runoff Depth=2.58" Flow Length=2,470' Tc=41.7 min CN=70 Runoff=69.96 cfs 8.587 af
Subcatchment 45S: Subcat 45	Runoff Area=33.931 ac 0.22% Impervious Runoff Depth=1.66" Flow Length=2,198' Tc=29.8 min CN=59 Runoff=44.42 cfs 4.700 af
Subcatchment 46.1S: 46.1S	Runoff Area=5.473 ac 0.00% Impervious Runoff Depth=0.69" Flow Length=719' Tc=31.5 min CN=45 Runoff=1.83 cfs 0.316 af
Subcatchment 46S: Subcat 46	Runoff Area=25.304 ac 0.00% Impervious Runoff Depth=0.47" Flow Length=1,524' Tc=54.0 min CN=41 Runoff=3.05 cfs 0.988 af
Subcatchment 47S: Sub 47 Flow L	Runoff Area=30.058 ac 1.25% Impervious Runoff Depth=0.42" ength=1,895' Tc=43.3 min UI Adjusted CN=40 Runoff=3.23 cfs 1.046 af

Mill Pt Post 1

Reach 6R: W-NSD-35	Avg. Flow Depth=0.90' Max Vel=5.21 fps Inflow=73.45 cfs 12.263 af n=0.036 L=1,882.0' S=0.0276 '/' Capacity=88.34 cfs Outflow=72.41 cfs 12.263 af
Reach 13.1R:	Avg. Flow Depth=0.09' Max Vel=2.32 fps Inflow=1.61 cfs 2.173 af n=0.030 L=165.0' S=0.0727 '/' Capacity=48.67 cfs Outflow=1.61 cfs 2.173 af
Reach 13.2R:	Avg. Flow Depth=0.14' Max Vel=4.87 fps Inflow=1.61 cfs 2.173 af n=0.035 L=232.0' S=0.2069 '/' Capacity=1,230.81 cfs Outflow=1.61 cfs 2.173 af
Reach 20.1R: S-KCF-6	Avg. Flow Depth=3.05' Max Vel=3.98 fps Inflow=223.20 cfs 19.681 af n=0.030 L=1,405.0' S=0.0028 '/' Capacity=141.69 cfs Outflow=204.13 cfs 19.681 af
Reach 20.2R:	Avg. Flow Depth=2.23' Max Vel=6.07 fps Inflow=204.13 cfs 19.681 af n=0.035 L=1,322.0' S=0.0121 '/' Capacity=250.41 cfs Outflow=197.64 cfs 19.681 af
Reach 22.1R: S-KCF-5	Avg. Flow Depth=2.38' Max Vel=4.88 fps Inflow=188.59 cfs 23.791 af n=0.030 L=665.0' S=0.0060 '/' Capacity=89.91 cfs Outflow=186.82 cfs 23.791 af
Reach 22.2R:	Avg. Flow Depth=4.26' Max Vel=5.13 fps Inflow=384.08 cfs 43.473 af n=0.035 L=707.0' S=0.0075 '/' Capacity=86.27 cfs Outflow=378.09 cfs 43.473 af
Reach 44R:	Avg. Flow Depth=1.95' Max Vel=4.48 fps Inflow=63.14 cfs 7.593 af n=0.035 L=498.0' S=0.0321 '/' Capacity=8.70 cfs Outflow=62.62 cfs 7.593 af
Reach 45R:	Avg. Flow Depth=2.58' Max Vel=6.56 fps Inflow=132.17 cfs 16.180 af n=0.035 L=537.0' S=0.0372 '/' Capacity=16.21 cfs Outflow=131.32 cfs 16.180 af
Pond 4.1P: 4.1P	Peak Elev=499.20' Storage=98,638 cf Inflow=62.02 cfs 2.967 af Primary=0.73 cfs 1.879 af Secondary=0.00 cfs 0.000 af Outflow=0.73 cfs 1.879 af
Pond 7.1P:	Peak Elev=515.02' Storage=26,225 cf Inflow=9.21 cfs 0.634 af Primary=0.19 cfs 0.037 af Secondary=0.00 cfs 0.000 af Outflow=0.19 cfs 0.037 af
Pond 9.1P: 9.1P	Peak Elev=469.81' Storage=38,567 cf Inflow=20.26 cfs 2.137 af Primary=5.43 cfs 1.623 af Secondary=4.63 cfs 0.291 af Outflow=10.06 cfs 1.914 af
Pond 10.1P: 10.1P	Peak Elev=569.76' Storage=11,059 cf Inflow=8.75 cfs 0.638 af Primary=3.35 cfs 0.427 af Secondary=0.00 cfs 0.000 af Outflow=3.35 cfs 0.427 af
Pond 12P: 12P	Peak Elev=508.38' Storage=44,248 cf Inflow=38.33 cfs 2.172 af 8.0" Round Culvert n=0.013 L=172.7' S=0.0058 '/' Outflow=1.61 cfs 2.173 af
Pond 23.1P: 23.1P	Peak Elev=494.45' Storage=10,288 cf Inflow=16.42 cfs 0.793 af Primary=13.34 cfs 0.705 af Secondary=0.00 cfs 0.000 af Outflow=13.34 cfs 0.705 af
Pond 44.1P: 44.1P	Peak Elev=428.54' Storage=54,864 cf Inflow=36.50 cfs 1.784 af Primary=0.78 cfs 1.035 af Secondary=0.20 cfs 0.048 af Outflow=0.98 cfs 1.083 af
Pond 46.1P: 46.1P	Peak Elev=355.16' Storage=8,766 cf Inflow=1.83 cfs 0.316 af Primary=0.17 cfs 0.171 af Secondary=0.00 cfs 0.000 af Outflow=0.17 cfs 0.171 af

Mill Pt Post 1 Prepared by TRC Companies	Type II 24-hr 100-year Rainfall=5.72" Printed 7/19/2024
HydroCAD® 10.20-5a s/n 01402 © 2023 HydroCAD Software Solutio	ons LLC Page 239
Link SP1:	Inflow=10.41 cfs 0.691 af Primary=10.41 cfs 0.691 af
Link SP10:	Inflow=43.49 cfs 4.893 af Primary=43.49 cfs 4.893 af
Link SP11:	Inflow=41.84 cfs 3.152 af Primary=41.84 cfs 3.152 af
Link SP13:	Inflow=25.09 cfs 3.889 af Primary=25.09 cfs 3.889 af
Link SP14:	Inflow=99.70 cfs 14.066 af Primary=99.70 cfs 14.066 af
Link SP17:	Inflow=121.08 cfs 14.202 af Primary=121.08 cfs 14.202 af
Link SP18:	Inflow=76.28 cfs 9.479 af Primary=76.28 cfs 9.479 af
Link SP2:	Inflow=28.42 cfs 1.971 af Primary=28.42 cfs 1.971 af
Link SP22:	Inflow=451.38 cfs 57.831 af Primary=451.38 cfs 57.831 af
Link SP23:	Inflow=27.45 cfs 3.328 af Primary=27.45 cfs 3.328 af
Link SP24:	Inflow=15.20 cfs 1.302 af Primary=15.20 cfs 1.302 af
Link SP3:	Inflow=52.70 cfs 4.930 af Primary=52.70 cfs 4.930 af
Link SP4:	Inflow=113.38 cfs 14.790 af Primary=113.38 cfs 14.790 af
Link SP43:	Inflow=165.50 cfs 21.963 af Primary=165.50 cfs 21.963 af
Link SP46:	Inflow=3.05 cfs 1.159 af Primary=3.05 cfs 1.159 af
Link SP47:	Inflow=3.23 cfs 1.046 af Primary=3.23 cfs 1.046 af
Link SP5:	Inflow=94.50 cfs 18.409 af Primary=94.50 cfs 18.409 af
Link SP7:	Inflow=61.20 cfs 8.268 af Primary=61.20 cfs 8.268 af

Link SP9:

Inflow=77.77 cfs 11.762 af Primary=77.77 cfs 11.762 af

Total Runoff Area = 1,129.454 ac Runoff Volume = 200.183 af Average Runoff Depth = 2.13" 98.80% Pervious = 1,115.935 ac 1.20% Impervious = 13.519 ac

### Summary for Subcatchment 1S: Sub 1

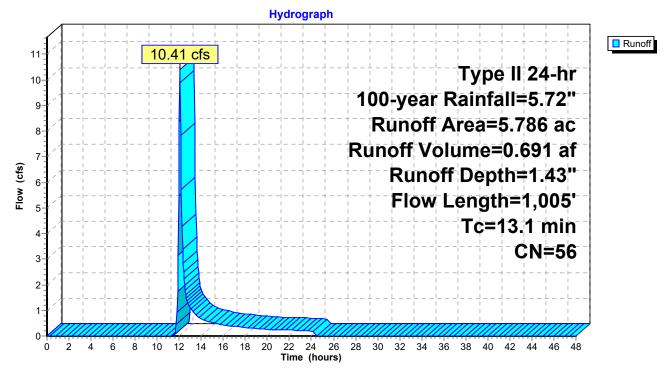
Runoff = 10.41 cfs @ 12.07 hrs, Volume= 0.691 af, Depth= 1.43" Routed to Link SP1 :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 100-year Rainfall=5.72"

Area	(ac) C	N Desc	cription			
		58 Meadow, non-grazed, HSG B				
4.	.149 5	5 <u>Woo</u>	ds, Good,	HSG B		
5.	.786 5	6 Weig	ghted Aver	age		
5.	.786	100.	00% Pervi	ous Area		
Tc	Length	Slope	Velocity	Capacity	Description	
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)		
7.1	100	0.0620	0.24		Sheet Flow,	
					Grass: Short n= 0.150 P2= 2.50"	
2.9	427	0.2390	2.44		Shallow Concentrated Flow,	
					Woodland Kv= 5.0 fps	
2.0	263	0.0980	2.19		Shallow Concentrated Flow,	
					Short Grass Pasture Kv= 7.0 fps	
1.1	215	0.4050	3.18		Shallow Concentrated Flow,	
					Woodland Kv= 5.0 fps	

13.1 1,005 Total

#### Subcatchment 1S: Sub 1



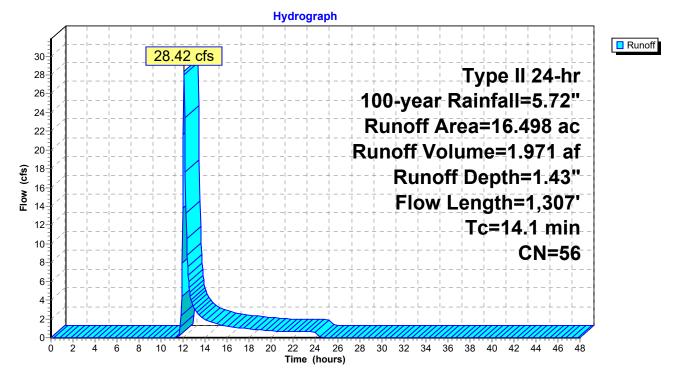
### Summary for Subcatchment 2S: Sub 2

Runoff = 28.42 cfs @ 12.08 hrs, Volume= 1.971 af, Depth= 1.43" Routed to Link SP2 :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 100-year Rainfall=5.72"

Area	(ac) C	N Desc	cription					
			Meadow, non-grazed, HSG A Meadow, non-grazed, HSG B					
7.								
			Weighted Average					
16.	498	100.	00% Pervi	ous Area				
Тс	Length	Slope	Velocity	Capacity	Description			
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)				
5.8	100	0.1010	0.29		Sheet Flow,			
					Grass: Short n= 0.150 P2= 2.50"			
2.8	407	0.2420	2.46		Shallow Concentrated Flow,			
	0.05		0.40		Woodland Kv= 5.0 fps			
1.5	225	0.1200	2.42		Shallow Concentrated Flow,			
1.3	169	0.1830	2.14		Short Grass Pasture Kv= 7.0 fps			
1.5	109	0.1030	Z.14		Shallow Concentrated Flow, Woodland Kv= 5.0 fps			
0.5	113	0.5100	3.57		Shallow Concentrated Flow,			
0.0	110	0.0100	0.07		Woodland Kv= 5.0 fps			
2.2	293	0.0220	2.22		Shallow Concentrated Flow,			
					Grassed Waterway Kv= 15.0 fps			
14.1	1,307	Total						

### Subcatchment 2S: Sub 2



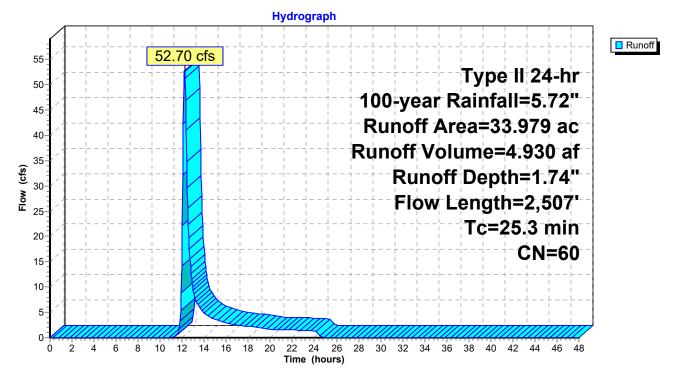
### Summary for Subcatchment 3S: Sub 3

Runoff = 52.70 cfs @ 12.21 hrs, Volume= 4.930 af, Depth= 1.74" Routed to Link SP3 :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 100-year Rainfall=5.72"

_	Area	(ac) C	N Dese	cription					
	18.	697 !	G B						
7.336 71 Meadow, non-grazed, HSG C						GC			
	7.	021 3		ds, Good,					
				ds, Good,					
				el surface/					
_	0.	<u>363 (</u>	<u>30 Mea</u>	dow, non-g	grazed, HS	G A			
	33.	979 (		ghted Aver					
	33.	979	100.	100.00% Pervious Area					
	Тс	Length	Slope	Velocity	Capacity	Description			
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)				
	8.4	100	0.0400	0.20		Sheet Flow,			
						Grass: Short n= 0.150 P2= 2.50"			
	9.4	1,002	0.0640	1.77		Shallow Concentrated Flow,			
						Short Grass Pasture Kv= 7.0 fps			
	3.7	337	0.0940	1.53		Shallow Concentrated Flow,			
						Woodland Kv= 5.0 fps			
	2.5	632		4.29		Direct Entry, CF			
	1.3	436		5.59		Direct Entry, CF			
	25.3	2,507	Total						

### Subcatchment 3S: Sub 3



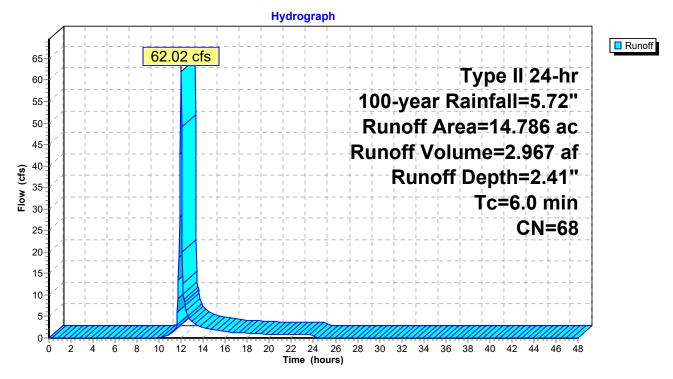
#### Summary for Subcatchment 4.1S:

Runoff = 62.02 cfs @ 11.98 hrs, Volume= 2.967 af, Depth= 2.41" Routed to Pond 4.1P : 4.1P

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 100-year Rainfall=5.72"

_	Area	(ac)	CN	Desc	Description							
	10.	0.166 71 Meadow, non-grazed, HSG					GC					
*	0.	0.489 96 Gravel										
4.131 58 Meadow, non-grazed, HSG B						G B						
	14.	14.786 68 Weighted Average										
	14.786		36100.00% Pervious Area		ous Area							
	Tc (min)	Leng (fee		Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description					
_	6.0						Direct Entry,					

### Subcatchment 4.1S:



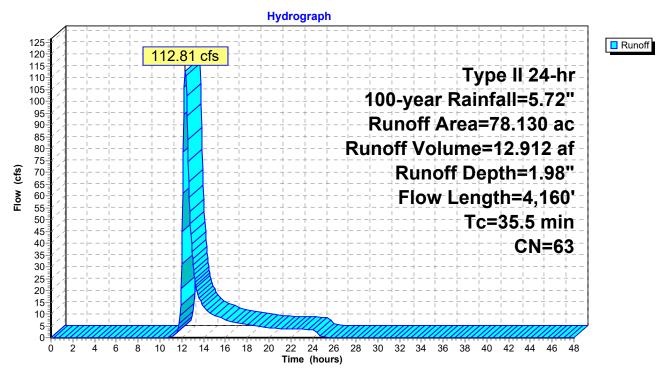
### Summary for Subcatchment 4S: Sub 4

Runoff = 112.81 cfs @ 12.33 hrs, Volume= 12.912 af, Depth= 1.98" Routed to Link SP4 :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 100-year Rainfall=5.72"

	Area	(ac) (	N Des	cription					
	0.	192	48 Brus	sh, Good, H	ISG B				
*	1.	938	96 Grav	/el surface					
*	0.	259	98 Unc	onnected r	oofs				
	0.393 30 Meadow, non-grazed, HSG								
	37.847 58 Meadow, non-grazed, HSC								
					grazed, HS	GC			
	10.274 55			Woods, Good, HSG B					
				ods, Good,					
				ghted Aver					
	77.871			99.67% Pervious Area					
	0.259			0.33% Impervious Area					
	0.259		100.	100.00% Unconnected					
	т.	المربع مراجل	01	\/_l;	0	Description			
	Tc (min)	Length	Slope	Velocity	Capacity	Description			
	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)				
	9.9	100	0.1900	0.17		Sheet Flow,			
	1 0	205	0 4550	0.76		Woods: Light underbrush n= 0.400 P2= 2.50"			
	1.8	295	0.1550	2.76		Shallow Concentrated Flow,			
	17.1	1 244	0.0250	1 21		Short Grass Pasture Kv= 7.0 fps			
	17.1	1,344	0.0350	1.31		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps			
	6.7	2,421		6.02		Direct Entry, CF			
_	35.5	4,160	Total	0.02		Direct Linuy, Or			
	30.0	4,100	Total						

Subcatchment 4S: Sub 4



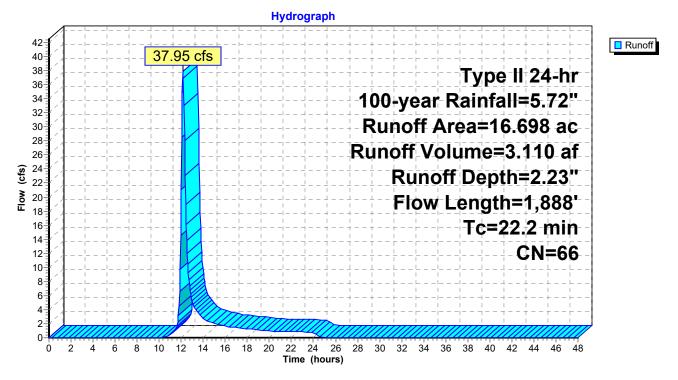
### Summary for Subcatchment 5S: Sub 5

Runoff = 37.95 cfs @ 12.16 hrs, Volume= 3.110 af, Depth= 2.23" Routed to Link SP5 :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 100-year Rainfall=5.72"

Area	(ac) C	CN Desc	Description						
5.916 58 Meadow, non-grazed, HSG					GB				
8.	385	71 Mea	Meadow, non-grazed, HSG C						
0.	0.686 55		Woods, Good, HSG B						
1.	558		Woods, Good, HSG C						
0.	153	96 Grav	Gravel surface, HSG A						
16.	698	66 Weig	ghted Aver	age					
16.	698	100.00% Pervious Area							
Tc	Length	Slope	Velocity	Capacity	Description				
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)					
9.4	100	0.0300	0.18		Sheet Flow,				
					Grass: Short n= 0.150 P2= 2.50"				
6.4	549	0.0420	1.43		Shallow Concentrated Flow,				
					Short Grass Pasture Kv= 7.0 fps				
1.7	195	0.0780	1.95		Shallow Concentrated Flow,				
					Short Grass Pasture Kv= 7.0 fps				
4.7	1,044		3.70		Direct Entry, CF				
22.2	1,888	Total							

### Subcatchment 5S: Sub 5



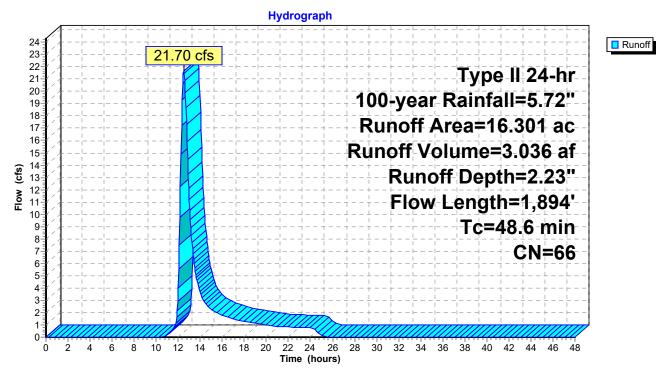
#### Summary for Subcatchment 6S: Sub 6

Runoff = 21.70 cfs @ 12.50 hrs, Volume= 3.036 af, Depth= 2.23" Routed to Link SP5 :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 100-year Rainfall=5.72"

Area	(ac) C	N Dese	Description					
6.	.064	58 Mea	dow, non-	grazed, HS	GB			
9.	9.461 71		Meadow, non-grazed, HSG C					
0.	0.126 55		Woods, Good, HSG B					
0.	650	70 Woo	Woods, Good, HSG C					
16.	.301	66 Weig	ghted Aver	age				
16.	.301	100.	00% Pervi	ous Area				
Tc	Length	Slope	Velocity	Capacity	Description			
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)				
27.8	100	0.0020	0.06		Sheet Flow,			
					Grass: Short n= 0.150 P2= 2.50"			
19.8	1,554	0.0350	1.31		Shallow Concentrated Flow,			
					Short Grass Pasture Kv= 7.0 fps			
1.0	240		3.81		Direct Entry, CF			
48.6	1,894	Total						

#### Subcatchment 6S: Sub 6



#### Summary for Subcatchment 7.1S: Sub 7.1

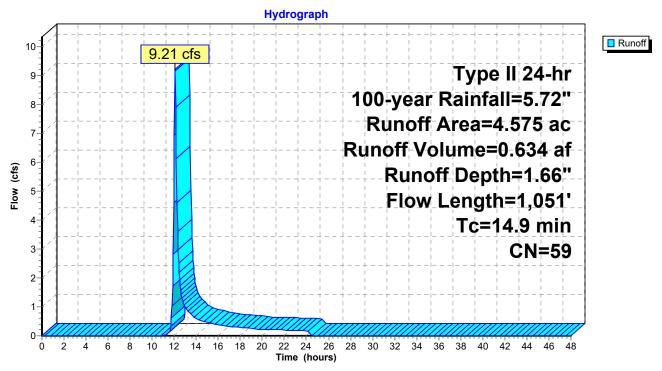
Runoff = 9.21 cfs @ 12.08 hrs, Volume= 0.634 af, Depth= 1.66" Routed to Pond 7.1P :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 100-year Rainfall=5.72"

Area	(ac) C	N Dese	cription		
4.	216 5			grazed, HS	G B
-			el surface	,	
0.	228 5	5 Woo	ds, Good,	HSG B	
4.	575 5	59 Weig	ghted Aver	age	
4.	575	100.	00% Pervi	ous Area	
Tc	Length	Slope	Velocity	Capacity	Description
<u>(min)</u>	(feet)	(ft/ft)	(ft/sec)	(cfs)	
7.0	100	0.0640	0.24		Sheet Flow,
					Grass: Short n= 0.150 P2= 2.50"
0.7	90	0.1000	2.21		Shallow Concentrated Flow,
					Short Grass Pasture Kv= 7.0 fps
0.5	54	0.1100	1.66		Shallow Concentrated Flow,
					Woodland Kv= 5.0 fps
6.7	807	0.0820	2.00		Shallow Concentrated Flow,
					Short Grass Pasture Kv= 7.0 fps

14.9 1,051 Total

## Subcatchment 7.1S: Sub 7.1

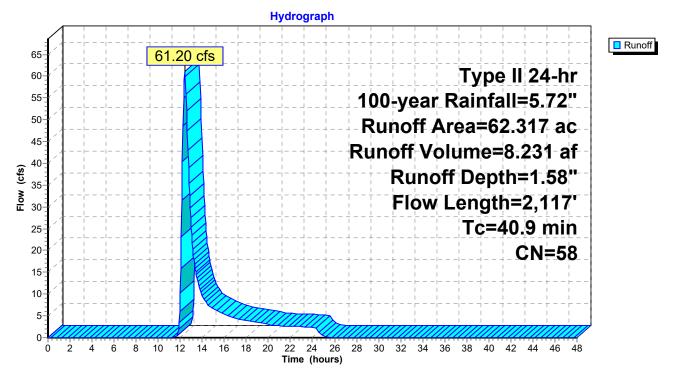


# Summary for Subcatchment 7S: Sub 7

Runoff = 61.20 cfs @ 12.42 hrs, Volume= 8.231 af, Depth= 1.58" Routed to Link SP7 :

Area	(ac) (	CN Des	cription							
46.	288	58 Mea	adow, non-g	grazed, HS	GB					
1.	123	78 Mea	eadow, non-grazed, HSG D							
12.	864		loods, Good, HSG B							
-	323		/oods, Good, HSG D							
-	107				Good, HSG C					
			vel surface	,						
0.	457	<u>48 Bru</u>	sh, Good, H	ISG B						
	317		ghted Aver	0						
62.	317	100	.00% Pervi	ous Area						
Tc (min)	Length (feet)		Velocity (ft/sec)	Capacity (cfs)	Description					
27.8	100	0.0020	0.06		Sheet Flow,					
					Grass: Short n= 0.150 P2= 2.50"					
9.7	786	0.0370	1.35		Shallow Concentrated Flow,					
					Short Grass Pasture Kv= 7.0 fps					
3.4	1,231		6.01		Direct Entry,					
40.9	2,117	Total								

Subcatchment 7S: Sub 7

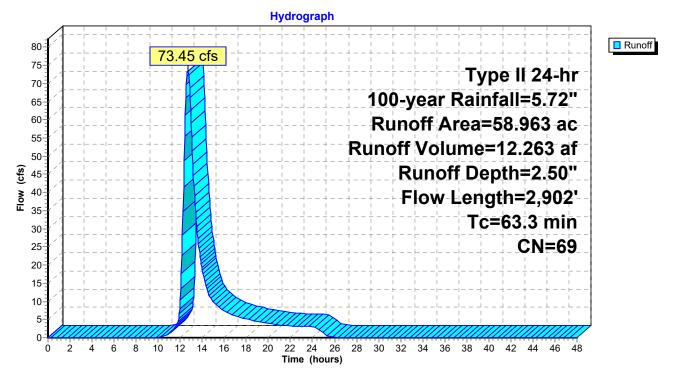


# Summary for Subcatchment 8S: Sub 8

Runoff = 73.45 cfs @ 12.69 hrs, Volume= 12.263 af, Depth= 2.50" Routed to Reach 6R : W-NSD-35

Area	(ac) C	N Dese	cription							
6.	209	58 Mea	eadow, non-grazed, HSG B							
30.	343		leadow, non-grazed, HSG C							
8.	.033	78 Mea	leadow, non-grazed, HSG D							
5.	.658 .		Voods, Good, HSG B							
6.	737	70 Woo	ds, Good,	HSG C						
1.	132	77 Woo	ds, Good,	HSG D						
0.	.761 9	96 Grav	el surface	, HSG A						
0.	.090 8	30 Past	ure/grassl	and/range,	Good, HSG D					
58.	.963 (	69 Weig	phted Aver	age						
58.	963		00% Pervi							
Tc	Length	Slope	Velocity	Capacity	Description					
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)						
23.7	100	0.0030	0.07		Sheet Flow,					
					Grass: Short n= 0.150 P2= 2.50"					
6.6	315	0.0130	0.80		Shallow Concentrated Flow,					
					Short Grass Pasture Kv= 7.0 fps					
23.1	727	0.0110	0.52		Shallow Concentrated Flow,					
					Woodland Kv= 5.0 fps					
9.9	1,760		2.97		Direct Entry, CF					
63.3	2,902	Total								

Subcatchment 8S: Sub 8



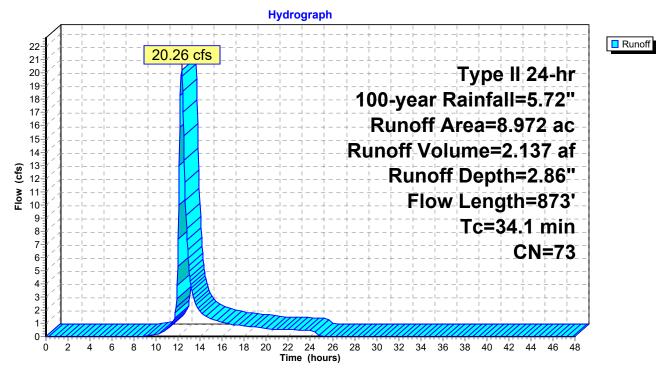
#### Summary for Subcatchment 9.1S: Sub 9.1

Runoff = 20.26 cfs @ 12.30 hrs, Volume= 2.137 af, Depth= 2.86" Routed to Pond 9.1P : 9.1P

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 100-year Rainfall=5.72"

 Area	(ac)	CN	Desc	ription						
1.	619	78	Mea	/leadow, non-grazed, HSG D						
0.	528	65	Brus	Brush, Good, HSG C						
4.	896	71	Mea	Aeadow, non-grazed, HSG C						
 1.	929	74								
 8.972 73 Weighted Average										
				, 00% Pervi						
Тс	Length	ו	Slope	Velocity	Capacity	Description				
(min)	(feet	)	(ft/ft)	(ft/sec)	(cfs)					
 21.1	100	) ()	.0040	0.08		Sheet Flow,				
						Grass: Short n= 0.150 P2= 2.50"				
13.0	773	30	.0200	0.99		Shallow Concentrated Flow,				
						Short Grass Pasture Kv= 7.0 fps				
34.1	873	3 Т	otal							

#### Subcatchment 9.1S: Sub 9.1

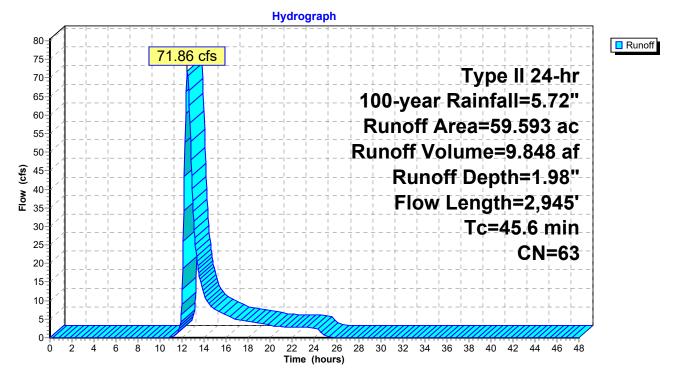


# Summary for Subcatchment 9S: Sub 9

Runoff = 71.86 cfs @ 12.47 hrs, Volume= Routed to Link SP9 : 9.848 af, Depth= 1.98"

Area	(ac) C	N Dese	cription								
2.	.871 4	8 Brus	Brush, Good, HSG B								
			Brush, Good, HSG C								
			Brush, Good, HSG D								
			Gravel surface, HSG D								
				oofs, HSG							
				grazed, HS							
				grazed, HS							
				grazed, HS							
				over, Good							
				over, Good	, HSG C						
-			er Surface								
			ds, Good,								
	1.580 70 Woods, Good, HSG C										
59.593 63 Weighted Average											
	.831		2% Pervio % Impervi								
	.762										
0.	.332	43.5	7% Uncon	nected							
Тс	Length	Slope	Velocity	Capacity	Description						
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	· · · · · · · · · · · · · · · · · · ·						
17.9	100	0.0060	0.09		Sheet Flow,						
					Grass: Short n= 0.150 P2= 2.50"						
13.8	841	0.0210	1.01		Shallow Concentrated Flow,						
					Short Grass Pasture Kv= 7.0 fps						
10.9	1,254	0.0750	1.92		Shallow Concentrated Flow,						
					Short Grass Pasture Kv= 7.0 fps						
1.6	156		1.63		Direct Entry,						
1.4	594		7.07		Direct Entry,						
45.6	2,945	Total									

Subcatchment 9S: Sub 9



## Summary for Subcatchment 10.1S: Sub 10.1

Runoff = 8.75 cfs @ 12.12 hrs, Volume= 0.638 af, Depth= 2.67" Routed to Pond 10.1P : 10.1P

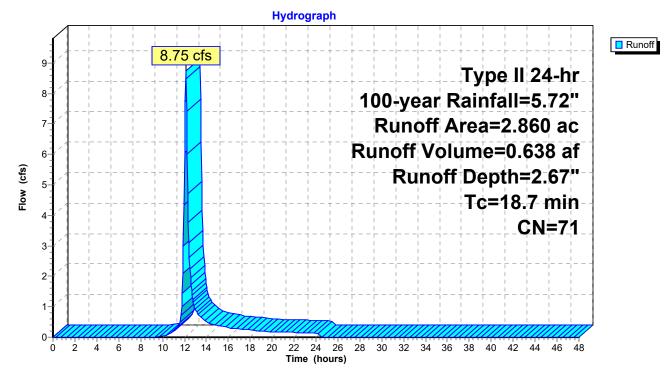
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 100-year Rainfall=5.72"

Area (ac)	CN	Description								
0.026	61	>75% Grass cover, Good, HSG B								
0.781	74	>75% Grass cover, Good, HSG C								
0.447	80	>75% Grass cover, Good, HSG D								
0.524	58	Meadow, non-grazed, HSG B								
1.054	71	Meadow, non-grazed, HSG C								
0.028	65	Brush, Good, HSG C								
2.860	71	Weighted Average								
2.860		100.00% Pervious Area								
Tc Leng	gth S	Slope Velocity Capacity Description								
(min) (fe	et)	(ft/ft) (ft/sec) (cfs)								

1	8	7

**Direct Entry, Direct** 

#### Subcatchment 10.1S: Sub 10.1

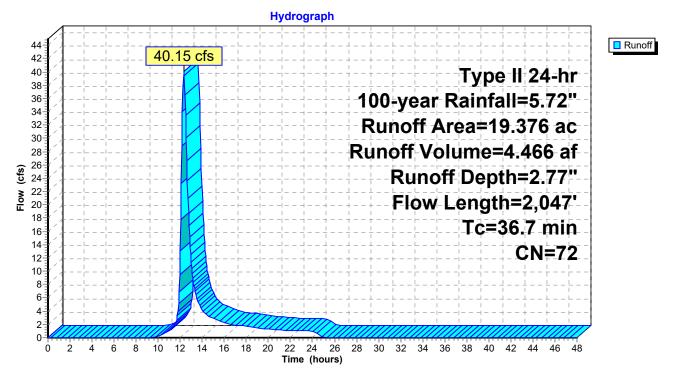


# Summary for Subcatchment 10S: Sub 10

Runoff = 40.15 cfs @ 12.33 hrs, Volume= Routed to Link SP10 : 4.466 af, Depth= 2.77"

Area	(ac)	CN	Desc	ription								
1.	800	98	Wate	/ater Surface, HSG D								
0.	.081	98	Unco	Inconnected roofs, HSG D								
0.	.828	96	Grav	Gravel surface, HSG D								
-	200	48		h, Good, H								
1.	752	65		h, Good, H								
	996	73		h, Good, H								
-	403	58			grazed, HS							
	.089	71			grazed, HS							
	486	61			over, Good,							
	211	74			over, Good,							
-	204	80			over, Good,	, HSG D						
-	.917	55		ds, Good,								
	.044	70		ds, Good,								
	.157		77 Woods, Good, HSG D									
	19.376 72 Weighted Average											
	.287			8% Pervio								
	.089			% Impervi								
0.	.081		7.44	% Unconn	ected							
Та	اممط	h	Clana	Valacity	Consoitu	Description						
Tc (min)	Lengt (fee		Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description						
(min)		/			(015)	Chaot Flow						
10.9	10	0 0	0.0210	0.15		Sheet Flow, Grass: Short n= 0.150 P2= 2.50"						
22.7	1,34	7 (	0.0200	0.99		Shallow Concentrated Flow,						
22.1	1,34	·/ (	J.0200	0.99		Short Grass Pasture Kv= 7.0 fps						
3.1	60	0		3.18		Direct Entry, CF						
36.7	2,04		Total									

## Subcatchment 10S: Sub 10

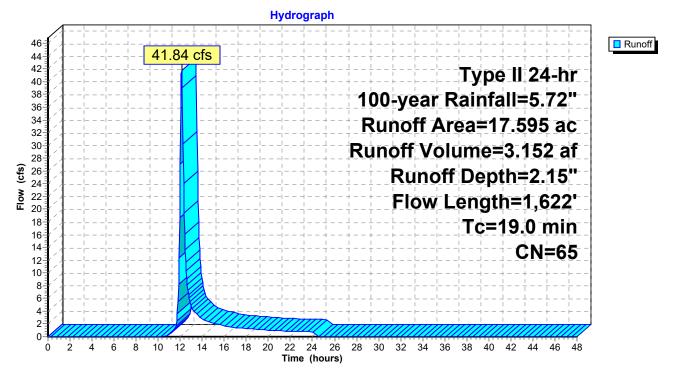


# Summary for Subcatchment 11S: Sub 11

Runoff = 41.84 cfs @ 12.13 hrs, Volume= Routed to Link SP11 : 3.152 af, Depth= 2.15"

Area	(ac) C	N Des	cription								
0.	199 4	48 Brus	Brush, Good, HSG B								
0.	091 (	65 Brus	Brush, Good, HSG C								
			Gravel surface, HSG D								
-			Inconnected roofs, HSG D								
				grazed, HS							
				grazed, HS							
				over, Good,							
				over, Good,	, HSG C						
			er Surface,								
			ds, Good,								
			ds, Good,								
			ghted Aver 7% Pervio								
	132 463										
	403 091		% Impervie 5% Uncon								
0.	031	19.0		necleu							
Тс	Length	Slope	Velocity	Capacity	Description						
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	Decemption						
9.2	100	0.0320	0.18	()	Sheet Flow.						
0.2	100	0.0020	0.10		Grass: Short n= 0.150 P2= 2.50"						
3.9	579	0.0240	2.49		Shallow Concentrated Flow,						
					Unpaved Kv= 16.1 fps						
2.6	277	0.0620	1.74		Shallow Concentrated Flow,						
					Short Grass Pasture Kv= 7.0 fps						
0.7	102	0.2670	2.58		Shallow Concentrated Flow,						
					Woodland Kv= 5.0 fps						
2.6	564		3.62		Direct Entry, CF						
19.0	1,622	Total									

# Subcatchment 11S: Sub 11



#### Summary for Subcatchment 12S: Sub 12

Runoff = 38.33 cfs @ 11.96 hrs, Volume= Routed to Pond 12P : 12P 2.172 af, Depth= 5.36"

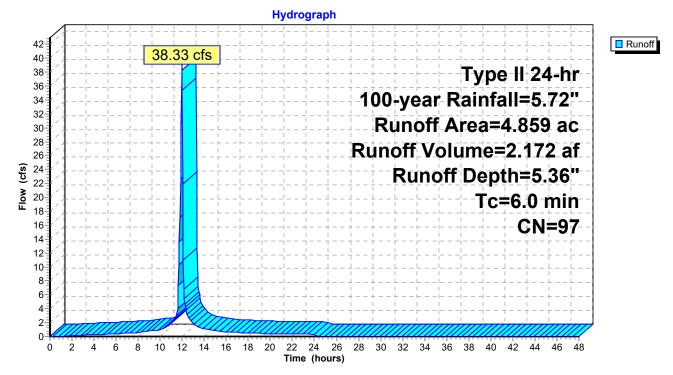
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 100-year Rainfall=5.72"

	Area	(ac)	CN	Desc	cription							
	0.	038	98	Unco	Jnconnected pavement, HSG D							
	2.	251	96	Grav	el surface	, HSG D						
_	2.	570	98	Wate	er Surface,	HSG D						
	4.	859	97	Weig	Weighted Average							
	2.	251		46.3	3% Pervio	us Area						
	2.	608		53.6	7% Imperv	vious Area						
	0.	038		1.46	% Unconn	ected						
	-			~		<b>o</b> ''						
	Tc	Lengt		Slope	Velocity	Capacity	Description					
_	(min)	(fee	et)	(ft/ft)	(ft/sec)	(cfs)						
	60						Direct Entry minimum					



Direct Entry, minimum

## Subcatchment 12S: Sub 12

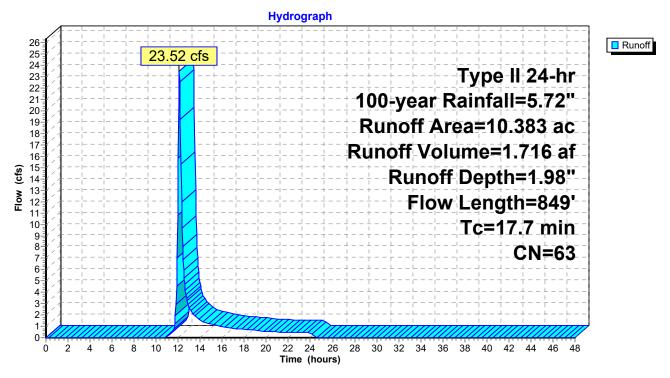


# Summary for Subcatchment 13S: Sub 13

Runoff = 23.52 cfs @ 12.11 hrs, Volume= 1.716 af, Depth= 1.98" Routed to Link SP13 :

Area	(ac)	CN Des	cription							
0	.019	98 Und	Inconnected pavement, HSG D							
0.	.120	96 Gra	Gravel surface, HSG D							
1.	.784	58 Mea	dow, non-	grazed, HS	G B					
4	.488			grazed, HS	SG C					
3.	.647	55 Woo	ods, Good,	HSG B						
0.	.325	70 Woo	ods, Good,	HSG C						
10.	.383	63 Wei	ghted Aver	age						
	.364	99.8	32% Pervio	us Area						
				ous Area						
0.	.019	100	100.00% Unconnected							
-		01		0 1						
Tc	Length		Velocity	Capacity	Description					
<u>(min)</u>	(feet)		(ft/sec)	(cfs)						
10.1	100	0.0250	0.16		Sheet Flow,					
<b>-</b> 4	500	0 05 40	4.00		Grass: Short n= 0.150 P2= 2.50"					
5.4	526	0.0540	1.63		Shallow Concentrated Flow,					
0.7	~~~	0 0070	4 50		Short Grass Pasture Kv= 7.0 fps					
0.7	62	0.0970	1.56		Shallow Concentrated Flow,					
1 5	161	0 1220	1 00		Woodland Kv= 5.0 fps					
1.5	161	0.1330	1.82		Shallow Concentrated Flow,					
477	0.40	Tatal			Woodland Kv= 5.0 fps					
17.7	849	Total								

Subcatchment 13S: Sub 13



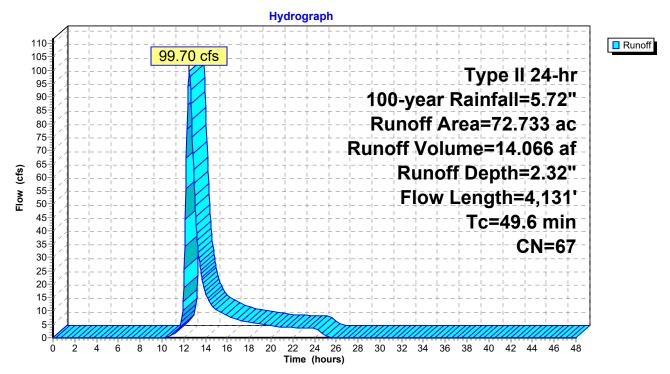
# Summary for Subcatchment 14S: Sub 14

- [47] Hint: Peak is 547% of capacity of segment #4 [47] Hint: Peak is 1295% of capacity of segment #5
- Runoff = 99.70 cfs @ 12.51 hrs, Volume= Routed to Link SP14 :

14.066 af, Depth= 2.32"

Area	(ac) C	N Desc	cription								
0.	.667 4	48 Brus	Brush, Good, HSG B								
0.	.121 (	65 Brus	Brush, Good, HSG C								
		73 Brus	rush, Good, HSG D								
			Inconnected roofs, HSG D								
				grazed, HS							
				grazed, HS							
				grazed, HS							
				over, Good	, HSG D						
			ds, Good,								
			ds, Good,								
			ds, Good,								
			phted Aver	0							
	.426		8% Pervio								
	.307		0.42% Impervious Area 100.00% Unconnected								
0.	.307	100.	00% Unco	nnected							
Тс	Longth	Slope	Valaaity	Conocity	Description						
(min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description						
9.0	<u>    (icci)</u> 50	0.0600	0.09	(013)	Shoot Flow						
9.0	50	0.0000	0.09		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.50"						
5.6	50	0.0280	0.15		Sheet Flow,						
0.0	50	0.0200	0.10		Grass: Short $n= 0.150$ P2= 2.50"						
6.7	465	0.0270	1.15		Shallow Concentrated Flow,						
0.1	100	0.0210	1.10		Short Grass Pasture Kv= 7.0 fps						
9.8	1,433	0.0120	2.43	18.23	Trap/Vee/Rect Channel Flow,						
	,		-		Bot.W=5.00' D=0.50' Z= 20.0 '/' Top.W=25.00'						
					n= 0.030 Earth, grassed & winding						
18.5	2,133	0.0080	1.93	7.70							
					Bot.W=5.00' D=0.50' Z= 6.0 '/' Top.W=11.00'						
					n= 0.035 Earth, dense weeds						

Subcatchment 14S: Sub 14



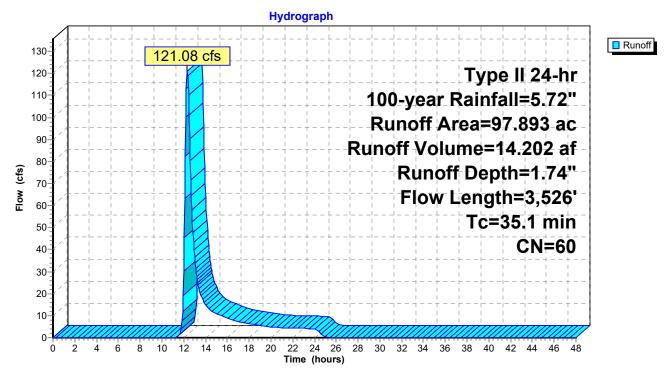
## Summary for Subcatchment 17S: Sub 17

[47] Hint: Peak is 1807% of capacity of segment #4

Runoff = 121.08 cfs @ 12.34 hrs, Volume= 14.202 af, Depth= 1.74" Routed to Link SP17 :

Area	(ac) C	N Dese	cription							
1.	.139	96 Gravel surface, HSG D								
1.		98 Unconnected roofs, HSG D								
				grazed, HS						
-				grazed, HS						
				grazed, HS						
				over, Good						
				over, Good						
				over, Good	, HSG D					
-			ds, Good,							
			ds, Good,							
			ds, Good,							
-			ghted Aver							
	.740		2% Pervio							
	.153		% Impervi							
Ι.	.153	100.	00% Unco	mecleu						
Тс	Length	Slope	Velocity	Capacity	Description					
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	Description					
9.4	100	0.0300	0.18	(00)	Sheet Flow,					
3.4	100	0.0000	0.10		Grass: Short $n= 0.150$ P2= 2.50"					
5.2	681	0.0990	2.20		Shallow Concentrated Flow,					
0.2		0.0000			Short Grass Pasture Kv= 7.0 fps					
10.3	1,098	0.0650	1.78		Shallow Concentrated Flow,					
	,				Short Grass Pasture Kv= 7.0 fps					
10.2	1,647	0.0140	2.68	6.70	Trap/Vee/Rect Channel Flow,					
	,				Bot.W=2.00' D=0.50' Z= 6.0 '/' Top.W=8.00'					
					n= 0.030 Earth, grassed & winding					
35.1	3,526	Total								

Subcatchment 17S: Sub 17

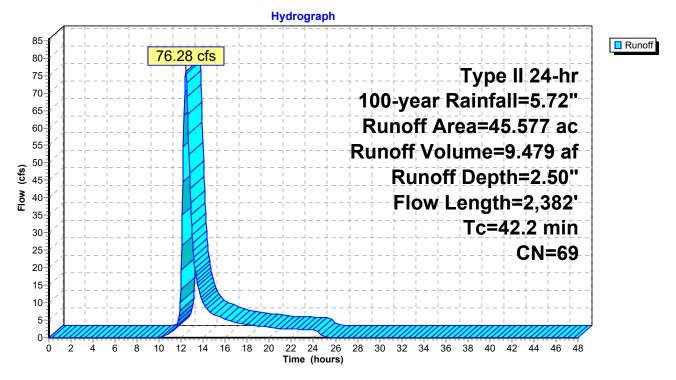


# Summary for Subcatchment 18S: Sub 18

Runoff = 76.28 cfs @ 12.41 hrs, Volume= Routed to Link SP18 : 9.479 af, Depth= 2.50"

	Area	(ac) (	CN Desc	cription					
	2.	524	48 Brus	h, Good, H	ISG B				
	4.	116	73 Brus	h, Good, H	ISG D				
*	0.	335	98 Pave	ement					
					grazed, HS				
					grazed, HS				
					grazed, HS	G D			
_				ds, Good,	HSG D				
*	0.	653	96 Grav	/el road					
				ghted Aver					
		242		99.26% Pervious Area					
	0.	335	0.74	% Impervi	ous Area				
	_		~		<b>a</b>				
	Tc	Length	Slope	Velocity	Capacity	Description			
	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)				
	11.6	100	0.0180	0.14		Sheet Flow,			
						Grass: Short n= 0.150 P2= 2.50"			
	10.5	668	0.0230	1.06		Shallow Concentrated Flow,			
	4 5	450	0 0 5 0 0	4 70		Short Grass Pasture Kv= 7.0 fps			
	4.5	459	0.0590	1.70		Shallow Concentrated Flow,			
	07	400	0.0400	0.00		Short Grass Pasture Kv= 7.0 fps			
	2.7	128	0.0130	0.80		Shallow Concentrated Flow,			
	12.0	1 0 2 7		1 22		Short Grass Pasture Kv= 7.0 fps			
_	12.9	1,027	<b>.</b>	1.33		Direct Entry, CF			
	42.2	2,382	Total						

# Subcatchment 18S: Sub 18

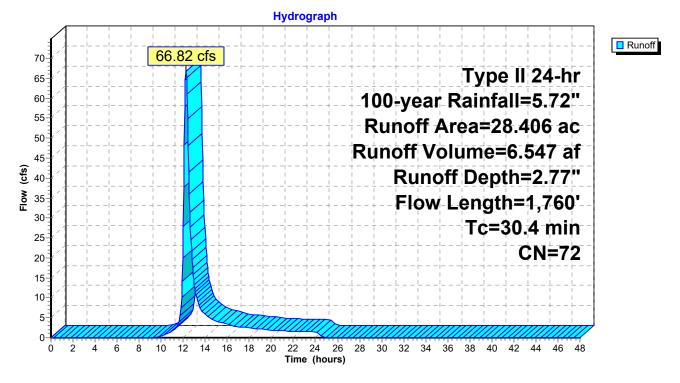


# Summary for Subcatchment 19S: Sub 19

Runoff = 66.82 cfs @ 12.25 hrs, Volume= Routed to Reach 20.1R : S-KCF-6 6.547 af, Depth= 2.77"

Area	(ac) C	N Desc	cription		
0.	.227 6	65 Brus	h, Good, H	ISG C	
0.	105	73 Brus	h, Good, H	ISG D	
2.	.120 5	58 Mea	dow, non-g	grazed, HS	G B
18.	.358	71 Mea	dow, non-g	grazed, HS	GC
7.	.318	78 Mea	dow, non-	grazed, HS	G D
			er Surface		
0.	.125	77 Woo	ds, Good,	HSG D	
28.	406	72 Weig	ghted Aver	age	
	.253		6% Pervio		
0.	.153	0.54	% Impervi	ous Area	
_		<u>.</u>		<b>a</b>	
Tc	Length	Slope	Velocity	Capacity	Description
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
8.2	100	0.0430	0.20		Sheet Flow,
					Grass: Short n= 0.150 P2= 2.50"
1.5	212	0.1120	2.34		Shallow Concentrated Flow,
40.0			4.00		Short Grass Pasture Kv= 7.0 fps
10.0	635	0.0230	1.06		Shallow Concentrated Flow,
40.7	0.40	0 0000	4.07		Short Grass Pasture Kv= 7.0 fps
10.7	813	0.0330	1.27		Shallow Concentrated Flow,
					Short Grass Pasture Kv= 7.0 fps
30.4	1,760	Total			

# Subcatchment 19S: Sub 19



# Summary for Subcatchment 20S: Sub 20

Runoff = 162.87 cfs @ 12.16 hrs, Volume= 13.134 af, Depth= 2.23" Routed to Reach 20.1R : S-KCF-6

Area	(ac) C	N Adj	Descript	ion					
0.	508 9	98	Unconn	ected roofs	, HSG D				
29.	509 క	58		/, non-graz					
23.	016	71			ed, HSG C				
	-	78			ed, HSG D				
		51			, Good, HSG B				
-		55	,	Good, HSC					
-		70		Good, HSC					
		77		Good, HSC					
		98		urface, HS					
		18		Good, HSG					
-		65		Good, HSG					
		73		Brush, Good, HSG D					
		96	Gravel surface, HSG D						
		67 66			, UI Adjusted				
	973			Pervious A					
	552			npervious /					
0.	508		92.03%	Unconnect	ed				
Тс	Length	Slope	Velocity	Capacity	Description				
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	Description				
6.7	100	0.0700	0.25	(013)	Sheet Flow,				
0.7	100	0.0700	0.23		Grass: Short $n= 0.150$ P2= 2.50"				
2.6	259	0.0580	1.69		Shallow Concentrated Flow,				
2.0	200	0.0000	1.05		Short Grass Pasture Kv= 7.0 fps				
8.8	703	0.0360	1.33		Shallow Concentrated Flow,				
0.0	100	0.0000	1.00		Short Grass Pasture Kv= 7.0 fps				
3.5	767		3.65		Direct Entry, CF				
21.6	1,829	Total							

#### Hydrograph 180 Runoff 162.87 cfs 170 Type II 24-hr 160 150 100-year Rainfall=5.72" 140 Runoff Area=70.525 ac 130 120 Runoff Volume=13.134 af 110 Flow (cfs) Runoff Depth=2.23" 100 90 Flow Length=1,829' 80 Tc=21.6 min 70 60 **UI Adjusted CN=66** 50 40 30 20-10 0-10 12 14 16 18 20 24 26 28 2 8 22 30 32 34 36 38 40 42 44 46 48 Ó 4 6 Time (hours)

## Subcatchment 20S: Sub 20

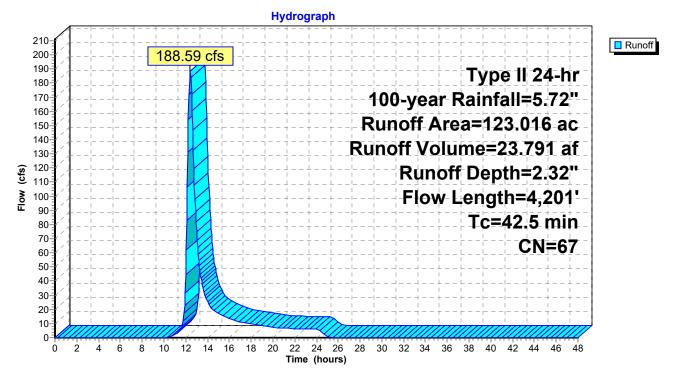
## Summary for Subcatchment 21S: Sub 21

[47] Hint: Peak is 1394% of capacity of segment #3 [47] Hint: Peak is 1244% of capacity of segment #4 [47] Hint: Peak is 1453% of capacity of segment #5

188.59 cfs @ 12.41 hrs, Volume= 23.791 af, Depth= 2.32" Runoff = Routed to Reach 22.1R : S-KCF-5

Area	(ac) C	N Desc	cription						
2.	223	96 Gravel surface, HSG D							
0.950 98 Unconnected roofs, HSG D									
50.	366 8	58 Mea	dow, non-g	grazed, HS	G B				
57.	844	71 Mea	dow, non-	grazed, HS	GC				
3.	445	78 Mea	Meadow, non-grazed, HSG D						
3.	145 9	98 Wate	er Surface	, HSG D					
0.	555 !	55 Woo	ds, Good,	HSG B					
1.	125	70 Woo	ds, Good,	HSG C					
0.	616 6			over, Good					
				over, Good	, HSG C				
			h, Good, H						
0.	<u>344 (</u>	65 Brus	h, Good, F	ISG C					
123.	016 (		ghted Aver						
118.	921		7% Pervio						
	095		3.33% Impervious Area						
0.	950	23.2	0% Uncon	nected					
Тс	Length	Slope	Velocity	Capacity	Description				
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)					
12.1	100	0.0160	0.14		Sheet Flow,				
					Grass: Short n= 0.150 P2= 2.50"				
12.6	1,112	0.0440	1.47		Shallow Concentrated Flow,				
					Short Grass Pasture Kv= 7.0 fps				
2.2	346	0.0150	2.58	13.52					
					Bot.W=6.00' D=0.50' Z= 9.0 '/' Top.W=15.00'				
					n= 0.035 Earth, dense weeds				
8.3	1,504	0.0150	3.03	15.15	Trap/Vee/Rect Channel Flow,				
					Bot.W=9.00' D=0.50' Z= 2.0 '/' Top.W=11.00'				
7.0	4 400	0.0440	0.00	40.00	n= 0.035 Earth, dense weeds				
7.3	1,139	0.0110	2.60	12.98	Trap/Vee/Rect Channel Flow,				
					Bot.W=9.00' D=0.50' Z= 2.0 '/' Top.W=11.00'				
					n= 0.035 Earth, dense weeds				
42.5	4,201	Total							

Subcatchment 21S: Sub 21



## Summary for Subcatchment 22S: Sub 22

[47] Hint: Peak is 2852% of capacity of segment #6

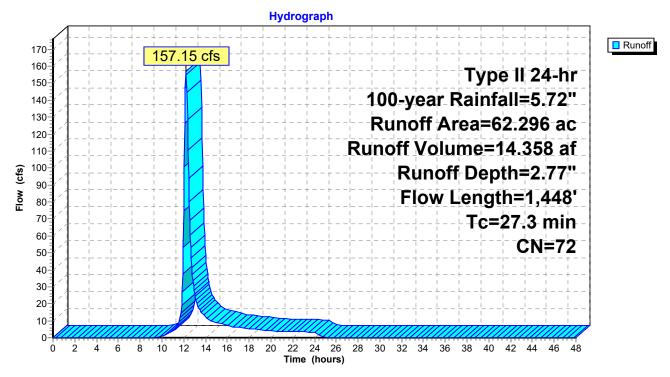
Runoff = 157.15 cfs @ 12.22 hrs, Volume= 14.358 af, Depth= 2.77" Routed to Link SP22 :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 100-year Rainfall=5.72"

Area	(ac) C	N Desc	cription							
1.	623 9	96 Grav	el surface	, HSG D						
4.	4.694 58 Meadow, non-grazed, HSG B									
	43.712 71 Meadow, non-grazed, HSG C									
-				grazed, HS	G D					
-			ds, Good,							
			ds, Good,							
			ds, Good,							
				avement, H	HSG D					
-			h, Good, H							
			h, Good, H							
-			phted Aver							
-	923		0% Pervio							
	373		0.60% Impervious Area 100.00% Unconnected							
0.	373	100.		nnected						
Тс	Length	Slope	Velocity	Capacity	Description					
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	·					
7.6	100	0.0520	0.22		Sheet Flow,					
					Grass: Short n= 0.150 P2= 2.50"					
1.7	319	0.0420	3.07		Shallow Concentrated Flow,					
					Grassed Waterway Kv= 15.0 fps					
7.8	360	0.0120	0.77		Shallow Concentrated Flow,					
					Short Grass Pasture Kv= 7.0 fps					
7.4	452	0.0210	1.01		Shallow Concentrated Flow,					
0.0	0.1	0.0400			Short Grass Pasture Kv= 7.0 fps					
0.9	61	0.0490	1.11		Shallow Concentrated Flow,					
4.0	450	0 0000	4 00	E E 4	Woodland Kv= 5.0 fps					
1.9	156	0.0020	1.38	5.51	Trap/Vee/Rect Channel Flow, Bot.W=2.00' D=1.00' Z= 2.0 '/' Top.W=6.00'					
					n = 0.035 Earth, dense weeds					

27.3 1,448 Total

Subcatchment 22S: Sub 22



#### Summary for Subcatchment 23.1S: Sub 23.1

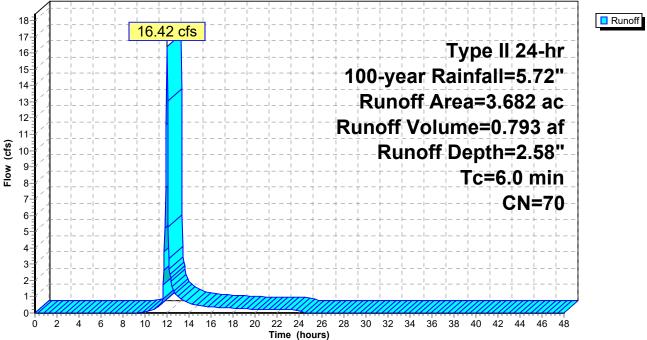
Runoff = 16.42 cfs @ 11.97 hrs, Volume= Routed to Pond 23.1P : 23.1P 0.793 af, Depth= 2.58"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 100-year Rainfall=5.72"

	Area	(ac)	CN	Desc	cription		
*	0.	928	96	Grav	rel		
	2.	257	58			grazed, HS	
	0.	497	78	Mea	dow, non-g	grazed, HS	G D
	3.	682	70	Weig	hted Aver	age	
	3.	682		100.	00% Pervi	ous Area	
	Тс	Leng		Slope	Velocity	Capacity	Description
	(min)	(fee	et)	(ft/ft)	(ft/sec)	(cfs)	
	6.0						Direct Entry,

# Subcatchment 23.1S: Sub 23.1



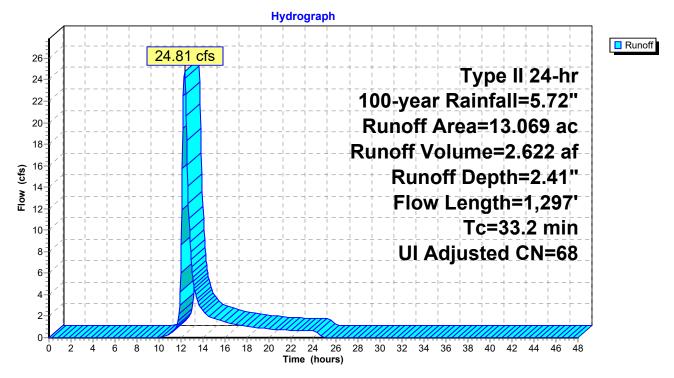


# Summary for Subcatchment 23S: Sub 23

Runoff = 24.81 cfs @ 12.30 hrs, Volume= 2.622 af, Depth= 2.41" Routed to Link SP23 :

Area	(ac) C	N Adj	Descrip	tion				
0.	.012 4	48	Brush, (	Good, HSG	B			
0.	.040	65	Brush, (	Good, HSG	C			
0.	.387 9	98	Unconn	ected roofs	s, HSG D			
2	.687	58	Meadov	v, non-graz	ed, HSG B			
9.	525	71	Meadov	v, non-graz	ed, HSG C			
0.	.031	55	Woods,	Good, HS0	GB			
0.	.387 (	61	>75% G	irass cover	, Good, HSG B			
13.	.069	68 68	Weighte	d Average	, UI Adjusted			
12.	682		97.04%	Pervious A	Area			
0.	.387		2.96% I	2.96% Impervious Area				
0.	.387		100.00% Unconnected					
Tc	Length	Slope	Velocity	Capacity	Description			
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)				
14.2	100	0.0760	0.12		Sheet Flow,			
					Woods: Light underbrush n= 0.400 P2= 2.50"			
15.8	892	0.0180	0.94		Shallow Concentrated Flow,			
					Short Grass Pasture Kv= 7.0 fps			
2.8	262	0.0490	1.55		Shallow Concentrated Flow,			
					Short Grass Pasture Kv= 7.0 fps			
0.4	43		1.79		Direct Entry,			
33.2	1,297	Total						

Subcatchment 23S: Sub 23



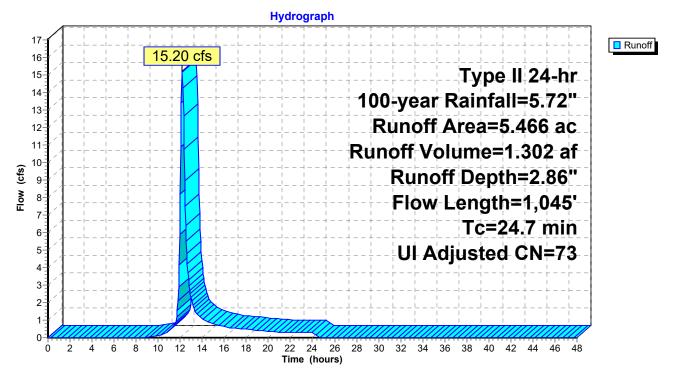
# Summary for Subcatchment 24S: Sub 24

- [47] Hint: Peak is 322% of capacity of segment #4 [47] Hint: Peak is 117% of capacity of segment #5
- Runoff = 15.20 cfs @ 12.18 hrs, Volume= Routed to Link SP24 :

1.302 af, Depth= 2.86"

Area	(ac) C	N Adj	Descript	tion				
0.	036 9	96	Gravel surface, HSG D					
0.	421 9	98	Unconn	Unconnected roofs, HSG D				
0.	252 5	58		v, non-graz				
		'1		v, non-graz				
		61			, Good, HSG B			
		<b>'</b> 4			, Good, HSG C			
		<b>'</b> 0	Woods,	Good, HSC	GC			
		<b>'</b> 4 73			, UI Adjusted			
	045			Pervious A				
	421			mpervious /				
0.	421		100.00%	6 Unconne	cted			
<b>–</b>	1	0	17.1.14.	0	Description			
Tc (mim)	Length	Slope	Velocity	Capacity	Description			
(min)	(feet)	<u>(ft/ft)</u>	(ft/sec)	(cfs)				
17.9	100	0.0060	0.09		Sheet Flow,			
0.0	100	0.0450	1 40		Grass: Short n= 0.150 P2= 2.50"			
2.2	192	0.0450	1.48		Shallow Concentrated Flow,			
1.4	100	0.0300	1.21		Short Grass Pasture Kv= 7.0 fps Shallow Concentrated Flow,			
1.4	100	0.0300	1.21		Short Grass Pasture Kv= 7.0 fps			
0.8	144	0.0220	3.15	4.73	Trap/Vee/Rect Channel Flow,			
0.0	177	0.0220	0.10	4.70	Bot.W=2.00' D=0.50' Z= 2.0 '/' Top.W=4.00'			
					n=0.035 Earth, dense weeds			
2.4	509	0.0220	3.47	13.02	Trap/Vee/Rect Channel Flow,			
	000	0.0220	0.11	10102	Bot.W=6.00' D=0.50' Z= 3.0 '/' Top.W=9.00'			
					n= 0.035 Earth, dense weeds			
24.7	1,045	Total			· · · · ·			

Subcatchment 24S: Sub 24

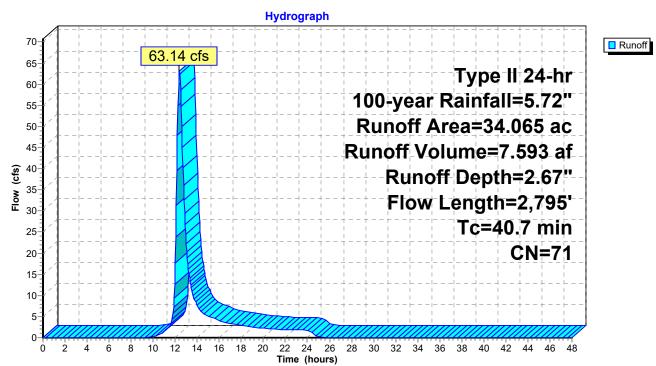


## Summary for Subcatchment 43S: Subcat 43

[47] Hint: Peak is 480% of capacity of segment #3

Runoff = 63.14 cfs @ 12.38 hrs, Volume= Routed to Reach 44R : 7.593 af, Depth= 2.67"

	Area	(ac) (	CN Des	cription							
*	1.	452	96 Gravel Impervious								
	0.	107									
	0.109 65 Brush, Good, HSG C										
				sh, Good, H							
	-				grazed, HS						
					grazed, HS						
					grazed, HS						
					grazed, HS						
	-				oofs, HSG	C					
				ds, Good,							
				ds, Good,							
				ds, Good,							
				ds, Good,							
				ghted Aver							
		973		3% Pervio							
		092 092		% Impervi 00% Unco							
	0.	092	100.		Intecleu						
	Тс	Length	Slope	Velocity	Capacity	Description					
	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	Description					
	9.4	100		0.18	(0.0)	Sheet Flow,					
	5.4	100	0.0000	0.10		Grass: Short n= 0.150 P2= 2.50"					
	26.2	1,556	0.0200	0.99		Shallow Concentrated Flow,					
	20.2	1,000	5.0200	0.00		Short Grass Pasture Kv= 7.0 fps					
	5.1	1,139	0.0320	3.76	13.15	Trap/Vee/Rect Channel Flow,					
	••••	.,	0.0020	••		Bot.W=6.00' D=0.50' Z= 2.0 '/' Top.W=8.00'					
						n= 0.040 Winding stream, pools & shoals					
	40.7	2,795	Total								



#### Subcatchment 43S: Subcat 43

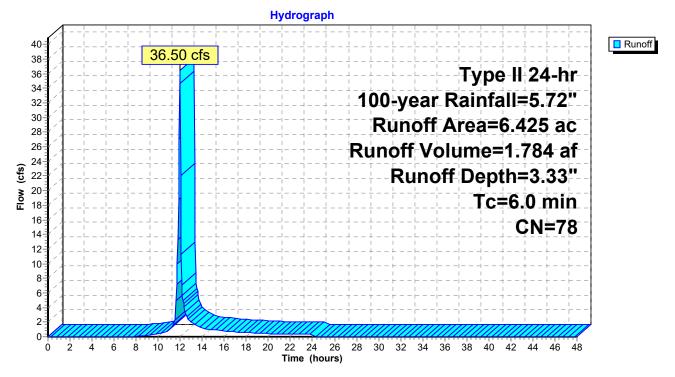
#### Summary for Subcatchment 44.1S: 44.1S

Runoff = 36.50 cfs @ 11.97 hrs, Volume= Routed to Pond 44.1P : 44.1P 1.784 af, Depth= 3.33"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 100-year Rainfall=5.72"

	Area	(ac)	CN	Desc	Description						
*	0.	766	96	Grav	Gravel						
	1.	461	77	Woo	Woods, Good, HSG D						
	1.	511	71	Mea	Meadow, non-grazed, HSG C						
_	2.	.687 78 Meadow, non-grazed, HSG D									
	6.	425	78	Weig							
	6.	6.425 100.00% Pervious Area				ous Area					
	Tc (min)	Leng (fee		Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description				
	6.0						Direct Entry,				

#### Subcatchment 44.1S: 44.1S



## Summary for Subcatchment 44S: 44S

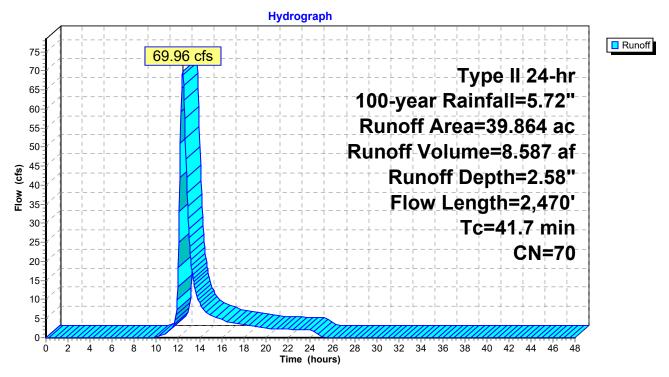
- [47] Hint: Peak is 1261% of capacity of segment #3 [47] Hint: Peak is 487% of capacity of segment #4
- Runoff = 69.96 cfs @ 12.40 hrs, Volume= Routed to Reach 45R :

8.587 af, Depth= 2.58"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 100-year Rainfall=5.72"

	Area	(ac) C	N Dese	cription						
*	1.	144 9	96 Grav	Gravel						
	6.	222 3	55 Woo	ds, Good,	HSG B					
	7.	156	70 Woo	ds, Good,	HSG C					
	0.	180 5	58 Mea	Meadow, non-grazed, HSG B						
	6.	882	71 Mea	Meadow, non-grazed, HSG C						
	1.	418 3	30 Woo	Woods, Good, HSG A						
	0.	291 3	30 Mea	Meadow, non-grazed, HSG A						
	6.	908	78 Mea	dow, non-g	grazed, HS	G D				
	9.	663	77 Woo	ds, Good,	HSG D					
	39.	864	70 Weig	ghted Aver	age					
	39.	864	100.	00% Pervi	ous Area					
	Тс	Length	Slope	Velocity	Capacity	Description				
	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)					
	21.9	100	0.0260	0.08		Sheet Flow,				
						Woods: Light underbrush n= 0.400 P2= 2.50"				
	9.2	409	0.0220	0.74		Shallow Concentrated Flow,				
						Woodland Kv= 5.0 fps				
	5.2	715	0.0320	2.31	5.55	Parabolic Channel,				
						W=18.00' D=0.20' Area=2.4 sf Perim=18.0'				
						n= 0.030 Earth, grassed & winding				
	5.4	1,246	0.0350	3.83	14.37	Trap/Vee/Rect Channel Flow,				
						Bot.W=6.00' D=0.50' Z= 3.0 '/' Top.W=9.00'				
						n= 0.040 Earth, cobble bottom, clean sides				
	41.7	2,470	Total							

Subcatchment 44S: 44S



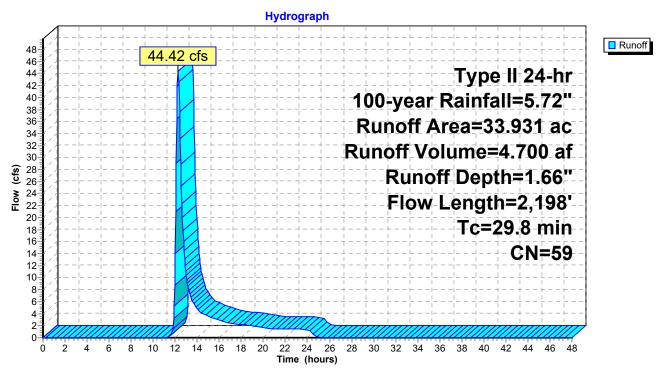
# Summary for Subcatchment 45S: Subcat 45

[47] Hint: Peak is 428% of capacity of segment #5

44.42 cfs @ 12.27 hrs, Volume= 4.700 af, Depth= 1.66" Runoff = Routed to Link SP43 :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 100-year Rainfall=5.72"

Area	(ac)	N Desc	cription						
-	()	48 Brush, Good, HSG B							
	0.038 65 Brush, Good, HSG C								
-	1.297 30 Meadow, non-grazed, HSG A								
				grazed, HS					
				grazed, HS					
				grazed, HS					
				oofs, HSG					
2.	408 🕄		ds, Good,						
3.	386 5	55 Woo	ds, Good,	HSG B					
			ds, Good,						
0.	313 7	77 Woo	ds, Good,	HSG D					
			ghted Aver						
	857		8% Pervio						
	074		0.22% Impervious Area						
0.	074	100.	00% Unco	nnected					
Тс	Length	Slope	Velocity	Capacity	Description				
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	Description				
12.4	100	0.0150	0.13	(013)	Sheet Flow,				
12.4	100	0.0150	0.15		Grass: Short $n= 0.150$ P2= 2.50"				
6.5	396	0.0210	1.01		Shallow Concentrated Flow,				
		0.02.0			Short Grass Pasture Kv= 7.0 fps				
1.8	223	0.0900	2.10		Shallow Concentrated Flow,				
					Short Grass Pasture Kv= 7.0 fps				
3.4	196	0.0360	0.95		Shallow Concentrated Flow,				
					Woodland Kv= 5.0 fps				
5.7	1,283	0.0370	3.77	10.38	Trap/Vee/Rect Channel Flow,				
					Bot.W=4.00' D=0.50' Z= 3.0 '/' Top.W=7.00'				
					n= 0.040 Winding stream, pools & shoals				
29.8	2,198	Total							



#### Subcatchment 45S: Subcat 45

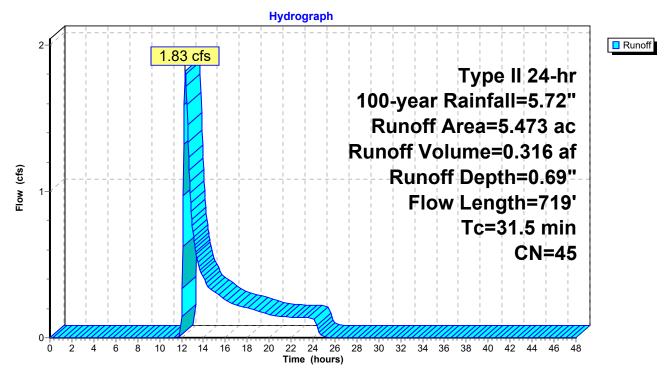
# Summary for Subcatchment 46.1S: 46.1S

Runoff = 1.83 cfs @ 12.36 hrs, Volume= 0.316 af, Depth= 0.69" Routed to Pond 46.1P : 46.1P

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 100-year Rainfall=5.72"

	Area	(ac) C	N Dese	cription				
	0.196 30 Meadow, non-grazed, HSG A							
	0.132 58 Meadow, non-grazed, HSG B							
	2.	928	55 Woo	ds, Good,	HSG B			
	0.	134	30 Brus	h, Good, H	ISG A			
*	0.	073	96 Grav	/el				
	2.	010	30 Woo	ds, Good,	HSG A			
	5.	473	45 Weig	phted Aver	age			
	5.	473	100.	00% Pervi	ous Area			
	Тс	Length	Slope	Velocity	Capacity	Description		
	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	•		
	22.2	100	0.0250	0.08		Sheet Flow,		
						Woods: Light underbrush n= 0.400 P2= 2.50"		
	7.7	389	0.0280	0.84		Shallow Concentrated Flow,		
						Woodland $Kv = 5.0$ fps		
	1.6	230	0.2300	2.40		Shallow Concentrated Flow,		
	1					Woodland $Kv=5.0$ fps		
	31.5	719	Total					
	00	110	10.01					

Subcatchment 46.1S: 46.1S

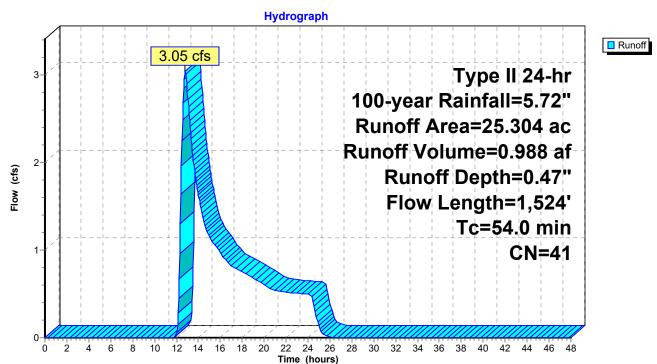


# Summary for Subcatchment 46S: Subcat 46

Runoff = 3.05 cfs @ 12.82 hrs, Volume= 0.988 af, Depth= 0.47" Routed to Link SP46 :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 100-year Rainfall=5.72"

	Area	(ac) C	N Dese	cription						
				h, Good, H						
	0.			Brush, Good, HSG B						
				Meadow, non-grazed, HSG A						
				Meadow, non-grazed, HSG B						
				Woods, Good, HSG A						
				ds, Good,						
				ds, Good,	HSG D					
*	0.	506 9	96 Grav							
				ghted Aver						
	25.	304	100.	00% Pervi	ous Area					
	_									
	Tc	Length	Slope	Velocity	Capacity	Description				
	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)					
	9.4	100	0.0300	0.18		Sheet Flow,				
						Grass: Short n= 0.150 P2= 2.50"				
	36.5	774	0.0050	0.35		Shallow Concentrated Flow,				
						Woodland Kv= 5.0 fps				
	5.2	153	0.0050	0.49		Shallow Concentrated Flow,				
						Short Grass Pasture Kv= 7.0 fps				
	1.3	245	0.4120	3.21		Shallow Concentrated Flow,				
						Woodland Kv= 5.0 fps				
	1.2	79	0.0510	1.13		Shallow Concentrated Flow,				
	~ .	470				Woodland Kv= 5.0 fps				
	0.4	173		6.95		Lake or Reservoir,				
						Mean Depth= 1.50'				
	54.0	1,524	Total							



#### Subcatchment 46S: Subcat 46

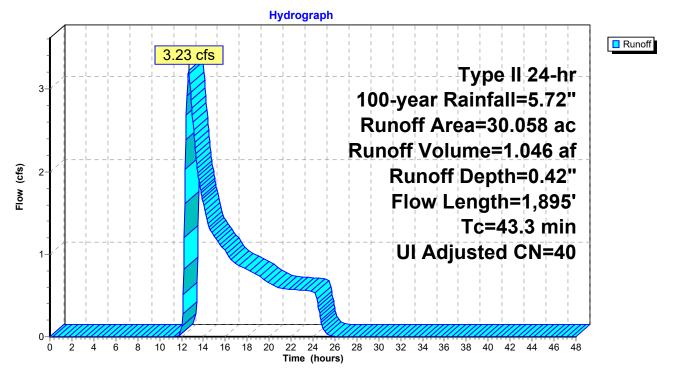
# Summary for Subcatchment 47S: Sub 47

Runoff = 3.23 cfs @ 12.66 hrs, Volume= 1.046 af, Depth= 0.42" Routed to Link SP47 :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 100-year Rainfall=5.72"

Area	(ac)	CN Adj	Descrip	tion					
0	.377	98	Unconn	Unconnected pavement, HSG D					
0	.432	96	Gravel s	surface, HS	G D				
0	.498	39	>75% G	ass cover	, Good, HSG A				
2	.024	61	>75% G	>75% Grass cover, Good, HSG B					
17	.600	30	Meadov	v, non-graz	ed, HSG A				
2	.644	58	Meadov	v, non-graz	ed, HSG B				
0	.051	30	Brush, 0	Good, HSG	A				
0	.702	48	Brush, (	Good, HSG	В				
1	.083	30	Woods,	Good, HSC	G A				
4	.647	55	Woods,	Good, HSC	G B				
30	.058	41 40	Weighte	ed Average	, UI Adjusted				
29	.681			Pervious A					
0	.377		1.25% I	mpervious	Area				
0	.377		100.00%	6 Unconne	cted				
Tc	Length	l Slope	Velocity	Capacity	Description				
(min)	(feet)	) (ft/ft)	(ft/sec)	(cfs)					
15.3	100	0.2550	0.11		Sheet Flow,				
					Woods: Dense underbrush n= 0.800 P2= 2.50"				
25.9	1,688	0.0240	1.08		Shallow Concentrated Flow,				
					Short Grass Pasture Kv= 7.0 fps				
2.1	107	0.0280	0.84		Shallow Concentrated Flow,				
					Woodland Kv= 5.0 fps				
43.3	1,895	5 Total							

Subcatchment 47S: Sub 47



#### Summary for Reach 6R: W-NSD-35

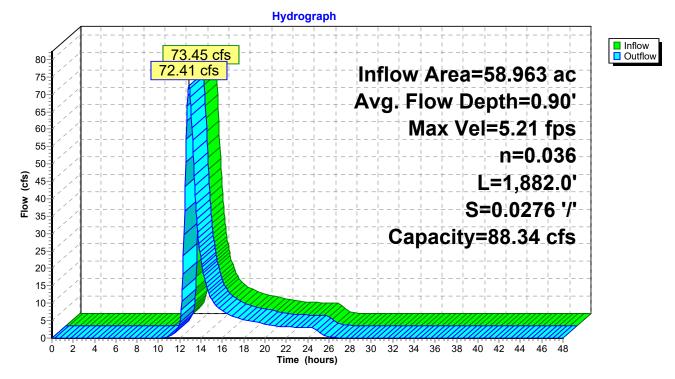
Inflow Area = 58.963 ac. 0.00% Impervious, Inflow Depth = 2.50" for 100-year event Inflow 73.45 cfs @ 12.69 hrs, Volume= 12.263 af = 72.41 cfs @ 12.86 hrs, Volume= Outflow = 12.263 af, Atten= 1%, Lag= 10.4 min Routed to Link SP5 : Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Max. Velocity= 5.21 fps, Min. Travel Time= 6.0 min Avg. Velocity = 1.38 fps, Avg. Travel Time= 22.8 min Peak Storage= 26,138 cf @ 12.76 hrs

Average Depth at Peak Storage= 0.90', Surface Width= 20.82' Bank-Full Depth= 1.00' Flow Area= 16.0 sf, Capacity= 88.34 cfs

10.00' x 1.00' deep channel, n= 0.036 Side Slope Z-value= 6.0 '/' Top Width= 22.00' Length= 1,882.0' Slope= 0.0276 '/' Inlet Invert= 542.00', Outlet Invert= 490.00'



Reach 6R: W-NSD-35



# Summary for Reach 13.1R:

[79] Warning: Submerged Pond 12P Primary device # 1 OUTLET by 0.09'

 Inflow Area =
 4.859 ac, 53.67% Impervious, Inflow Depth =
 5.37" for 100-year event

 Inflow =
 1.61 cfs @
 13.21 hrs, Volume=
 2.173 af

 Outflow =
 1.61 cfs @
 13.24 hrs, Volume=
 2.173 af, Atten= 0%, Lag= 2.0 min

 Routed to Reach 13.2R :
 13.24 hrs, Volume=
 2.173 af, Atten= 0%, Lag= 2.0 min

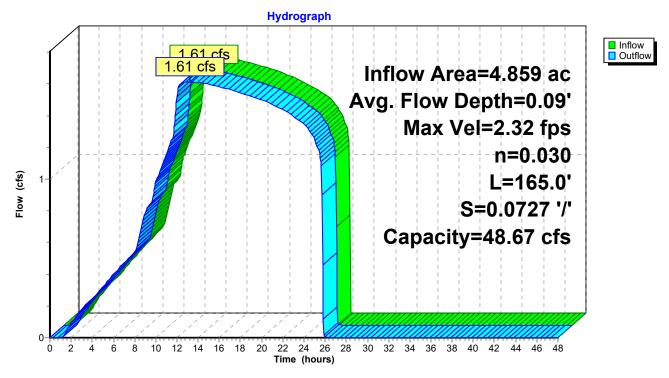
Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Max. Velocity= 2.32 fps, Min. Travel Time= 1.2 min Avg. Velocity = 1.88 fps, Avg. Travel Time= 1.5 min

Peak Storage= 114 cf @ 13.22 hrs Average Depth at Peak Storage= 0.09', Surface Width= 9.56' Bank-Full Depth= 0.50' Flow Area= 8.0 sf, Capacity= 48.67 cfs

6.00' x 0.50' deep channel, n= 0.030 Earth, grassed & winding Side Slope Z-value= 20.0 '/' Top Width= 26.00' Length= 165.0' Slope= 0.0727 '/' Inlet Invert= 504.00', Outlet Invert= 492.00'

‡

Reach 13.1R:



#### Summary for Reach 13.2R:

[62] Hint: Exceeded Reach 13.1R OUTLET depth by 0.06' @ 13.30 hrs

 Inflow Area =
 4.859 ac, 53.67% Impervious, Inflow Depth =
 5.37" for 100-year event

 Inflow =
 1.61 cfs @
 13.24 hrs, Volume=
 2.173 af

 Outflow =
 1.61 cfs @
 13.27 hrs, Volume=
 2.173 af, Atten= 0%, Lag= 1.3 min

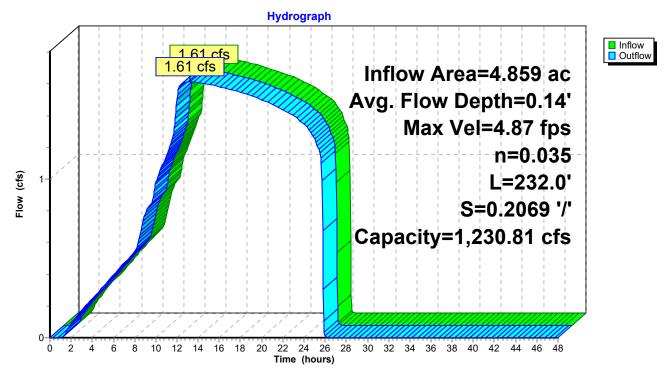
 Routed to Link SP13 :
 13.27 hrs, Volume=
 2.173 af, Atten= 0%, Lag= 1.3 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Max. Velocity= 4.87 fps, Min. Travel Time= 0.8 min Avg. Velocity = 4.00 fps, Avg. Travel Time= 1.0 min

Peak Storage= 77 cf @ 13.25 hrs Average Depth at Peak Storage= 0.14', Surface Width= 2.58' Bank-Full Depth= 4.00' Flow Area= 40.0 sf, Capacity= 1,230.81 cfs

2.00' x 4.00' deep channel, n= 0.035 Earth, dense weeds Side Slope Z-value= 2.0 '/' Top Width= 18.00' Length= 232.0' Slope= 0.2069 '/' Inlet Invert= 492.00', Outlet Invert= 444.00'

Reach 13.2R:



# Summary for Reach 20.1R: S-KCF-6

[91] Warning: Storage range exceeded by 0.55' [55] Hint: Peak inflow is 158% of Manning's capacity

Inflow Area = 98.931 ac, 0.71% Impervious, Inflow Depth = 2.39" for 100-year event Inflow = 223.20 cfs @ 12.17 hrs, Volume= 19.681 af Outflow = 204.13 cfs @ 12.35 hrs, Volume= 19.681 af, Atten= 9%, Lag= 10.7 min Routed to Reach 20.2R :

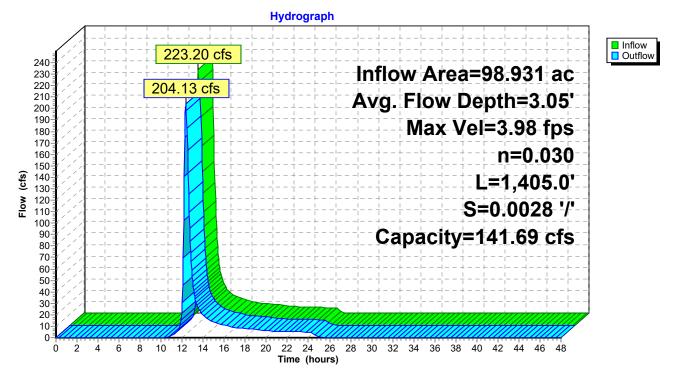
Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Max. Velocity= 3.98 fps, Min. Travel Time= 5.9 min Avg. Velocity = 0.90 fps, Avg. Travel Time= 26.0 min

Peak Storage= 72,092 cf @ 12.25 hrs Average Depth at Peak Storage= 3.05', Surface Width= 26.29' Bank-Full Depth= 2.50' Flow Area= 38.8 sf, Capacity= 141.69 cfs

8.00' x 2.50' deep channel, n= 0.030 Earth, grassed & winding Side Slope Z-value= 3.0 '/' Top Width= 23.00' Length= 1,405.0' Slope= 0.0028 '/' Inlet Invert= 494.00', Outlet Invert= 490.00'

‡

Reach 20.1R: S-KCF-6



#### Summary for Reach 20.2R:

[62] Hint: Exceeded Reach 20.1R OUTLET depth by 0.02' @ 24.95 hrs

Inflow Area = 98.931 ac, 0.71% Impervious, Inflow Depth = 2.39" for 100-year event Inflow = 204.13 cfs @ 12.35 hrs, Volume= 19.681 af Outflow = 197.64 cfs @ 12.46 hrs, Volume= 19.681 af, Atten= 3%, Lag= 6.6 min Routed to Reach 22.2R :

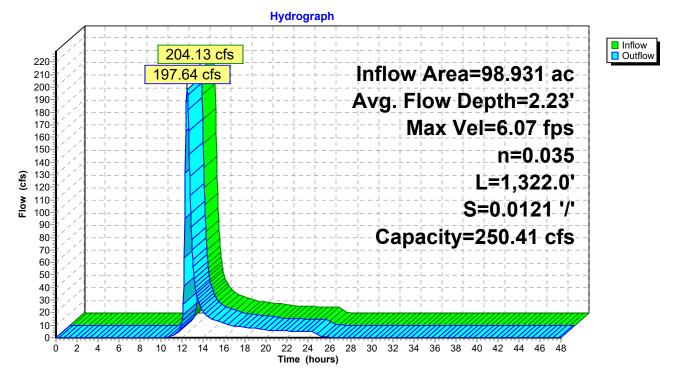
Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Max. Velocity= 6.07 fps, Min. Travel Time= 3.6 min Avg. Velocity = 1.35 fps, Avg. Travel Time= 16.4 min

Peak Storage= 43,264 cf @ 12.40 hrs Average Depth at Peak Storage= 2.23', Surface Width= 21.37' Bank-Full Depth= 2.50' Flow Area= 38.8 sf, Capacity= 250.41 cfs

8.00' x 2.50' deep channel, n= 0.035 Earth, dense weeds Side Slope Z-value= 3.0 '/' Top Width= 23.00' Length= 1,322.0' Slope= 0.0121 '/' Inlet Invert= 490.00', Outlet Invert= 474.00'

‡

Reach 20.2R:



# Summary for Reach 22.1R: S-KCF-5

[91] Warning: Storage range exceeded by 0.88' [55] Hint: Peak inflow is 210% of Manning's capacity

Inflow Area = 123.016 ac, 3.33% Impervious, Inflow Depth = 2.32" for 100-year event Inflow = 188.59 cfs @ 12.41 hrs, Volume= 23.791 af Outflow = 186.82 cfs @ 12.49 hrs, Volume= 23.791 af, Atten= 1%, Lag= 4.4 min Routed to Reach 22.2R :

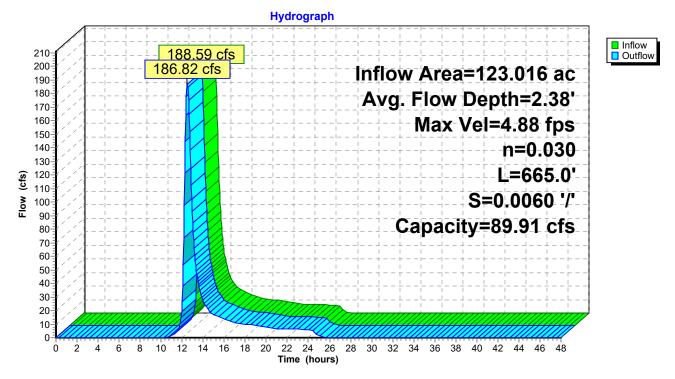
Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Max. Velocity= 4.88 fps, Min. Travel Time= 2.3 min Avg. Velocity = 1.50 fps, Avg. Travel Time= 7.4 min

Peak Storage= 25,538 cf @ 12.45 hrs Average Depth at Peak Storage= 2.38', Surface Width= 24.27' Bank-Full Depth= 1.50' Flow Area= 21.8 sf, Capacity= 89.91 cfs

10.00' x 1.50' deep channel, n= 0.030 Earth, grassed & winding Side Slope Z-value= 3.0 '/' Top Width= 19.00' Length= 665.0' Slope= 0.0060 '/' Inlet Invert= 478.00', Outlet Invert= 474.00'

‡

Reach 22.1R: S-KCF-5

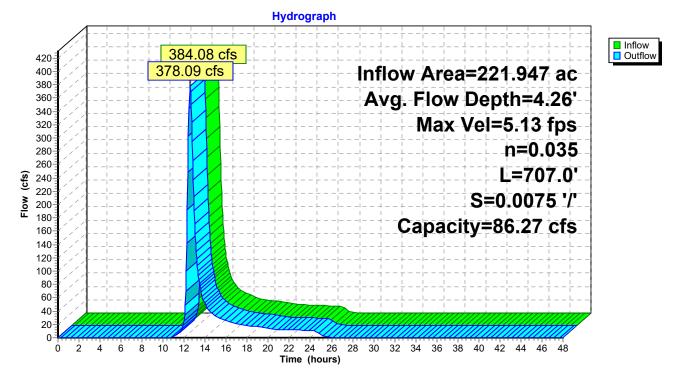


‡

#### Summary for Reach 22.2R:

[91] Warning: Storage range exceeded by 2.76' [55] Hint: Peak inflow is 445% of Manning's capacity [62] Hint: Exceeded Reach 20.2R OUTLET depth by 2.20' @ 12.55 hrs [64] Warning: Exceeded Reach 20.2R outlet bank by 1.76' @ 12.51 hrs [62] Hint: Exceeded Reach 22.1R OUTLET depth by 1.91' @ 12.55 hrs [64] Warning: Exceeded Reach 22.1R outlet bank by 2.76' @ 12.51 hrs 221.947 ac, 2.16% Impervious, Inflow Depth = 2.35" 384.08 cfs @ 12.47 hrs, Volume= 43.473 af Inflow Area = for 100-year event Inflow = Outflow 43.473 af, Atten= 2%, Lag= 4.7 min = 378.09 cfs @ 12.55 hrs, Volume= Routed to Link SP22 : Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Max. Velocity= 5.13 fps. Min. Travel Time= 2.3 min Avg. Velocity = 1.26 fps, Avg. Travel Time= 9.4 min Peak Storage= 52,316 cf @ 12.51 hrs Average Depth at Peak Storage= 4.26', Surface Width= 35.54' Bank-Full Depth= 1.50' Flow Area= 21.8 sf, Capacity= 86.27 cfs 10.00' x 1.50' deep channel, n= 0.035 Earth, dense weeds Side Slope Z-value= 3.0 '/' Top Width= 19.00' Length= 707.0' Slope= 0.0075 '/' Inlet Invert= 474.00', Outlet Invert= 468.67'

#### Reach 22.2R:



# Summary for Reach 44R:

[91] Warning: Storage range exceeded by 1.45' [55] Hint: Peak inflow is 726% of Manning's capacity

Inflow Area = 34.065 ac, 0.27% Impervious, Inflow Depth = 2.67" for 100-year event Inflow = 63.14 cfs @ 12.38 hrs, Volume= 7.593 af Outflow = 62.62 cfs @ 12.45 hrs, Volume= 7.593 af, Atten= 1%, Lag= 3.9 min Routed to Reach 45R :

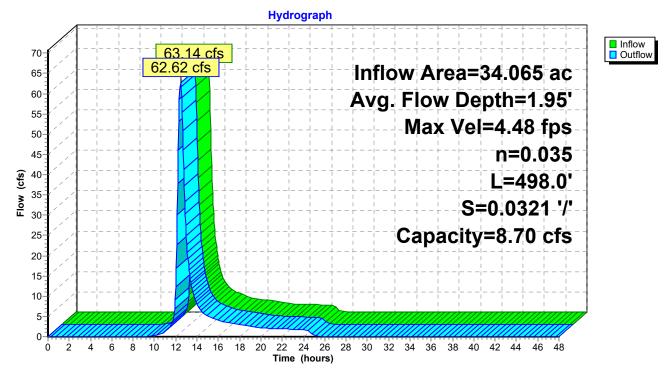
Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Max. Velocity= 4.48 fps, Min. Travel Time= 1.9 min Avg. Velocity = 2.08 fps, Avg. Travel Time= 4.0 min

Peak Storage= 6,988 cf @ 12.42 hrs Average Depth at Peak Storage= 1.95', Surface Width= 25.36' Bank-Full Depth= 0.50' Flow Area= 2.5 sf, Capacity= 8.70 cfs

2.00' x 0.50' deep channel, n= 0.035 Earth, dense weeds Side Slope Z-value= 6.0 '/' Top Width= 8.00' Length= 498.0' Slope= 0.0321 '/' Inlet Invert= 404.00', Outlet Invert= 388.00'

‡

Reach 44R:



# Summary for Reach 45R:

[91] Warning: Storage range exceeded by 2.08'
[55] Hint: Peak inflow is 815% of Manning's capacity
[62] Hint: Exceeded Reach 44R OUTLET depth by 0.66' @ 12.50 hrs
[64] Warning: Exceeded Reach 44R outlet bank by 2.08' @ 12.45 hrs
Inflow Area = 73.929 ac, 0.12% Impervious, Inflow Depth = 2.63" for 100-year event
Inflow = 132.17 cfs @ 12.42 hrs, Volume= 16.180 af
Outflow = 131.32 cfs @ 12.47 hrs, Volume= 16.180 af, Atten= 1%, Lag= 2.7 min Routed to Link SP43 :

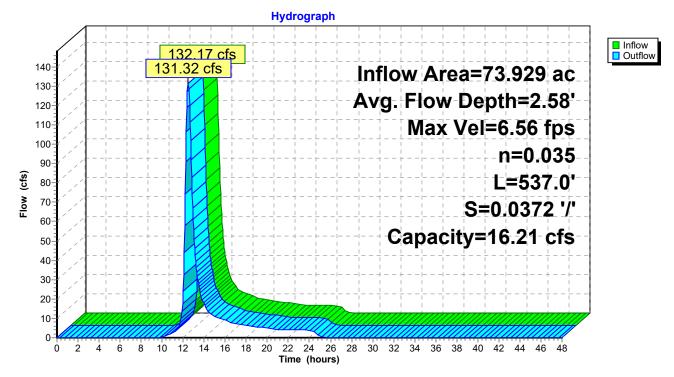
Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Max. Velocity= 6.56 fps, Min. Travel Time= 1.4 min Avg. Velocity = 2.52 fps, Avg. Travel Time= 3.5 min

Peak Storage= 10,787 cf @ 12.45 hrs Average Depth at Peak Storage= 2.58' , Surface Width= 16.30' Bank-Full Depth= 0.50' Flow Area= 3.5 sf, Capacity= 16.21 cfs

6.00' x 0.50' deep channel, n= 0.035 Earth, dense weeds Side Slope Z-value= 2.0 '/' Top Width= 8.00' Length= 537.0' Slope= 0.0372 '/' Inlet Invert= 388.00', Outlet Invert= 368.00'



#### Reach 45R:



# Summary for Pond 4.1P: 4.1P

Inflow Area = 14.786 ac, 0.00% Impervious, Inflow Depth = 2.41" for 100-year event Inflow 62.02 cfs @ 11.98 hrs, Volume= 2.967 af = 0.73 cfs @ 23.23 hrs, Volume= Outflow = 1.879 af, Atten= 99%, Lag= 675.3 min 0.73 cfs @ 23.23 hrs, Volume= Primary = 1.879 af Routed to Link SP4 : 0.00 hrs, Volume= Secondary = 0.00 cfs @ 0.000 af Routed to Link SP4 :

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 499.20' @ 23.23 hrs Surf.Area= 28,656 sf Storage= 98,638 cf

Plug-Flow detention time= 1,002.8 min calculated for 1.879 af (63% of inflow) Center-of-Mass det. time= 885.2 min (1,727.3 - 842.2)

Volume	Invert	Invert Avail.Storage		Storage Description						
#1	495.40	' 121,9	979 cf	Custom Stage Data (Irregular)Listed below (Recalc)						
				la a Otana	Ourse Otherse					
Elevatio			Perim.	Inc.Store	Cum.Store	Wet.Area				
(fee		(sq-ft)	(feet)	(cubic-feet)	(cubic-feet)	<u>(sq-ft)</u>				
495.4		23,410	686.0	0	0	23,410				
496.0	00	24,099	692.0	14,252	14,252	24,187				
497.0	00	25,495	704.0	24,794	39,046	25,692				
498.0	00	26,916	717.0	26,202	65,248	27,325				
499.0	00	28,362	729.0	27,636	92,884	28,883				
500.0	00	29,834	742.0	29,095	121,979	30,573				
Device	Routing	Invert	Outle	et Devices						
#1	Primary	495.50	12.0	" Round Culvert						
	2		L= 3	5.0' CPP, projectin	g, no headwall, Ke	= 0.900				
			Inlet	/ Outlet Invert= 495	.50' / 495.00' S= 0	.0143 '/' Cc= 0.900				
				n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf						
#2	Device 1	499.40'		48.0" Horiz. Orifice/Grate C= 0.600						
			Limit	ed to weir flow at low heads						
#3	Device 1	496.00' <b>4.0</b> '		<b>.0" Vert. Orifice/Grate</b> C= 0.600 Limited to weir flow at low heads						
#4	Secondary					oad-Crested Rectangular Weir				
	,					20 1.40 1.60 1.80 2.00				
				3.00 3.50 4.00 4						
						2.67 2.65 2.66 2.66				
				2.72 2.73 2.76 2						
			2.00	2.1.2 2.10 2.10 2		-				
Primary	Primary OutFlow Max=0.73 cfs @ 23.23 hrs HW=499.20' (Free Discharge)									

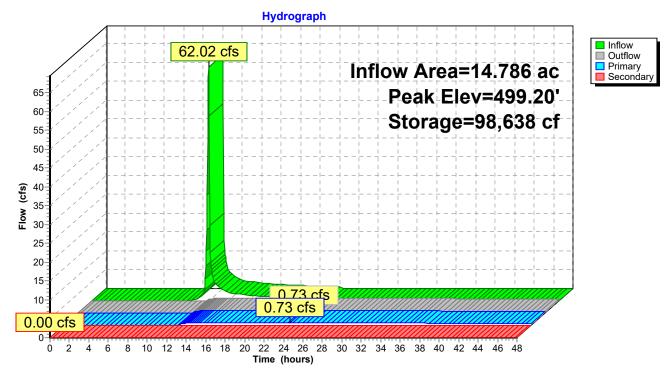
-1=Culvert (Passes 0.73 cfs of 5.34 cfs potential flow)

-2=Orifice/Grate (Controls 0.00 cfs)

-3=Orifice/Grate (Orifice Controls 0.73 cfs @ 8.39 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=495.40' (Free Discharge)

Pond 4.1P: 4.1P



# Summary for Pond 7.1P:

Inflow Area = 4.575 ac, 0.00% Impervious, Inflow Depth = 1.66" for 100-year event Inflow = 9.21 cfs @ 12.08 hrs, Volume= 0.634 af 0.19 cfs @ 23.45 hrs, Volume= Outflow = 0.037 af, Atten= 98%, Lag= 682.0 min 0.19 cfs @ 23.45 hrs, Volume= 0.037 af Primary = Routed to Link SP7 : 0.00 hrs, Volume= 0.000 af Secondary = 0.00 cfs @ Routed to Link SP7 :

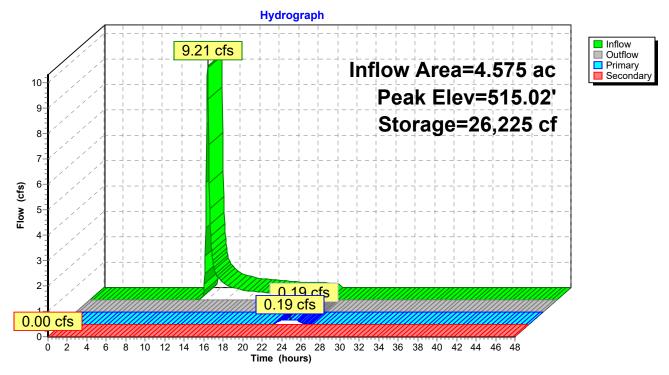
Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 515.02' @ 23.45 hrs Surf.Area= 11,016 sf Storage= 26,225 cf

Plug-Flow detention time= 691.8 min calculated for 0.037 af (6% of inflow) Center-of-Mass det. time= 529.4 min (1,403.1 - 873.7)

Volume	Invert	Avail.Sto	rage Storage	e Description				
#1	512.00'	37,77	73 cf Custom	n Stage Data (Prismatic)Listed below (Recalc)				
Elevation (feet)	S	urf.Area	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)				
		(sq-ft)						
512.00		6,414	0	0				
513.00		7,879	7,147	7,147				
514.00		9,401	8,640	15,787				
515.00		10,979	10,190	25,977				
516.00		12,614	11,797	37,773				
Device F	Routing	Invert	Outlet Devices	25				
#1 F	Primary	512.00'	12.0" Round	d Culvert				
	-			P, projecting, no headwall,  Ke= 0.900 Invert= 512.00' / 510.00'   S= 0.0606 '/'   Cc= 0.900				
				rrugated PE, smooth interior, Flow Area= 0.79 sf				
#2 E	Device 1	515.00'		Orifice/Grate C= 0.600				
<i>π</i> <b>∠</b> L		010.00	Limited to weir flow at low heads					
#3 E	Device 1	512.25'						
		012120	Limited to weir flow at low heads					
#4 S	Secondary	515.50'	<b>10.0' long + 3</b> Head (feet) 0 2.50 3.00 3.5 Coef. (English	<b>3.0 '/ SideZ x 4.0' breadth Broad-Crested Rectangular Weir</b> 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 50 4.00 4.50 5.00 5.50 h) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66 73 2.76 2.79 2.88 3.07 3.32				
Primary OutFlow Max=0.14 cfs @ 23.45 hrs HW=515.02' (Free Discharge) 1=Culvert (Passes 0.14 cfs of 4.74 cfs potential flow) 2=Orifice/Grate (Weir Controls 0.14 cfs @ 0.49 fps) -3=Orifice/Grate (Controls 0.00 cfs)								

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=512.00' (Free Discharge) 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

# Pond 7.1P:



# Summary for Pond 9.1P: 9.1P

Inflow Area = 8.972 ac, 0.00% Impervious, Inflow Depth = 2.86" for 100-year event Inflow 20.26 cfs @ 12.30 hrs, Volume= 2.137 af = 10.06 cfs @ 12.67 hrs, Volume= Outflow = 1.914 af, Atten= 50%, Lag= 22.1 min 5.43 cfs @ 12.65 hrs, Volume= Primary = 1.623 af Routed to Link SP9 : Secondary = 4.63 cfs @ 12.67 hrs, Volume= 0.291 af Routed to Link SP9 :

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 469.81' @ 12.67 hrs Surf.Area= 11,939 sf Storage= 38,567 cf

Plug-Flow detention time= 411.8 min calculated for 1.914 af (90% of inflow) Center-of-Mass det. time= 359.0 min (1,215.3 - 856.3)

Volume	Invert	Avail.Sto	rage Storag	ge Description
#1	466.00'	40,83	33 cf Custo	m Stage Data (Prismatic)Listed below (Recalc)
		<b>E A</b>		0
Elevatio		urf.Area	Inc.Store	Cum.Store
(fee	1	(sq-ft)	(cubic-feet)	(cubic-feet)
466.0		8,356	0	0
467.0		9,263	8,810	8,810
468.0	00	10,188	9,726	18,535
469.0	00	11,142	10,665	29,200
470.0	00	12,124	11,633	40,833
Device	Routing	Invert	Outlet Devic	ces
#1	Primary	466.00'	12.0" Roun	nd Culvert
			L= 30.0' CF	PP, projecting, no headwall, Ke= 0.900
				t Invert= 466.00' / 462.00' S= 0.1333 '/' Cc= 0.900
			n= 0.013 Co	orrugated PE, smooth interior, Flow Area= 0.79 sf
#2	Device 1	469.50'		. Orifice/Grate C= 0.600
			Limited to we	eir flow at low heads
#3	Device 1	467.00'	4.0" Vert. O	<b>Drifice/Grate</b> C= 0.600 Limited to weir flow at low heads
#4	Secondary			+ 3.0 '/' SideZ x 4.0' breadth Broad-Crested Rectangular Weir
	<b>,</b>			0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00
			· · ·	3.50 4.00 4.50 5.00 5.50
				(sh) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66
				2.73 2.76 2.79 2.88 3.07 3.32

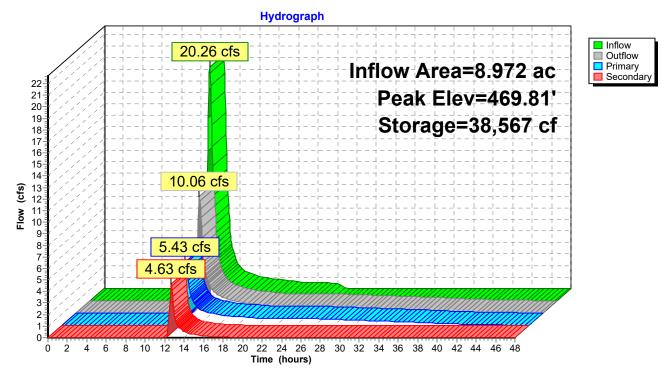
Primary OutFlow Max=5.43 cfs @ 12.65 hrs HW=469.81' (Free Discharge)

-1=Culvert (Inlet Controls 5.43 cfs @ 6.92 fps)

**2=Orifice/Grate** (Passes < 7.11 cfs potential flow)

-3=Orifice/Grate (Passes < 0.68 cfs potential flow)

Secondary OutFlow Max=4.56 cfs @ 12.67 hrs HW=469.81' (Free Discharge) 4=Broad-Crested Rectangular Weir (Weir Controls 4.56 cfs @ 1.35 fps) Pond 9.1P: 9.1P



# Summary for Pond 10.1P: 10.1P

Inflow Area = 2.860 ac, 0.00% Impervious, Inflow Depth = 2.67" for 100-year event Inflow 8.75 cfs @ 12.12 hrs, Volume= 0.638 af = 3.35 cfs @ 12.38 hrs, Volume= Outflow = 0.427 af, Atten= 62%, Lag= 16.0 min 3.35 cfs @ 12.38 hrs, Volume= Primary = 0.427 af Routed to Link SP10 : 0.00 hrs, Volume= Secondary = 0.00 cfs @ 0.000 af Routed to Link SP10 :

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 569.76' @ 12.38 hrs Surf.Area= 7,406 sf Storage= 11,059 cf

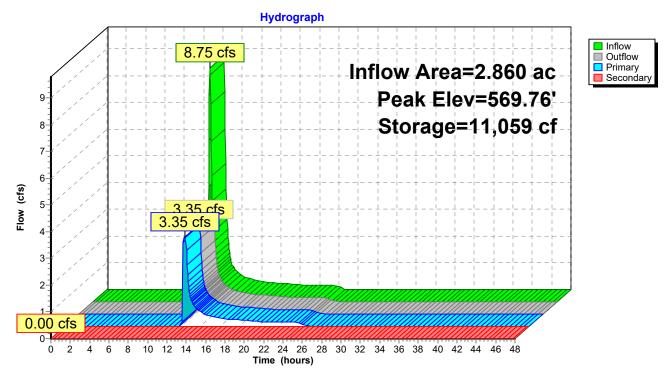
Plug-Flow detention time= 187.2 min calculated for 0.426 af (67% of inflow) Center-of-Mass det. time= 77.3 min (924.1 - 846.8)

Volume	Invert	Avail.Sto	rage Storage	e Description				
#1	568.00'	30,34	12 cf Custom	n Stage Data (Prismatic)Listed below (Recalc)				
Elevatior		rf.Area	Inc.Store	Cum.Store				
feet		(sq-ft)	(cubic-feet)	(cubic-feet)				
568.00	1	<u>(34-11)</u> 5,183	0	0				
569.00		5,165 6,419	5,801	5,801				
570.00		7,717	7,068	12,869				
571.00		9,076	8,397	21,266				
572.00		9,077	9,077	30,342				
572.00	5	3,011	5,011	30,0+z				
Device	Routing	Invert	Outlet Device	es				
#1	Primary	568.00'	12.0" Round	d Culvert				
	-		L= 80.0' CP	P, projecting, no headwall, Ke= 0.900				
			Inlet / Outlet I	Invert= 568.00' / 567.50' S= 0.0063 '/' Cc= 0.900				
				rrugated PE, smooth interior, Flow Area= 0.79 sf				
#2	Device 1	569.50'	48.0" Horiz.	Orifice/Grate C= 0.600				
			Limited to weir flow at low heads					
#3	Secondary	571.00'	10.0' long + 3.0 '/' SideZ x 4.0' breadth Broad-Crested Rectangular Weir					
			· · · ·	0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00				
				.50 4.00 4.50 5.00 5.50				
				h) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66				
			2.68 2.72 2.	.73 2.76 2.79 2.88 3.07 3.32				
	Primary OutFlow Max=3.35 cfs @ 12.38 hrs_HW=569.76' (Free Discharge)							

1=Culvert (Inlet Controls 3.35 cfs @ 4.27 fps)
2=Orifice/Grate (Passes 3.35 cfs of 5.42 cfs potential flow)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=568.00' (Free Discharge) -3=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 10.1P: 10.1P



### Summary for Pond 12P: 12P

[44] Hint: Outlet device #1 is below defined storage

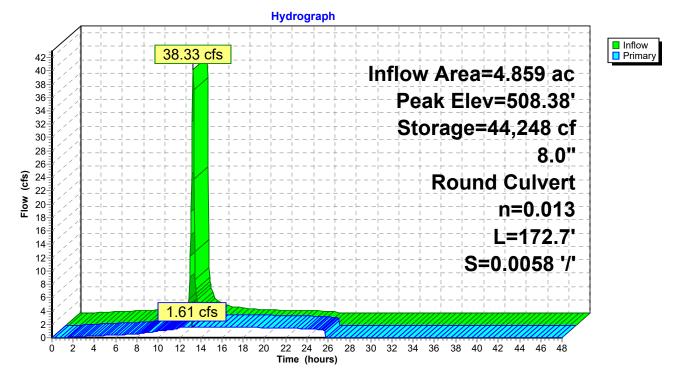
Inflow Are	a =	4.859 ac, 5	3.67% Impervious, I	nflow Depth = 5.36" for 100-year event
Inflow	=	38.33 cfs @	11.96 hrs, Volume=	2.172 af
Outflow	=	1.61 cfs @	13.21 hrs, Volume=	2.173 af, Atten= 96%, Lag= 74.9 min
Primary	=	1.61 cfs @	13.21 hrs, Volume=	2.173 af
Routed	I to Rea	ach 13.1R :		

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs / 3 Peak Elev= 508.38' @ 13.21 hrs Surf.Area= 46,287 sf Storage= 44,248 cf

Plug-Flow detention time= 232.1 min calculated for 2.171 af (100% of inflow) Center-of-Mass det. time= 232.1 min (981.2 - 749.1)

Volume	Inve	ert Avai	I.Storage	Storage Description	on		
#1	506.0	00' 3	49,842 cf	Custom Stage D	<b>ata (Irregular)</b> Liste	ed below (Recalc)	
Elevatio (fee	•••	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft <u>)</u>	
506.0 508.0 510.0 512.0	0	138 39,705 80,589 124,830	45.5 811.5 1,415.9 2,053.3	0 28,123 117,907 203,812	0 28,123 146,030 349,842	138 52,385 159,538 335,540	
Device	Routing	In	vert Outle	et Devices			
#1	Primary	505	L= 1 Inlet		5.00'/504.00' S=	Ke= 0.900 = 0.0058 '/'    Cc= 0.900 ;   Flow Area= 0.35 sf	

**Primary OutFlow** Max=1.61 cfs @ 13.21 hrs HW=508.38' (Free Discharge) **1=Culvert** (Barrel Controls 1.61 cfs @ 4.62 fps) Pond 12P: 12P



## Summary for Pond 23.1P: 23.1P

Inflow Area = 3.682 ac, 0.00% Impervious, Inflow Depth = 2.58" for 100-year event Inflow = 16.42 cfs @ 11.97 hrs, Volume= 0.793 af 13.34 cfs @ 12.03 hrs, Volume= Outflow = 0.705 af, Atten= 19%, Lag= 3.3 min 13.34 cfs @ 12.03 hrs, Volume= Primary = 0.705 af Routed to Link SP23 : 0.00 cfs @ 0.00 hrs, Volume= 0.000 af Secondary = Routed to Link SP23 :

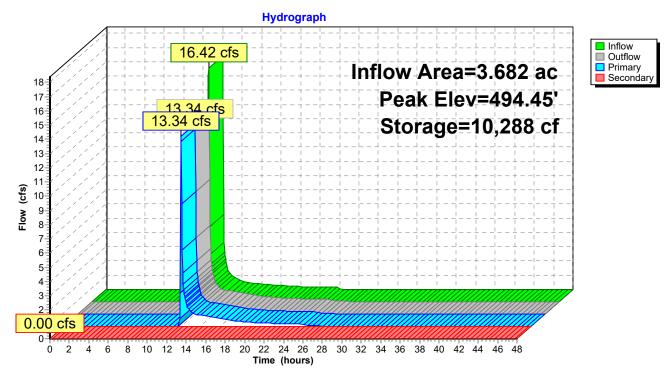
Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 494.45' @ 12.03 hrs Surf.Area= 4,898 sf Storage= 10,288 cf

Plug-Flow detention time= 134.7 min calculated for 0.705 af (89% of inflow) Center-of-Mass det. time= 80.8 min (918.2 - 837.4)

Volume	Invert	Avail.Sto	rage Storage [	Description
#1	492.00'	24,76	68 cf Custom	Stage Data (Prismatic)Listed below (Recalc)
	_			
Elevatio		Irf.Area	Inc.Store	Cum.Store
(fee	1	(sq-ft)	(cubic-feet)	(cubic-feet)
492.0		3,530	0	0
493.0		4,069	3,800	3,800
494.0		4,634	4,352	8,151
495.0		5,223	4,929	13,080
496.0		5,838	5,531	18,610
497.0	0	6,477	6,158	24,768
Device	Routing	Invert	Outlet Devices	S
#1	Primary	492.00'	24.0" Round	
πı	Thindry	402.00		P, projecting, no headwall, Ke= 0.900
				nvert= 492.00' / 489.00' S= 0.1071 '/' Cc= 0.900
				rugated PE, smooth interior, Flow Area= 3.14 sf
#2	Device 1	493.00'		<b>fice/Grate</b> C= 0.600 Limited to weir flow at low heads
#3	Device 1	494.00'		Drifice/Grate C= 0.600
				r flow at low heads
#4	Secondary	496.50'		3.0 '/' SideZ x 4.0' breadth Broad-Crested Rectangular Weir
	,			.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00
			( )	50 4.00 4.50 5.00 5.50
			Coef. (English)	n) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66
				73 2.76 2.79 2.88 3.07 3.32
Primary	<b>OutFlow</b> M	ax=12.75 cfs	@ 12.03 hrs H\	IW=494.43' (Free Discharge)
<sup>™</sup> 1=Cu	lvert (Passe	es 12.75 cfs o	f 14.30 cfs poter	ntial flow)
			ntrols 1.03 cfs @	
<u></u> _3=	Orifice/Grat	e (Weir Cont	rols 11.72 cfs @	) 2.15 fps)
			fs@0.00 hrs H	HW=492.00' (Free Discharge)

4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 23.1P: 23.1P



### Summary for Pond 44.1P: 44.1P

Inflow Area = 6.425 ac, 0.00% Impervious, Inflow Depth = 3.33" for 100-year event Inflow 36.50 cfs @ 11.97 hrs, Volume= 1.784 af = 0.98 cfs @ 14.90 hrs, Volume= Outflow = 1.083 af, Atten= 97%, Lag= 176.1 min 0.78 cfs @ 14.90 hrs, Volume= Primary = 1.035 af Routed to Link SP43 : Secondary = 0.20 cfs @ 14.90 hrs, Volume= 0.048 af Routed to Link SP43 :

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 428.54' @ 14.90 hrs Surf.Area= 23,441 sf Storage= 54,864 cf

Plug-Flow detention time= 811.7 min calculated for 1.083 af (61% of inflow) Center-of-Mass det. time= 701.1 min (1,519.2 - 818.1)

Invert	Avail.Stor	rage Storage	e Description
426.00'	90,70	04 cf Custon	n Stage Data (Prismatic)Listed below (Recalc)
		Inc.Store	Cum.Store
	(sq-ft)	(cubic-feet)	(cubic-feet)
	19,818	0	0
			20,522
	,	,	42,463
	,	,	65,848
	25,597	24,856	90,704
Pouting	Invort		
<u> </u>			
rimary	426.00		
			<sup>,</sup> P, projecting, no headwall,  Ke= 0.900 Invert= 426.00' / 425.50'   S= 0.0227 '/'   Cc= 0.900
			prrugated PE, smooth interior, Flow Area= 0.79 sf
Device 1	127 25'		rifice/Grate C= 0.600 Limited to weir flow at low heads
			Orifice/Grate C= 0.600
	420.00		eir flow at low heads
Secondary	428 50'		3.0 '/' SideZ x 4.0' breadth Broad-Crested Rectangular Weir
Jocomaany	120.00		0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00
			.50 4.00 4.50 5.00 5.50
			sh) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66
			.73 2.76 2.79 2.88 3.07 3.32
	426.00' Si Routing Primary Device 1 Device 1	426.00'       90,70         Surf.Area       (sq-ft)         19,818       21,225         22,657       24,114         25,597       25,597         Routing       Invert         Primary       426.00'         Device 1       427.25'	426.00'         90,704 cf         Custor           Surf.Area         Inc.Store           (sq-ft)         (cubic-feet)           19,818         0           21,225         20,522           22,657         21,941           24,114         23,386           25,597         24,856           Routing         Invert         Outlet Device           Primary         426.00' <b>12.0'' Roun</b> L= 22.0' CF         Inlet / Outlet         n= 0.013 Cc           Device 1         427.25' <b>4.0'' Vert. Or</b> Device 1         428.50' <b>48.0'' Horiz.</b> Limited to we         Secondary         428.50'           Secondary         428.50' <b>10.0' long +</b> Head (feet)         2.50 3.00 3           Coef. (Englis)         2.50 3.00 3

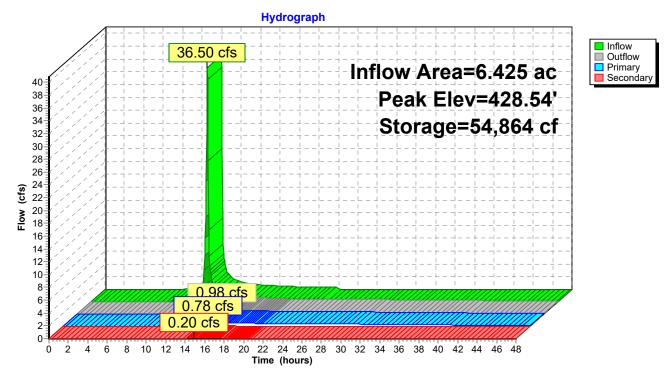
Primary OutFlow Max=0.75 cfs @ 14.90 hrs HW=428.54' (Free Discharge)

-1=Culvert (Passes 0.75 cfs of 4.26 cfs potential flow)

**2=Orifice/Grate** (Orifice Controls 0.44 cfs @ 5.10 fps)

-3=Orifice/Grate (Weir Controls 0.30 cfs @ 0.64 fps)

Secondary OutFlow Max=0.18 cfs @ 14.90 hrs HW=428.54' (Free Discharge) 4=Broad-Crested Rectangular Weir (Weir Controls 0.18 cfs @ 0.46 fps) Pond 44.1P: 44.1P



### Summary for Pond 46.1P: 46.1P

Inflow Area = 5.473 ac, 0.00% Impervious, Inflow Depth = 0.69" for 100-year event Inflow = 1.83 cfs @ 12.36 hrs, Volume= 0.316 af 0.17 cfs @ 19.50 hrs, Volume= Outflow = 0.171 af, Atten= 91%, Lag= 428.4 min 0.17 cfs @ 19.50 hrs, Volume= Primary = 0.171 af Routed to Link SP46 : 0.00 hrs, Volume= 0.000 af Secondary = 0.00 cfs @ Routed to Link SP46 :

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 355.16' @ 19.50 hrs Surf.Area= 8,605 sf Storage= 8,766 cf

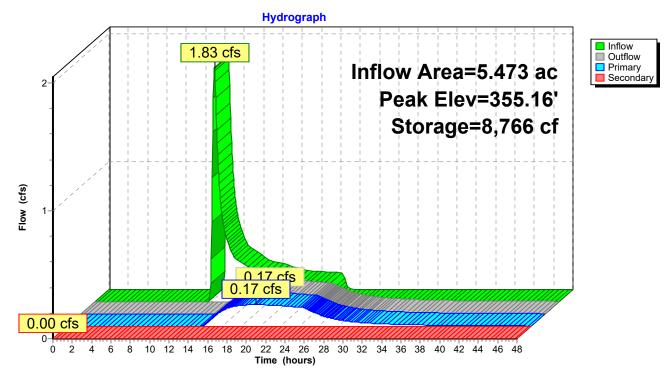
Plug-Flow detention time= 571.6 min calculated for 0.171 af (54% of inflow) Center-of-Mass det. time= 409.9 min (1,356.6 - 946.7)

Volume	Invert	Avail.Sto	rage Storag	e Description	
#1	354.00'				<b>ismatic)</b> Listed below (Recalc)
Elevatio	n Si	ırf.Area	Inc.Store	Cum.Store	
(fee		(sq-ft)	(cubic-feet)	(cubic-feet)	
354.0		6,512	0	0	
355.0	00	8,313	7,413	7,413	
356.0		10,140	9,227	16,639	
357.0	00	11,992	11,066	27,705	
Device	Routing	Invert	Outlet Devic	es	
#1	Primary	354.00'	24.0" Roun	d Culvert	
	,		L= 20.0' CF	PP, projecting, no	headwall, Ke= 0.900
					353.75' S= 0.0125 '/' Cc= 0.900
					ooth interior, Flow Area= 3.14 sf
#2	Device 1	354.83'			0.600 Limited to weir flow at low heads
#3	Device 1	355.50'		Orifice/Grate	
#4	Secondary	355.50'		eir flow at low hea	I.0' breadth Broad-Crested Rectangular Weir
#4	Secondary	355.50			0.80 1.00 1.20 1.40 1.60 1.80 2.00
				8.50 4.00 4.50 5	
					69 2.68 2.67 2.67 2.65 2.66 2.66
			· · ·	2.73 2.76 2.79 2	
				IW=355.16' (Fre	e Discharge)
			5.24 cfs poter		
<u>–2</u> =	-Orifice/Grat	e (Orifice Co	ntrols 0.17 cfs	@ 1.96 fps)	

**3=Orifice/Grate** (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=354.00' (Free Discharge) 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

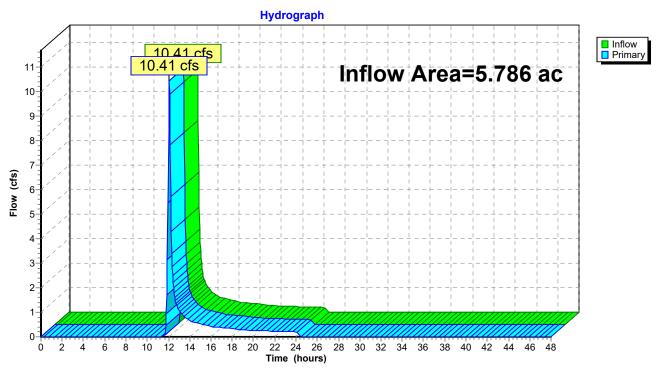
Pond 46.1P: 46.1P



# Summary for Link SP1:

Inflow Area	a =	5.786 ac,	0.00% Impervious, Infl	ow Depth = $1.43$ "	for 100-year event
Inflow	=	10.41 cfs @	12.07 hrs, Volume=	0.691 af	
Primary	=	10.41 cfs @	12.07 hrs, Volume=	0.691 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

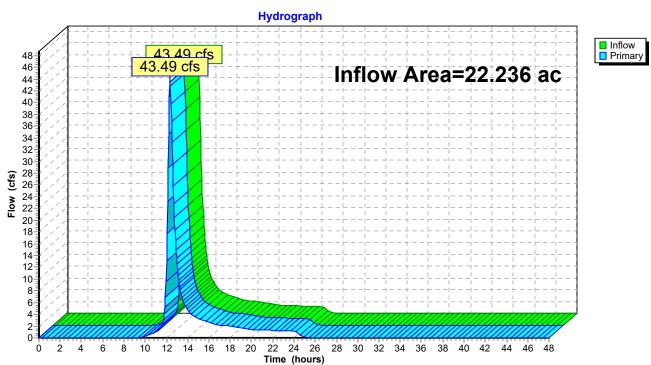


## Link SP1:

# Summary for Link SP10:

Inflow Area	a =	22.236 ac,	4.90% Impervious,	Inflow Depth =	2.64"	for 100-year event
Inflow	=	43.49 cfs @	12.33 hrs, Volume	= 4.893 a	af	
Primary	=	43.49 cfs @	12.33 hrs, Volume	= 4.893 a	af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs



#### Link SP10:

# Summary for Link SP11:

Inflow Area	a =	17.595 ac,	2.63% Impervious,	Inflow Depth = 2	2.15" for 100-year event
Inflow	=	41.84 cfs @	12.13 hrs, Volume	= 3.152 a	f
Primary	=	41.84 cfs @	12.13 hrs, Volume	= 3.152 a	f, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

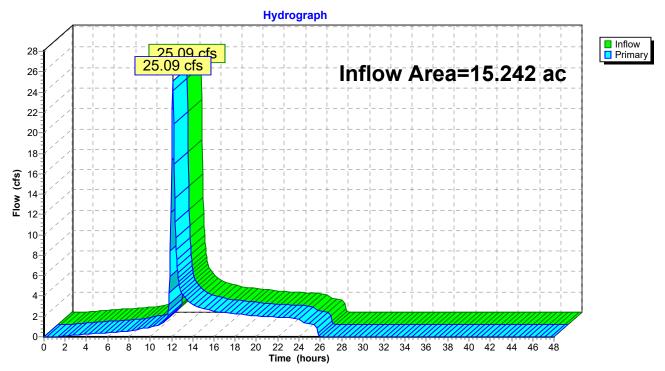
#### Hydrograph Inflow Primary 41 84 cfs 41.84 cfs 46 Inflow Area=17.595 ac 44 42 40-38-36 34 32-30-28-26-24-22-20-Flow (cfs) 18-16 14-12-10-8-6 4 2 0-2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 Ó Time (hours)

#### Link SP11:

# Summary for Link SP13:

Inflow Area	a =	15.242 ac, 17.24% Impervious, Inflow Depth = 3.06" for 100-year event
Inflow	=	25.09 cfs @ 12.11 hrs, Volume= 3.889 af
Primary	=	25.09 cfs $\overline{@}$ 12.11 hrs, Volume= 3.889 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs



#### Link SP13:

# Summary for Link SP14:

Inflow Area	a =	72.733 ac,	0.42% Impervious,	Inflow Depth =	2.32"	for 100-year event
Inflow	=	99.70 cfs @	12.51 hrs, Volume	= 14.066	af	
Primary	=	99.70 cfs @	12.51 hrs, Volume	= 14.066	af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

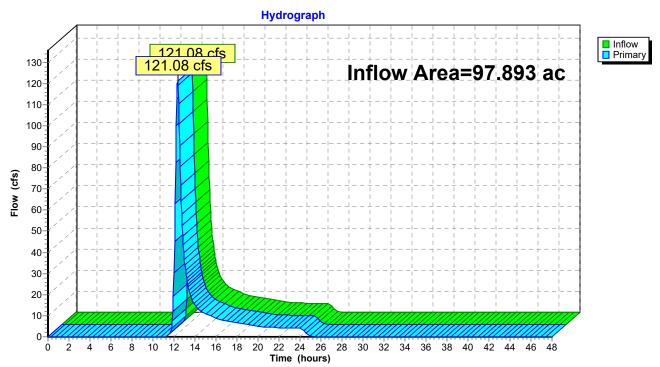
#### Hydrograph Inflow Primary 99 70 cfs 99.70 cfs 110 Inflow Area=72.733 ac 105 100 95 90 85 80 75 70 65 Flow (cfs) 60 55 50 45 40-35-30 25 20 15 10 5 0-2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 ò Time (hours)

#### Link SP14:

# Summary for Link SP17:

Inflow Are	a =	97.893 ac,	1.18% Impervious, Inflow	Depth = $1.74''$	for 100-year event
Inflow	=	121.08 cfs @	12.34 hrs, Volume=	14.202 af	-
Primary	=	121.08 cfs @	12.34 hrs, Volume=	14.202 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

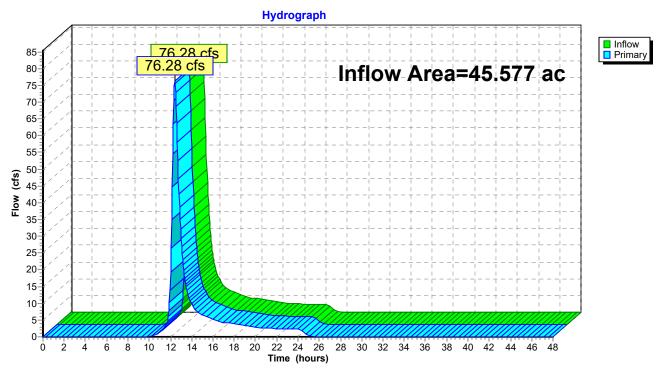


#### Link SP17:

# Summary for Link SP18:

Inflow Area	a =	45.577 ac,	0.74% Impervious, Infl	ow Depth = 2.50"	for 100-year event
Inflow	=	76.28 cfs @	12.41 hrs, Volume=	9.479 af	
Primary	=	76.28 cfs @	12.41 hrs, Volume=	9.479 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

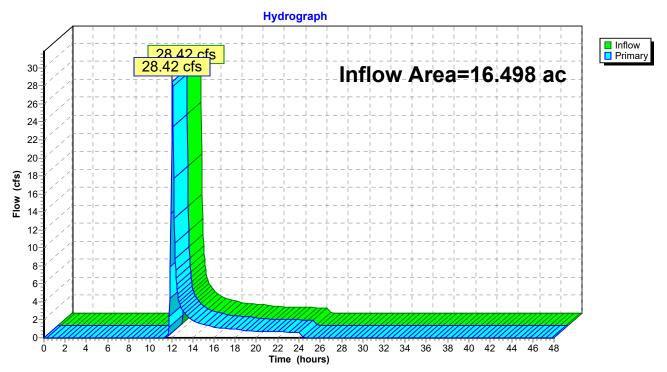


### Link SP18:

# Summary for Link SP2:

Inflow Area	a =	16.498 ac,	0.00% Impervious,	Inflow Depth = 1.43"	for 100-year event
Inflow	=	28.42 cfs @	12.08 hrs, Volume=	= 1.971 af	-
Primary	=	28.42 cfs @	12.08 hrs, Volume=	= 1.971 af, Att	ten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs



#### Link SP2:

# Summary for Link SP22:

Inflow Are	a =	284.243 ac,	1.82% Impervious, Inflow	Depth = 2.44"	for 100-year event
Inflow	=	451.38 cfs @	12.51 hrs, Volume=	57.831 af	
Primary	=	451.38 cfs @	12.51 hrs, Volume=	57.831 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

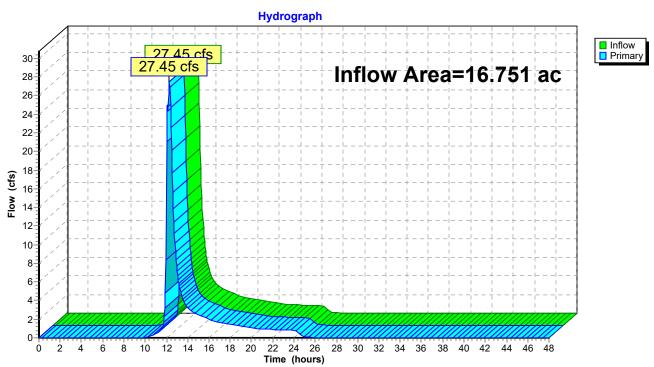
#### Hydrograph Inflow Primary 451.38 cfs 451.38 cfs 500-480-460-Inflow Area=284.243 ac 440 420-400 380 360-340 340 320 300 280 260 260 240 200 200 180 160-140 120-100-80 60 40 20-0-2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 Ó Time (hours)

#### Link SP22:

# Summary for Link SP23:

Inflow Area	a =	16.751 ac,	2.31% Impervious, I	Inflow Depth = 2	2.38" for 100-year event
Inflow	=	27.45 cfs @	12.28 hrs, Volume=	= 3.328 a	f
Primary	=	27.45 cfs @	12.28 hrs, Volume=	= 3.328 a	f, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

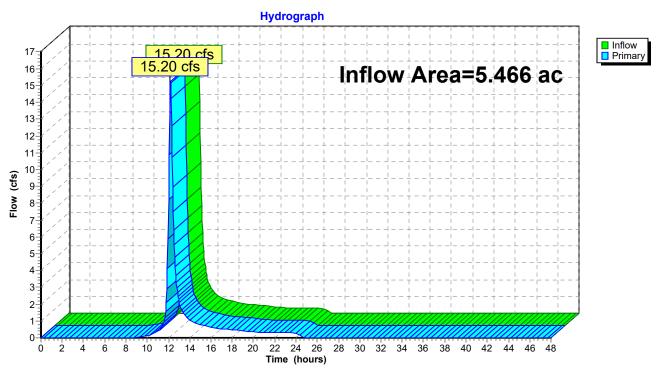


#### Link SP23:

# Summary for Link SP24:

Inflow Area	a =	5.466 ac,	7.70% Impervious,	Inflow Depth =	2.86"	for 100-year event
Inflow	=	15.20 cfs @	12.18 hrs, Volume	= 1.302	af	
Primary	=	15.20 cfs @	12.18 hrs, Volume	= 1.302	af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

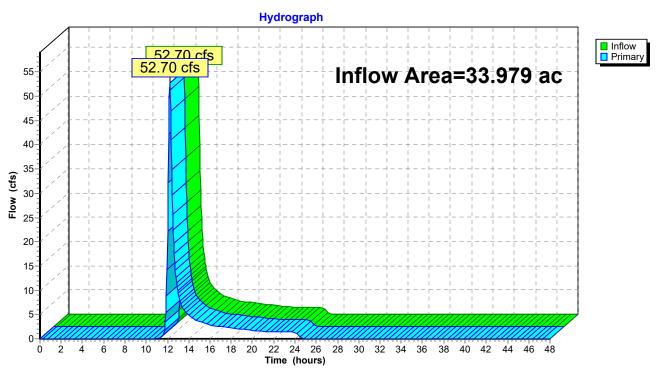


#### Link SP24:

# Summary for Link SP3:

Inflow Are	a =	33.979 ac,	0.00% Impervious, Int	flow Depth = 1.74"	for 100-year event
Inflow	=	52.70 cfs @	12.21 hrs, Volume=	4.930 af	-
Primary	=	52.70 cfs @	12.21 hrs, Volume=	4.930 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

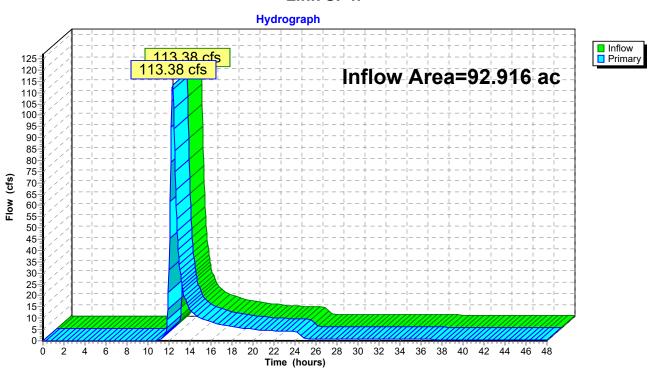


#### Link SP3:

# Summary for Link SP4:

Inflow Are	a =	92.916 ac,	0.28% Impervious, Inflow	/ Depth > 1.91"	for 100-year event
Inflow	=	113.38 cfs @	12.33 hrs, Volume=	14.790 af	-
Primary	=	113.38 cfs @	12.33 hrs, Volume=	14.790 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs



#### Link SP4:

# Summary for Link SP43:

Inflow Area	a =	114.285 ac,	0.15% Impervious, Inflow	Depth > 2.31"	for 100-year event
Inflow	=	165.50 cfs @	12.42 hrs, Volume=	21.963 af	
Primary	=	165.50 cfs @	12.42 hrs, Volume=	21.963 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

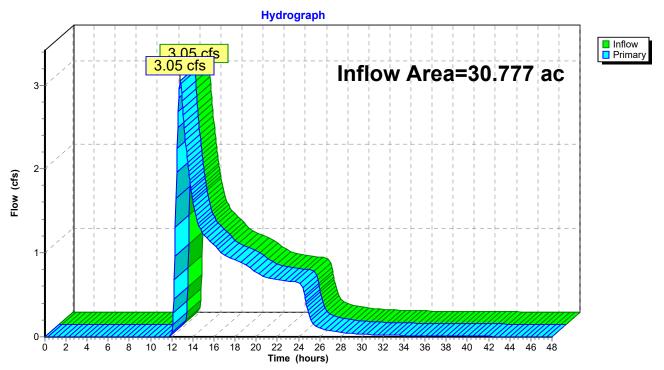
#### Hydrograph Inflow Primary 165.50 cfs 165.50 cfs 180 Inflow Area=114.285 ac 170 160 150 140 130 120 110 110-100-90-80-80-70 60 50 40 30-20 10 0-2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 Ó Time (hours)

#### Link SP43:

# Summary for Link SP46:

Inflow Area =	30.777 ac,	0.00% Impervious, I	Inflow Depth >	0.45"	for 100-year event
Inflow =	3.05 cfs @	12.82 hrs, Volume=	1.159 a	af	
Primary =	3.05 cfs @	12.82 hrs, Volume=	= 1.159 a	af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

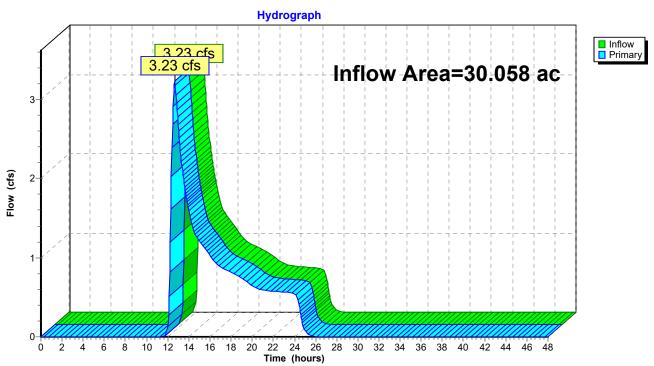


#### Link SP46:

# Summary for Link SP47:

Inflow Area =	30.058 ac,	1.25% Impervious, Inflow	Depth = $0.42''$	for 100-year event
Inflow =	3.23 cfs @	12.66 hrs, Volume=	1.046 af	
Primary =	3.23 cfs @	12.66 hrs, Volume=	1.046 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

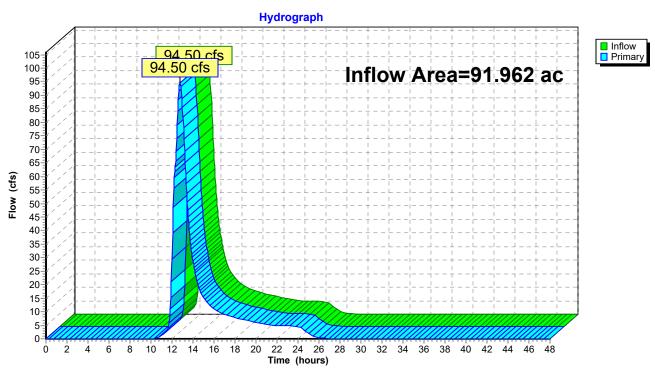


#### Link SP47:

# Summary for Link SP5:

Inflow Area	a =	91.962 ac,	0.00% Impervious, In	flow Depth = 2.40"	for 100-year event
Inflow	=	94.50 cfs @	12.76 hrs, Volume=	18.409 af	
Primary	=	94.50 cfs @	12.76 hrs, Volume=	18.409 af, At	ten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

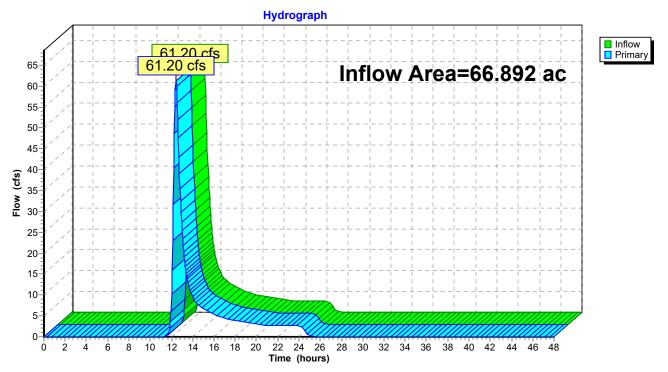


#### Link SP5:

# Summary for Link SP7:

Inflow Are	a =	66.892 ac,	0.00% Impervious, Infle	ow Depth = $1.48$ "	for 100-year event
Inflow	=	61.20 cfs @	12.42 hrs, Volume=	8.268 af	-
Primary	=	61.20 cfs @	12.42 hrs, Volume=	8.268 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

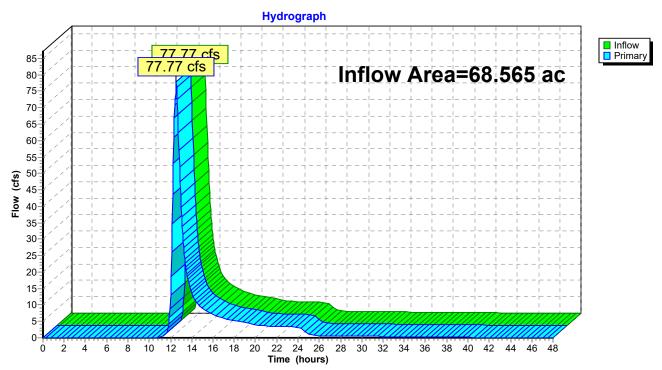


### Link SP7:

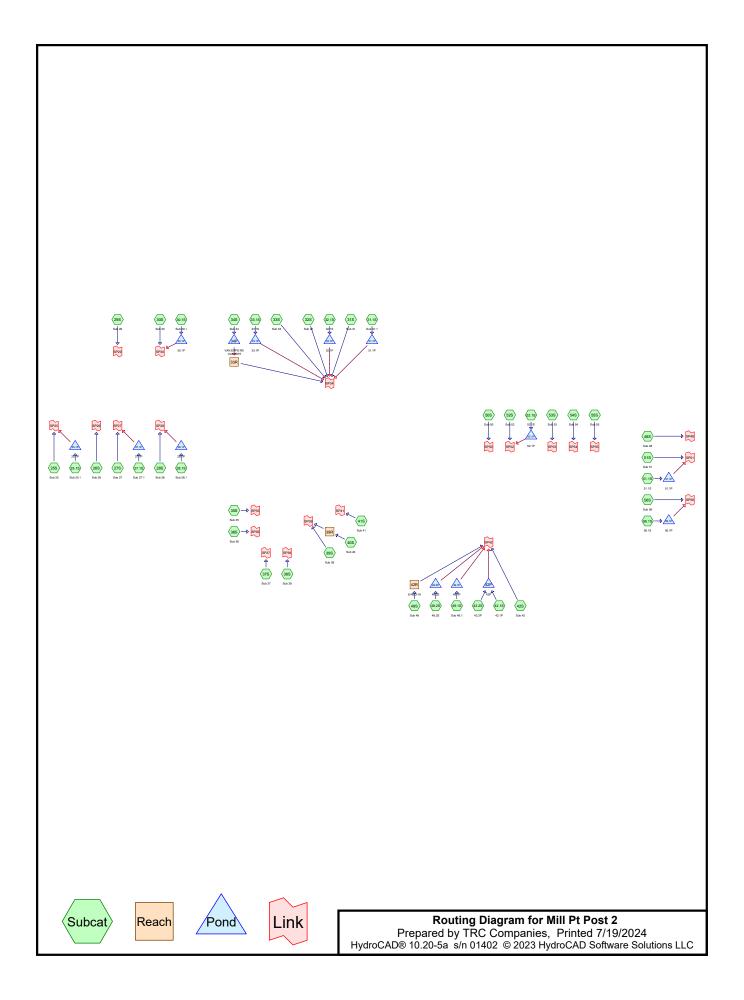
# Summary for Link SP9:

Inflow Area	a =	68.565 ac,	1.11% Impervious, Inflow	Depth > 2.06"	for 100-year event
Inflow	=	77.77 cfs @	12.56 hrs, Volume=	11.762 af	-
Primary	=	77.77 cfs @	12.56 hrs, Volume=	11.762 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs



#### Link SP9:



# Area Listing (all nodes)

Area	CN	Description
(acres)		(subcatchment-numbers)
18.815	61	>75% Grass cover, Good, HSG B (26S, 27S, 28S, 30S, 33S, 34S, 35S, 40S, 48S,
		49.1S, 49.2S, 49S, 51S, 54S)
13.645	74	>75% Grass cover, Good, HSG C (25S, 26S, 27S, 28S, 30S, 34S, 35S, 48S, 49.1S,
		49S, 51.1S, 51S, 54S)
1.200	80	>75% Grass cover, Good, HSG D (25S, 27S, 48S)
13.037	48	Brush, Good, HSG B (25S, 26S, 30S, 31S, 32S, 33.1S, 33S, 34S, 35S, 48S, 49.1S,
		49S, 50S, 51S, 52S, 53S, 54S, 55S, 56S)
27.797	65	Brush, Good, HSG C (25S, 30S, 35S, 40S, 48S, 49.1S, 49S, 50S, 51.1S, 51S, 53S,
		54S, 55S, 56S)
8.206	73	Brush, Good, HSG D (25S, 48S, 49S, 50S, 51.1S, 51S, 52S)
1.938	96	Gravel (27.1S, 28.1S, 32.1S, 33.1S, 49.1S, 56.1S)
0.649	96	Gravel surface (48S)
0.225	96	Gravel surface, HSG C (25.1S)
13.956	96	Gravel surface, HSG D (25S, 26S, 27S, 28S, 29S, 30S, 31S, 32S, 33S, 34S, 35S,
		36S, 38S, 39S, 40S, 41S, 42S, 49S, 50S, 51S, 52S, 53S, 54S, 55S)
2.077	98	Impervious (26S, 33.1S, 37S, 49.1S, 49S)
1.258	98	Impervious Roof and Pavement (48S)
0.005	98	Impervious roof (49.2S)
441.406	58	Meadow, non-grazed, HSG B (25.1S, 25S, 26S, 27.1S, 27S, 28.1S, 28S, 29S, 30S,
		31.1S, 31S, 32.1S, 32S, 33.1S, 33S, 34S, 35S, 36S, 37S, 38S, 39S, 40S, 41S, 42.2S, 42S, 42S, 42S, 42S, 42S, 42S, 42S, 4
426.467	71	42.2S, 42S, 48S, 49.1S, 49.2S, 49S, 50S, 51S, 52S, 53S, 54S, 55S, 56.1S, 56S) Meadow, non-grazed, HSG C (25.1S, 25S, 26S, 27.1S, 27S, 28.1S, 28S, 29S,
420.407	7 1	30.1S, 30S, 31.1S, 31S, 32.1S, 32S, 33.1S, 33S, 34S, 35S, 36S, 38S, 39S, 40S,
		415, 42.15, 42.25, 425, 485, 49.15, 49.25, 495, 505, 51.15, 515, 52.15, 525, 535,
		54S, 55S, 56.1S, 56S)
33.827	78	Meadow, non-grazed, HSG D (25S, 26S, 33.1S, 33S, 39S, 40S, 41S, 48S, 49S,
00.021	10	50S, 51.1S, 51S, 52S)
7.768	98	Unconnected roofs, HSG D (25S, 27S, 28S, 29S, 30S, 33S, 34S, 35S, 38S, 39S,
		40S, 50S, 51S, 54S, 55S)
7.785	98	Water Surface, HSG D (27S, 32S, 39S, 40S, 48S, 49S, 50S, 52S, 53S, 54S)
3.907	30	Woods, Good, HSG A (38S)
130.541	55	Woods, Good, HSG B (29S, 30S, 31S, 32S, 33S, 34S, 35S, 36S, 37S, 38S, 39S,
		40S, 41S, 42S, 48S, 49S, 50S, 51S, 52S, 54S, 55S, 56S)
29.657	70	Woods, Good, HSG C (25S, 30S, 31S, 33S, 35S, 39S, 40S, 41S, 42S, 48S, 49.1S,
		49S, 50S, 51.1S, 51S, 52S, 53S, 54S, 55S, 56S)
1.037	77	Woods, Good, HSG D (39S, 48S, 49S, 51S)
1,185.203	65	TOTAL AREA

# Soil Listing (all nodes)

Area	Soil	Subcatchment
(acres)	Group	Numbers
3.907	HSG A	38S
603.799	HSG B	25.1S, 25S, 26S, 27.1S, 27S, 28.1S, 28S, 29S, 30S, 31.1S, 31S, 32.1S, 32S,
		33.1S, 33S, 34S, 35S, 36S, 37S, 38S, 39S, 40S, 41S, 42.2S, 42S, 48S, 49.1S,
		49.2S, 49S, 50S, 51S, 52S, 53S, 54S, 55S, 56.1S, 56S
497.791	HSG C	25.1S, 25S, 26S, 27.1S, 27S, 28.1S, 28S, 29S, 30.1S, 30S, 31.1S, 31S, 32.1S,
		32S, 33.1S, 33S, 34S, 35S, 36S, 38S, 39S, 40S, 41S, 42.1S, 42.2S, 42S, 48S,
		49.1S, 49.2S, 49S, 50S, 51.1S, 51S, 52.1S, 52S, 53S, 54S, 55S, 56.1S, 56S
73.779	HSG D	25S, 26S, 27S, 28S, 29S, 30S, 31S, 32S, 33.1S, 33S, 34S, 35S, 36S, 38S, 39S,
		40S, 41S, 42S, 48S, 49S, 50S, 51.1S, 51S, 52S, 53S, 54S, 55S
5.927	Other	26S, 27.1S, 28.1S, 32.1S, 33.1S, 37S, 48S, 49.1S, 49.2S, 49S, 56.1S
1,185.203		TOTAL AREA

Mill Pt Post 2	
Prepared by TRC Companies	Printed 7/19/2024
HydroCAD® 10.20-5a s/n 01402 © 2023 HydroCAD Software Solutions LLC	Page 4

	Ground Covers (all nodes)								
G-B	HSG-C	HSG-D	Other	Total	Groun				

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
 0.000	18.815	13.645	1.200	0.000	33.660	>75% Grass cover, Good	25S
							26S , 27S
							, 28S
							, 30S
							, 33S
							, 34S
							, 35S ,
							40S
							48S
							49. 1S,
							49.
							2S, 49S
							, 51.
							1S, 51S
							, 54S
0.000	13.037	27.797	8.206	0.000	49.040	Brush, Good	25S
							, 26S
							, 30S
							, 31S
							, 32S
							, 33.
							1S, 33S
							, 34S

		Grou	nd Covers	s (all node	s) (contir	nuea)	
HSG-A	HSG-B	HSG-C	HSG-D	Other	Total	Ground	Subcatchment
 (acres)	(acres)	(acres)	(acres)	(acres)	(acres)	Cover	Numbers
0.000	0.000	0.000	0.000	1.938	1.938	Gravel	27.
							1S,
							28.
							1S,
							32.
							1S,
							33.
							1S,
							49.
							1S,
							56.
						• • •	1S
0.000	0.000	0.225	13.956	0.649	14.830	Gravel surface	25.
							1S,
							25S
							, 26S
							, 27S
							, 28S
							,
							29S
							,
							30S
							,
							31S
							,
							32S
							,
							, 33S
							,
							34S
							,
							35S
							, 36S
							,
							38S
							,
							39S

#### Ground Covers (all nodes) (continued)

, 40S

,

	Ground Covers (all nodes) (continued)							
HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers	
0.000	0.000	0.000	0.000	2.077	2.077	Impervious	26S	
							, 22	
							33.	
							1S,	
							37S	
							, 49.	
							9. 1S,	
							49S	
0.000	0.000	0.000	0.000	1.258	1.258	Impervious Roof and Pavement		
0.000	0.000	0.000	0.000	0.005	0.005	Impervious roof	49.	
0.000	0.000	0.000	0.000	0.000	0.000	impervieue reer	2S	
0.000	441.406	426.467	33.827	0.000	901.700	Meadow, non-grazed	25.	
						ý 3	1S,	
							25S	
							,	
							26S	
							,	
							27.	
							1S,	
							27S	
							,	
							28.	
							1S,	
							28S	
							,	
							29S	
							,	
							30.	
							1S,	
							30S	
							, 01	
							31. 1S	
							1S, 31S	
							, 32.	
							JZ.	

## Ground Covers (all nodes) (continued)

,

1S, 32S , 33. 1S, 33S

		Grou	ind Covers	s (all noue	5) (COIIII	lueu)	
HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
 0.000	0.000	0.000	7.768	0.000	7.768	Unconnected roofs	25S
							, 27S
							, 28S
							, 29S
							, 30S
							, 33S
							, 34S
							, 35S
							, 38S
							, 39S
							, 40S
							, 50S
							, 51S
							, 54S
							, 55S
0.000	0.000	0.000	7.785	0.000	7.785	Water Surface	27S ,
							, 32S ,
							39S
							, 40S
							, 48S
							, 49S
							, 50S

## Ground Covers (all nodes) (continued)

52S .

, 53S

29S , 30S

,

Ground Covers (all nodes) (continued)									
HSG-A	HSG-B	HSG-C	HSG-D	Other	Total	Ground	Subcatchment		
 (acres)	(acres)	(acres)	(acres)	(acres)	(acres)	Cover	Numbers		
3.907	130.541	29.657	1.037	0.000	165.142	Woods, Good	25S		

000
, 31S
, 32S
, 33S
, 34S
, 35S
, 36S
, 37S
, 38S
, 39S
, 40S
, 41S
, 42S
, 48S
, 49.
1S, 49S
, 50S
, 51.
1S,
51S , 52S
52S , 53S
53S

	Ground Covers (all nodes) (continued)									
	HSG-A	HSG-B	HSG-C	HSG-D	Other	Total	Ground	Subcatchment		
_	(acres)	(acres)	(acres)	(acres)	(acres)	(acres)	Cover	Numbers		
_	3.907	603.799	497.791	73.779	5.927	1,185.203	TOTAL AREA			

# Ground Covers (all nodes) (continued)

Time span=0.00-48.00 hrs, dt=0.05 hrs, 961 points Runoff by SCS TR-20 method, UH=SCS, Weighted-CN Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 25.1S: Sub 25.1	Runoff Area=3.422 ac 0.00% Impervious Runoff Depth=0.31" Flow Length=564' Tc=12.4 min CN=70 Runoff=1.05 cfs 0.088 af
Subcatchment 25S: Sub 25	Runoff Area=15.820 ac 0.63% Impervious Runoff Depth=0.40" Flow Length=1,104' Tc=22.2 min CN=73 Runoff=5.09 cfs 0.526 af
Subcatchment 26S: Sub 26	Runoff Area=14.925 ac 5.39% Impervious Runoff Depth=0.18" Flow Length=1,324' Tc=18.0 min CN=65 Runoff=1.36 cfs 0.229 af
Subcatchment 27.1S: Sub 27.1	Runoff Area=3.749 ac 0.00% Impervious Runoff Depth=0.34" Flow Length=831' Tc=14.7 min CN=71 Runoff=1.22 cfs 0.105 af
Subcatchment 27S: Sub 27	Runoff Area=19.044 ac 2.34% Impervious Runoff Depth=0.21" Flow Length=1,602' Tc=17.8 min CN=66 Runoff=2.24 cfs 0.328 af
Subcatchment 28.1S: Sub 28.1	Runoff Area=2.160 ac 0.00% Impervious Runoff Depth=0.34" Flow Length=409' Tc=11.9 min CN=71 Runoff=0.79 cfs 0.061 af
Subcatchment 28S: Sub 28 Flow Lengtl	Runoff Area=19.213 ac 0.59% Impervious Runoff Depth=0.18" n=1,727' Tc=27.4 min UI Adjusted CN=65 Runoff=1.35 cfs 0.295 af
Subcatchment 29S: Sub 29	Runoff Area=19.201 ac 1.25% Impervious Runoff Depth=0.13" Flow Length=1,656' Tc=26.3 min CN=62 Runoff=0.59 cfs 0.202 af
Subcatchment 30.1S: Sub 30.1	Runoff Area=4.003 ac 0.00% Impervious Runoff Depth=0.34" Flow Length=1,131' Tc=29.7 min CN=71 Runoff=0.80 cfs 0.112 af
Subcatchment 30S: Sub 30	Runoff Area=32.197 ac 1.38% Impervious Runoff Depth=0.14" Flow Length=2,349' Tc=29.2 min CN=63 Runoff=1.29 cfs 0.387 af
Subcatchment 31.1S: Sub 31.1	Runoff Area=0.925 ac 0.00% Impervious Runoff Depth=0.31" Flow Length=267' Tc=10.3 min CN=70 Runoff=0.32 cfs 0.024 af
Subcatchment 31S: Sub 31	Runoff Area=24.402 ac 0.00% Impervious Runoff Depth=0.13" Flow Length=2,354' Tc=30.5 min CN=62 Runoff=0.71 cfs 0.256 af
Subcatchment 32.1S: 32.1S	Runoff Area=5.376 ac 0.00% Impervious Runoff Depth=0.31" Flow Length=867' Tc=20.0 min CN=70 Runoff=1.22 cfs 0.138 af
Subcatchment 32S: Sub 32	Runoff Area=39.541 ac 7.07% Impervious Runoff Depth=0.14" Flow Length=2,402' Tc=27.3 min CN=63 Runoff=1.64 cfs 0.475 af
Subcatchment 33.1S: 33.1S	Runoff Area=12.768 ac 1.41% Impervious Runoff Depth=0.40" Flow Length=1,561' Tc=36.2 min CN=73 Runoff=2.90 cfs 0.424 af
Subcatchment 33S: Sub 33	Runoff Area=78.535 ac 0.56% Impervious Runoff Depth=0.05" Flow Length=1,749' Tc=22.2 min CN=57 Runoff=0.46 cfs 0.349 af

# Mill Pt Post 2

Prepared by TRC Companies HydroCAD® 10.20-5a s/n 01402 © 2023 HydroCAD Software Solutions LLC

 Type II 24-hr
 1-year Rainfall=2.17"

 Printed
 7/19/2024

 LC
 Page 11

1194106/18/0 10:20 64 6/1101102 @ 2020	
Subcatchment 34S: Sub 34	Runoff Area=25.795 ac 1.16% Impervious Runoff Depth=0.13" Flow Length=1,380' Tc=24.0 min CN=62 Runoff=0.81 cfs 0.271 af
Subcatchment 35S: Sub 35	Runoff Area=54.779 ac 2.01% Impervious Runoff Depth=0.18" Flow Length=3,081' Tc=40.4 min CN=65 Runoff=3.11 cfs 0.842 af
Subcatchment 36S: Sub 36	Runoff Area=46.618 ac 0.00% Impervious Runoff Depth=0.14" Flow Length=1,996' Tc=23.3 min CN=63 Runoff=2.07 cfs 0.560 af
Subcatchment 37S: Sub 37	Runoff Area=10.440 ac 5.80% Impervious Runoff Depth=0.09" Flow Length=1,926' Tc=33.1 min CN=60 Runoff=0.16 cfs 0.081 af
Subcatchment 38S: Sub 38	Runoff Area=71.315 ac 1.11% Impervious Runoff Depth=0.16" Flow Length=3,404' Tc=47.6 min CN=64 Runoff=2.95 cfs 0.973 af
Subcatchment 39S: Sub 39	Runoff Area=114.576 ac 0.49% Impervious Runoff Depth=0.13" Flow Length=2,852' Tc=30.0 min CN=62 Runoff=3.35 cfs 1.203 af
Subcatchment 40S: Sub 40	Runoff Area=20.880 ac 7.94% Impervious Runoff Depth=0.28" Flow Length=1,917' Tc=28.9 min CN=69 Runoff=3.15 cfs 0.488 af
Subcatchment 41S: Sub 41	Runoff Area=60.164 ac 0.00% Impervious Runoff Depth=0.13" Flow Length=2,626' Tc=33.1 min CN=62 Runoff=1.71 cfs 0.632 af
Subcatchment 42.1S: 42.1P	Runoff Area=1.588 ac 0.00% Impervious Runoff Depth=0.34" Tc=6.0 min CN=71 Runoff=0.78 cfs 0.045 af
Subcatchment 42.2S: 42.2P	Runoff Area=3.269 ac 0.00% Impervious Runoff Depth=0.23" Tc=6.0 min CN=67 Runoff=0.87 cfs 0.063 af
Subcatchment 42S: Sub 42	Runoff Area=45.032 ac 0.00% Impervious Runoff Depth=0.09" Flow Length=1,067' Tc=27.0 min CN=60 Runoff=0.71 cfs 0.350 af
Subcatchment 48S: Sub 48	Runoff Area=72.538 ac 2.48% Impervious Runoff Depth=0.34" Flow Length=4,007' Tc=38.1 min CN=71 Runoff=12.18 cfs 2.035 af
Subcatchment 49.1S: Sub 49.1	Runoff Area=4.740 ac 6.79% Impervious Runoff Depth=0.18" Tc=10.0 min CN=65 Runoff=0.63 cfs 0.073 af
Subcatchment 49.2S: 49.2S	Runoff Area=3.533 ac 0.14% Impervious Runoff Depth=0.31" Tc=6.0 min CN=70 Runoff=1.52 cfs 0.091 af
Subcatchment 49S: Sub 49	Runoff Area=31.263 ac 0.62% Impervious Runoff Depth=0.18" Flow Length=2,999' Tc=38.0 min CN=65 Runoff=1.83 cfs 0.481 af
Subcatchment 50S: Sub 50	Runoff Area=45.771 ac 1.25% Impervious Runoff Depth=0.25" Flow Length=2,623' Tc=43.5 min CN=68 Runoff=4.44 cfs 0.970 af
Subcatchment 51.1S: 51.1S	Runoff Area=8.131 ac 0.00% Impervious Runoff Depth=0.40" Flow Length=1,025' Tc=26.3 min CN=73 Runoff=2.32 cfs 0.270 af
Subcatchment 51S: Sub 51	Runoff Area=95.556 ac 0.76% Impervious Runoff Depth=0.16" Flow Length=3,172' Tc=41.1 min CN=64 Runoff=4.28 cfs 1.304 af

Mill Pt Post 2

Prepared by TRC Companies HydroCAD® 10.20-5a s/n 01402 © 2023 HydroCAD Software Solutions LLC

 Type II 24-hr
 1-year Rainfall=2.17"

 Printed
 7/19/2024

 LC
 Page 12

Subcatchment 52.1S: 52.	<b>1S</b> Runoff Area=0.805 ac 0.00% Impervious Runoff Depth=0.34" Tc=0.0 min CN=71 Runoff=0.49 cfs 0.023 af
Subcatchment 52S: Sub	52Runoff Area=14.017 ac2.95% ImperviousRunoff Depth=0.28"Flow Length=1,182'Tc=22.0 minCN=69Runoff=2.55 cfs0.328 af
Subcatchment 53S: Sub	53Runoff Area=21.434 ac1.80% ImperviousRunoff Depth=0.23"Flow Length=2,555'Tc=37.9 minCN=67Runoff=1.89 cfs0.410 af
Subcatchment 54S: Sub	54Runoff Area=46.515 ac7.79% ImperviousRunoff Depth=0.28"Flow Length=3,144'Tc=38.8 minUI Adjusted CN=69Runoff=5.74 cfs1.087 af
Subcatchment 55S: Sub	<b>55</b> Runoff Area=28.411 ac 0.98% Impervious Runoff Depth=0.23" Flow Length=2,400' Tc=57.7 min CN=67 Runoff=1.94 cfs 0.544 af
Subcatchment 56.1S: 56.	<b>1S</b> Runoff Area=27.373 ac 0.00% Impervious Runoff Depth=0.31" Flow Length=1,864' Tc=23.1 min CN=70 Runoff=5.66 cfs 0.702 af
Subcatchment 56S: Sub	<b>56</b> Runoff Area=35.379 ac 0.00% Impervious Runoff Depth=0.21" Flow Length=1,907' Tc=23.9 min CN=66 Runoff=3.42 cfs 0.609 af
Reach 33R:	Avg. Flow Depth=0.26' Max Vel=1.11 fps Inflow=0.81 cfs 0.271 af n=0.100 L=1,875.0' S=0.0597 '/' Capacity=10.60 cfs Outflow=0.58 cfs 0.271 af
Reach 39R:	Avg. Flow Depth=0.40' Max Vel=1.91 fps Inflow=3.15 cfs 0.488 af n=0.100 L=1,110.0' S=0.0991 '/' Capacity=86.68 cfs Outflow=2.69 cfs 0.488 af
Reach 42R: S-NSD-16	Avg. Flow Depth=0.37' Max Vel=1.33 fps Inflow=1.83 cfs 0.481 af n=0.100 L=1,790.0' S=0.0531 '/' Capacity=51.95 cfs Outflow=1.40 cfs 0.481 af
Pond 25.1P: 25.1P	Peak Elev=604.67' Storage=3,824 cf Inflow=1.05 cfs 0.088 af Primary=0.00 cfs 0.000 af Secondary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af
Pond 27.1P: 27.1P	Peak Elev=551.57' Storage=4,582 cf Inflow=1.22 cfs 0.105 af Primary=0.00 cfs 0.000 af Secondary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af
Pond 28.1P: 28.1P	Peak Elev=558.71' Storage=2,640 cf Inflow=0.79 cfs 0.061 af Primary=0.00 cfs 0.000 af Secondary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af
<b>Pond 30.1P: 30.1P</b> Discarded=0.01 cfs 0.040 af	Peak Elev=460.00' Storage=4,290 cf Inflow=0.80 cfs 0.112 af Primary=0.00 cfs 0.000 af Secondary=0.00 cfs 0.000 af Outflow=0.01 cfs 0.040 af
<b>Pond 31.1P: 31.1P</b> Discarded=0.02 cfs 0.024 af	Peak Elev=510.12' Storage=460 cf Inflow=0.32 cfs 0.024 af Primary=0.00 cfs 0.000 af Secondary=0.00 cfs 0.000 af Outflow=0.02 cfs 0.024 af
Pond 32.1P: 32.1P	Peak Elev=552.53' Storage=6,008 cf Inflow=1.22 cfs 0.138 af Primary=0.00 cfs 0.000 af Secondary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af
Pond 33.1P: 33.1P	Peak Elev=590.61' Storage=18,155 cf Inflow=2.90 cfs 0.424 af Primary=0.03 cfs 0.042 af Secondary=0.00 cfs 0.000 af Outflow=0.03 cfs 0.042 af

Mill Pt Post 2Type II 24-hr1-year Rainfall=2.17"Prepared by TRC CompaniesPrinted 7/19/2024HydroCAD® 10.20-5a s/n 01402 © 2023 HydroCAD Software Solutions LLCPage 13							
Pond 34P: VAN EPPS RI					cf Inflow=0.81 cfs f Outflow=0.81 cfs		
Pond 42P: 42P	Primary=0.00 cfs				cf Inflow=1.64 cfs f Outflow=0.00 cfs		
Pond 49.1P: 49.1P	Primary=0.00 cfs				cf Inflow=0.63 cfs f Outflow=0.00 cfs		
Pond 49.2P: 49.2S	Primary=0.03 cfs				cf Inflow=1.52 cfs f Outflow=0.03 cfs		
Pond 51.1P: 51.1P	Primary=0.00 cfs				cf Inflow=2.32 cfs f Outflow=0.00 cfs		
Pond 52.1P: 52.1P	Primary=0.00 cfs				cf Inflow=0.49 cfs f Outflow=0.00 cfs		
Pond 56.1P: 56.1P	Primary=0.30 cfs				cf Inflow=5.66 cfs f Outflow=0.30 cfs		
Link SP25:					Inflow=5.09 cfs Primary=5.09 cfs		
Link SP26:					Inflow=1.36 cfs Primary=1.36 cfs		
Link SP27:					Inflow=2.24 cfs Primary=2.24 cfs		
Link SP28:					Inflow=1.35 cfs Primary=1.35 cfs		
Link SP29:					Inflow=0.59 cfs Primary=0.59 cfs		
Link SP30:					Inflow=1.29 cfs Primary=1.29 cfs		
Link SP34:					Inflow=2.40 cfs Primary=2.40 cfs		
Link SP35:					Inflow=3.11 cfs Primary=3.11 cfs		
Link SP36:					Inflow=2.07 cfs Primary=2.07 cfs		
Link SP37:					Inflow=0.16 cfs Primary=0.16 cfs		

Link SP38:

Inflow=2.95 cfs 0.973 af Primary=2.95 cfs 0.973 af

HydroCAD® 10.20-5a s/n 01402 © 2023 HydroCAD Software Solutions LLC	Page 14
Link SP39:	Inflow=5.95 cfs 1.691 af
	Primary=5.95 cfs 1.691 af
Link CD44	Inflow=1.71 cfs 0.632 af
Link SP41:	Primary=1.71 cfs 0.632 af
	-
Link SP42:	Inflow=2.01 cfs 0.846 af
	Primary=2.01 cfs 0.846 af
Link SP48:	Inflow=12.18 cfs 2.035 af
	Primary=12.18 cfs 2.035 af
Link SP50:	Inflow=4.44 cfs 0.970 af
	Primary=4.44 cfs 0.970 af
Link SP51:	Inflow=4.28 cfs 1.304 af Primary=4.28 cfs 1.304 af
	1 mary - 4.20 013 1.004 ar
Link SP52:	Inflow=2.55 cfs 0.328 af
	Primary=2.55 cfs 0.328 af
Link SP53:	Inflow=1.89 cfs 0.410 af
	Primary=1.89 cfs 0.410 af
Link SP54:	Inflow=5.74 cfs 1.087 af
LIIIK 3F 54.	Primary=5.74 cfs 1.087 af
Link SP55:	Inflow=1.94 cfs 0.544 af Primary=1.94 cfs 0.544 af
	1 1111ary - 1.34 015 0.344 al
Link SP56:	Inflow=3.42 cfs 0.917 af
	Primary=3.42 cfs 0.917 af

Total Runoff Area = 1,185.203 acRunoff Volume = 18.434 afAverage Runoff Depth = 0.19"98.41% Pervious = 1,166.310 ac1.59% Impervious = 18.893 ac

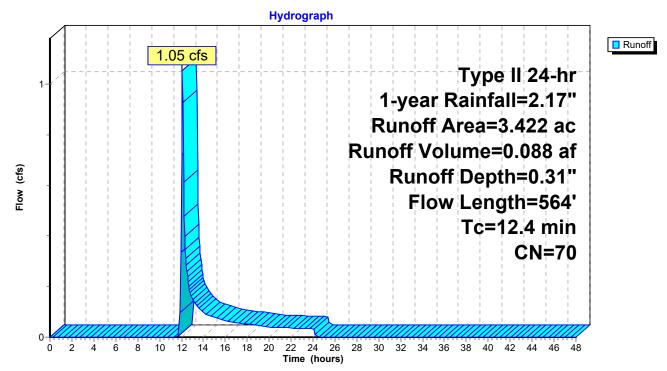
#### Summary for Subcatchment 25.1S: Sub 25.1

Runoff = 1.05 cfs @ 12.08 hrs, Volume= 0.088 af, Depth= 0.31" Routed to Pond 25.1P : 25.1P

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 1-year Rainfall=2.17"

_	Area	(ac) C	N Desc	cription		
2.622 71 Meadow, non-grazed, HSG						GC
	0.	225 9		el surface	,	
	0.	<u>575 5</u>	58 Mea	dow, non-g	grazed, HS	G B
	3.	422 7	'0 Weig	hted Aver	age	
	3.	422	100.	00% Pervi	ous Area	
	Тс	Length	Slope	Velocity	Capacity	Description
	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	•
	5.6	100	0.1080	0.30		Sheet Flow,
						Grass: Short n= 0.150 P2= 2.50"
	0.5	35	0.0270	1.15		Shallow Concentrated Flow,
						Short Grass Pasture Kv= 7.0 fps
	6.3	429	0.0260	1.13		Shallow Concentrated Flow,
	,					Short Grass Pasture Kv= 7.0 fps
	12.4	564	Total			

#### Subcatchment 25.1S: Sub 25.1

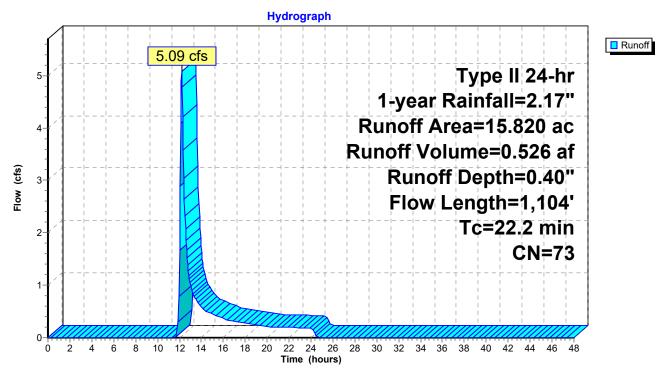


# Summary for Subcatchment 25S: Sub 25

Runoff = 5.09 cfs @ 12.19 hrs, Volume= 0.526 af, Depth= 0.40" Routed to Link SP25 :

Area	(ac) C	N Des	cription								
0.	050	48 Brus	Brush, Good, HSG B								
0.	279	65 Brus	Brush, Good, HSG C								
0.	181	73 Brus	sh, Good, H	ISG D							
0.	099	98 Unc	onnected r	oofs, HSG	D						
0.	210	58 Mea	dow, non-	grazed, HS	IG B						
10.	133	71 Mea	dow, non-	grazed, HS	IG C						
3.	694	78 Mea	dow, non-	grazed, HS	IG D						
0.	455	74 >75	% Grass co	over, Good	, HSG C						
0.	497	80 >75	% Grass co	over, Good	, HSG D						
0.	020	70 Woo	ods, Good,	HSG C							
0.	202	96 Gra	vel surface	, HSG D							
15.	820	73 Wei	ghted Aver	age							
15.	721	99.3	7% Pervio	us Area							
0.	099	0.63	% Impervi	ous Area							
0.	099	100	.00% Unco	nnected							
Тс	Length	Slope	Velocity	Capacity	Description						
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)							
8.2	100	0.0430	0.20		Sheet Flow,						
					Grass: Short n= 0.150 P2= 2.50"						
11.3	717	0.0230	1.06		Shallow Concentrated Flow,						
					Short Grass Pasture Kv= 7.0 fps						
2.7	287		1.76		Direct Entry, CF						
22.2	1,104	Total									

Subcatchment 25S: Sub 25

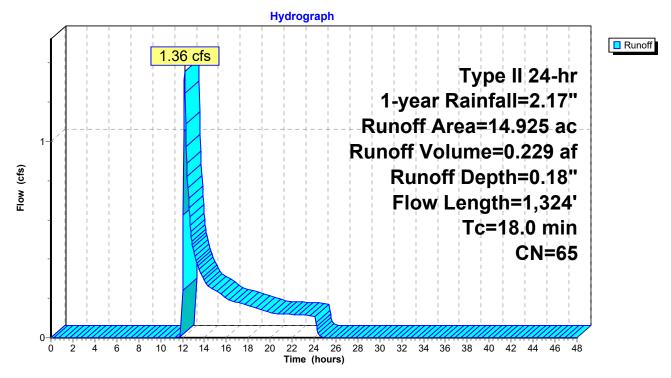


# Summary for Subcatchment 26S: Sub 26

Runoff = 1.36 cfs @ 12.19 hrs, Volume= 0.229 af, Depth= 0.18" Routed to Link SP26 :

	Area	(ac) (	CN Des	cription						
	0.	114	48 Bru	Brush, Good, HSG B						
0.057 96 Gravel surface, HSG D										
*	0.	804	98 lmp	ervious						
	6.	796	58 Mea	adow, non-	grazed, HS	GB				
	2.	989	71 Mea	adow, non-	grazed, HS	GC				
	2.	988	61 >75	% Grass c	over, Good	, HSG B				
	0.	965	74 >75	% Grass c	over, Good	, HSG C				
	0.	212	78 Mea	adow, non-	grazed, HS	G D				
	14.	925	65 Wei	ghted Aver	age					
	14.	121	94.6	51% Pervio	us Area					
	0.	804	5.39	5.39% Impervious Area						
	Тс	Length			Capacity	Description				
	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)					
	9.7	100	0.0280	0.17		Sheet Flow,				
						Grass: Short n= 0.150 P2= 2.50"				
	2.2	340	0.1340	2.56		Shallow Concentrated Flow,				
						Short Grass Pasture Kv= 7.0 fps				
	2.7	259	0.0540	1.63		Shallow Concentrated Flow,				
						Short Grass Pasture Kv= 7.0 fps				
	3.4	625		3.06		Direct Entry, CF				
	18.0	1,324	Total							

Subcatchment 26S: Sub 26



#### Summary for Subcatchment 27.1S: Sub 27.1

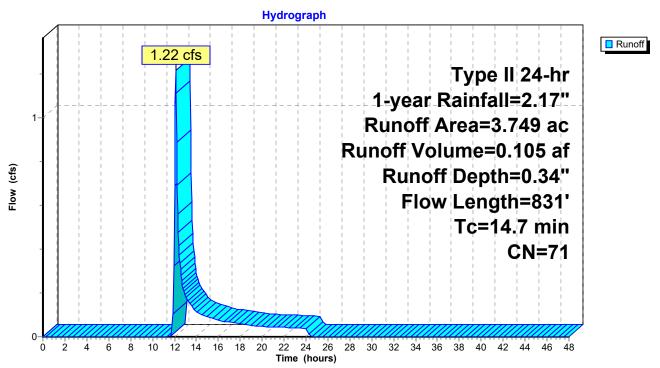
Runoff = 1.22 cfs @ 12.10 hrs, Volume= 0.105 af, Depth= 0.34" Routed to Pond 27.1P : 27.1P

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Type II 24-hr 1-year Rainfall=2.17"

	Area	(ac) C	N Des	cription		
	3.	035			grazed, HS	
	0.	435 8	58 Mea	dow, non-g	grazed, HS	GB
*	0.	279	96 Grav	/el	-	
	3.	749	71 Weig	ghted Aver	age	
	3.	749	100.	00% Pervi	ous Area	
	Тс	Length	Slope	Velocity	Capacity	Description
	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
	6.7	100	0.0700	0.25		Sheet Flow,
						Grass: Short n= 0.150 P2= 2.50"
	3.1	391	0.0900	2.10		Shallow Concentrated Flow,
						Short Grass Pasture Kv= 7.0 fps
	3.2	175	0.0170	0.91		Shallow Concentrated Flow,
						Short Grass Pasture Kv= 7.0 fps
	1.7	165	0.0530	1.61		Shallow Concentrated Flow,
						Short Grass Pasture Kv= 7.0 fps
	14.7	831	Total			

## Subcatchment 27.1S: Sub 27.1

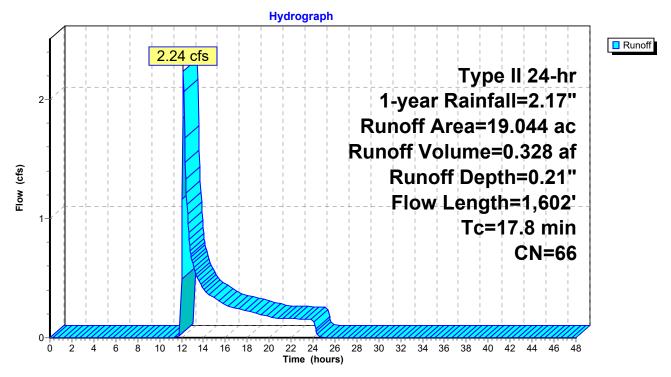


# Summary for Subcatchment 27S: Sub 27

Runoff = 2.24 cfs @ 12.17 hrs, Volume= 0.328 af, Depth= 0.21" Routed to Link SP27 :

Area	(ac) C	N Dese	cription						
0.	0.254 96 Gravel surface, HSG D								
0.	0.064 98 Unconnected roofs, HSG D								
8.	719	58 Mea	dow, non-g	grazed, HS	G B				
7.	839			grazed, HS					
0.	231 (	61 >75 <sup>°</sup>	% Grass co	over, Good	, HSG B				
1.	416	74 >75	% Grass co	over, Good	, HSG C				
				over, Good	, HSG D				
0.	<u>381 </u>	98 Wate	er Surface	, HSG D					
19.	044 (	66 Weig	ghted Aver	age					
18.	599	97.6	6% Pervio	us Area					
0.	445	2.34	% Impervi	ous Area					
0.	064	14.3	8% Uncon	nected					
Тс	Length	Slope	Velocity	Capacity	Description				
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)					
6.9	100	0.0650	0.24		Sheet Flow,				
					Grass: Short n= 0.150 P2= 2.50"				
7.4	832	0.0720	1.88		Shallow Concentrated Flow,				
					Short Grass Pasture Kv= 7.0 fps				
3.5	670		3.19		Direct Entry, CF				
17.8	1,602	Total							

Subcatchment 27S: Sub 27



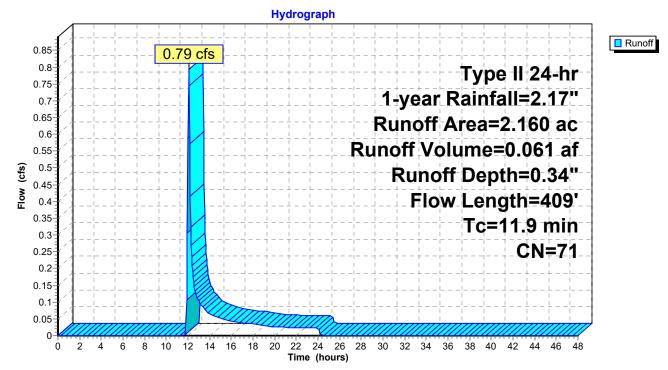
#### Summary for Subcatchment 28.1S: Sub 28.1

Runoff = 0.79 cfs @ 12.07 hrs, Volume= Routed to Pond 28.1P : 28.1P 0.061 af, Depth= 0.34"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 1-year Rainfall=2.17"

	Area	(ac)	CN D	escription				
*	6 0.051 96 Gravel							
	0.	068	58 N	eadow, non	-grazed, HS	G B		
	2.	041	71 N	eadow, non	-grazed, HS	GC		
_	2.160 71 Weighted Average							
	2.	160	1	00.00% Perv	/ious Area			
	Tc	Length	Slop	be Velocity	Capacity	Description		
	(min)	(feet)	(ft/	ft) (ft/sec)	(cfs)			
	8.2	100	0.042	20 0.20		Sheet Flow,		
						Grass: Short n= 0.150 P2= 2.50"		
	3.7	309	0.040	0 1.40		Shallow Concentrated Flow,		
						Short Grass Pasture Kv= 7.0 fps		
_	11.9	409	Tota					

# Subcatchment 28.1S: Sub 28.1

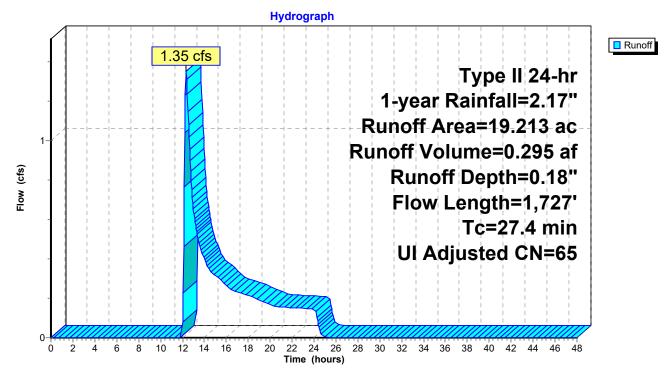


# Summary for Subcatchment 28S: Sub 28

Runoff = 1.35 cfs @ 12.34 hrs, Volume= 0.295 af, Depth= 0.18" Routed to Link SP28 :

_	Area	(ac)	CN	Adj	Descript	tion				
0.547 96 Grav						Gravel surface, HSG D				
	0.	114	98		Unconnected roofs, HSG D					
	8.	804	58		Meadow, non-grazed, HSG B					
	7.	984	71		Meadow, non-grazed, HSG C					
	0.	902	61		>75% G	>75% Grass cover, Good, HSG B				
_	0.	862	74		>75% G	rass cover	, Good, HSG C			
	19.	213	66	65	Weighte	d Average	, UI Adjusted			
	19.	099			99.41%	Pervious A	vrea			
	0.	114			0.59% Impervious Area					
	0.	114			100.00% Unconnected					
	Тс	Lengt		Slope	Velocity	Capacity	Description			
_	(min)	(feet	t)	(ft/ft)	(ft/sec)	(cfs)				
	16.9	10	0 (	0.0070	0.10		Sheet Flow,			
							Grass: Short n= 0.150 P2= 2.50"			
	7.4	81	9 (	0.0700	1.85		Shallow Concentrated Flow,			
							Short Grass Pasture Kv= 7.0 fps			
	3.1	80	8 (	0.0420	4.36	6.53	Trap/Vee/Rect Channel Flow,			
							Bot.W=2.00' D=0.50' Z= 2.0 '/' Top.W=4.00'			
_							n= 0.035 Earth, dense weeds			
	27.4	1,72	7 .	Total						

Subcatchment 28S: Sub 28



# Summary for Subcatchment 29S: Sub 29

Runoff = 0.59 cfs @ 12.42 hrs, Volume= 0.202 af, Depth= 0.13" Routed to Link SP29 :

Area	(ac) (	CN Des	cription								
0	.326	96 Gra	Gravel surface, HSG D								
0	.240	98 Unc	Jnconnected roofs, HSG D								
14	.674		Meadow, non-grazed, HSG B								
3	.955			grazed, HS	GC						
0	.006	55 Wo	ods, Good,	HSG B							
19	.201		ghted Aver	0							
18	.961		75% Pervio								
-	.240		5% Impervi								
0	.240	100	.00% Unco	nnected							
т.	المربع مرافات	01	Mala alta	0	Description						
Tc (min)	Length			Capacity	Description						
(min)	(feet)		(ft/sec)	(cfs)							
8.9	100	0.0350	0.19		Sheet Flow,						
16 F	1 400	0.0460	1 50		Grass: Short n= 0.150 P2= 2.50"						
16.5	1,490	0.0460	1.50		Shallow Concentrated Flow,						
0.0	66		1 22		Short Grass Pasture Kv= 7.0 fps Direct Entry, CF						
0.9			1.22		Direct Entry, CF						
26.3	1,656	Total									

Hydrograph 0.65 Runoff 0.59 cfs 0.6 Type II 24-hr 0.55 1-year Rainfall=2.17" 0.5 Runoff Area=19.201 ac 0.45 Runoff Volume=0.202 af 0.4 (classifier constraints) (classifier constrain Runoff Depth=0.13" Flow Length=1,656' Tc=26.3 min 0.25 0.2 CN=62 0.15 0.1 0.05 0-2 10 12 14 16 18 20 22 24 26 28 4 6 8 30 32 34 36 38 40 42 44 46 48 Ó Time (hours)

#### Subcatchment 29S: Sub 29

#### Summary for Subcatchment 30.1S: Sub 30.1

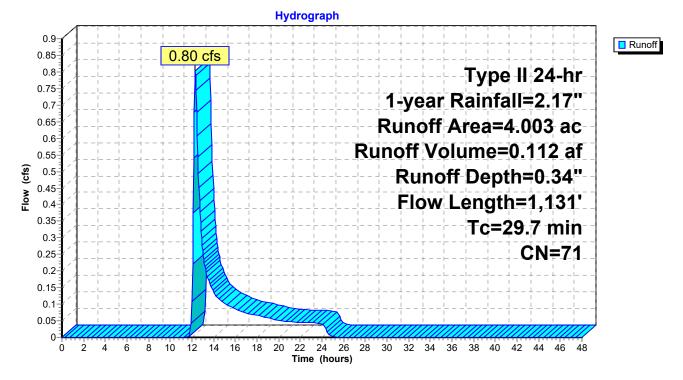
Runoff = 0.80 cfs @ 12.31 hrs, Volume= Routed to Pond 30.1P : 30.1P

0.112 af, Depth= 0.34"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 1-year Rainfall=2.17"

	Area	(ac) C	N Desc	cription						
	4.003 71 Meadow, non-grazed, HSG C									
4.003 100.00% Pervious Area										
(	Tc min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description				
	15.3	100	0.0090	0.11		Sheet Flow,				
	14.4	1,031	0.0290	1.19		Grass: Short n= 0.150 P2= 2.50" <b>Shallow Concentrated Flow,</b> Short Grass Pasture Kv= 7.0 fps				
	29.7	1,131	Total							

#### Subcatchment 30.1S: Sub 30.1



# Summary for Subcatchment 30S: Sub 30

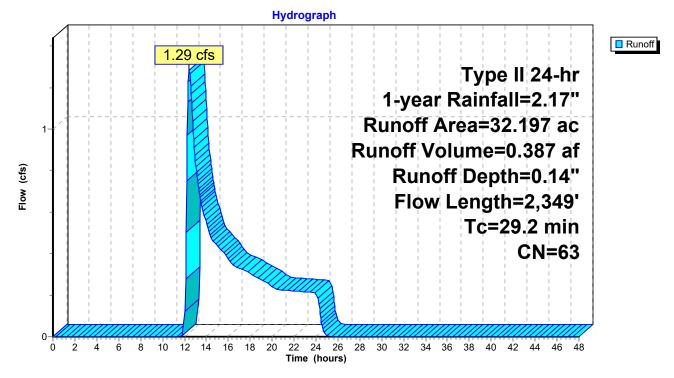
Runoff = 1.29 cfs @ 12.43 hrs, Volume= 0.387 af, Depth= 0.14" Routed to Link SP30 :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 1-year Rainfall=2.17"

Area	(ac) C	N Dese	cription		
0	.214 4	48 Brus	h, Good, H	ISG B	
0	.283 6	65 Brus	h, Good, I	ISG C	
1	.013 9	96 Grav	el surface	, HSG D	
0	.445 9	98 Unco	onnected r	oofs, HSG	D
19	.622 5	58 Mea	dow, non-g	grazed, HS	G B
				grazed, HS	
-				over, Good	
				over, Good	, HSG C
			ds, Good,		
-			ds, Good,		
			ghted Aver		
	.752		2% Pervio		
	.445		% Impervi		
0	.445	100.	00% Unco	nnected	
Та	l e e este	Clana	Valasitu	Consolity	Description
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
				(015)	
11.1	100	0.0200	0.15		Sheet Flow, Grass: Short n= 0.150 P2= 2.50"
3.4	228	0.0260	1.13		Shallow Concentrated Flow,
5.4	220	0.0200	1.15		Short Grass Pasture Kv= 7.0 fps
0.6	171	0.1050	4.86		Shallow Concentrated Flow,
0.0		0.1000	4.00		Grassed Waterway Kv= 15.0 fps
2.8	279	0.0570	1.67		Shallow Concentrated Flow,
2.0	210	0.0010	1.07		Short Grass Pasture Kv= 7.0 fps
6.5	554	0.0410	1.42		Shallow Concentrated Flow,
					Short Grass Pasture Kv= 7.0 fps
4.8	1,017	0.0290	3.52	6.15	Trap/Vee/Rect Channel Flow,
	,				Bot.W=2.00' D=0.50' Z= 3.0 '/' Top.W=5.00'
					n= 0.035 Earth, dense weeds
29.2	2 349	Total			·

29.2 2,349 Total

## Subcatchment 30S: Sub 30



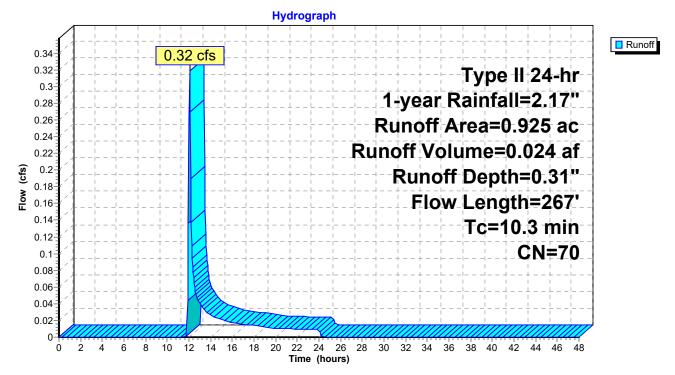
#### Summary for Subcatchment 31.1S: Sub 31.1

Runoff = 0.32 cfs @ 12.05 hrs, Volume= 0.024 af, Depth= 0.31" Routed to Pond 31.1P : 31.1P

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 1-year Rainfall=2.17"

Area	(ac) C	N Desc	cription						
0.047 58 Meadow, non-grazed, HSG B									
0.878 71 Meadow, non-grazed, HSG C									
0.925 70 Weighted Average									
0.	925	100.	00% Pervi	ous Area					
Tc	Length	Slope	Velocity	Capacity	Description				
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)					
9.1	100	0.0330	0.18		Sheet Flow,				
					Grass: Short n= 0.150 P2= 2.50"				
0.9	90	0.0522	1.60		Shallow Concentrated Flow,				
					Short Grass Pasture Kv= 7.0 fps				
0.3	77	0.0130	4.02	20.10	Trap/Vee/Rect Channel Flow,				
					Bot.W=2.00' D=1.00' Z= 3.0 '/' Top.W=8.00'				
					n= 0.030 Earth, grassed & winding				
10.3	267	Total							

#### Subcatchment 31.1S: Sub 31.1



# Summary for Subcatchment 31S: Sub 31

Runoff = 0.71 cfs @ 12.51 hrs, Volume= 0.256 af, Depth= 0.13" Routed to Link SP34 :

Area	(ac) (	N Dese	cription					
0.	029	48 Brus	h, Good, H	ISG B				
14.	311			grazed, HS				
-			Meadow, non-grazed, HSG C					
			ds, Good,					
			ds, Good,					
0.	548	96 Grav	el surface	<u>, HSG D</u>				
			ghted Aver					
24.	402	100.	00% Pervi	ous Area				
_		~		<b>a</b> 14				
Tc	Length	Slope	Velocity	Capacity	Description			
<u>(min)</u>	(feet)	(ft/ft)	(ft/sec)	(cfs)				
8.2	100	0.0420	0.20		Sheet Flow,			
					Grass: Short n= 0.150 P2= 2.50"			
18.9	1,401	0.0310	1.23		Shallow Concentrated Flow,			
					Short Grass Pasture Kv= 7.0 fps			
3.4	853	0.0938	4.18	4.18	,			
					W=3.00' D=0.50' Area=1.0 sf Perim=3.2'			
					n= 0.050 Mountain streams w/large boulders			
30.5	2,354	Total						

Hydrograph Runoff 0.71 cfs 0.75 Type II 24-hr 0.7 0.65 1-year Rainfall=2.17" 0.6 Runoff Area=24.402 ac 0.55 Runoff Volume=0.256 af 0.5 0.45 Flow (cfs) Runoff Depth=0.13" 0.4 Flow Length=2,354' 0.35 Tc=30.5 min 0.3 0.25 CN=62 0.2 0.15 0.1 0.05 0-2 6 8 10 12 14 16 18 20 22 24 26 28 Ó 4 30 32 34 36 38 40 42 44 46 48 Time (hours)

## Subcatchment 31S: Sub 31

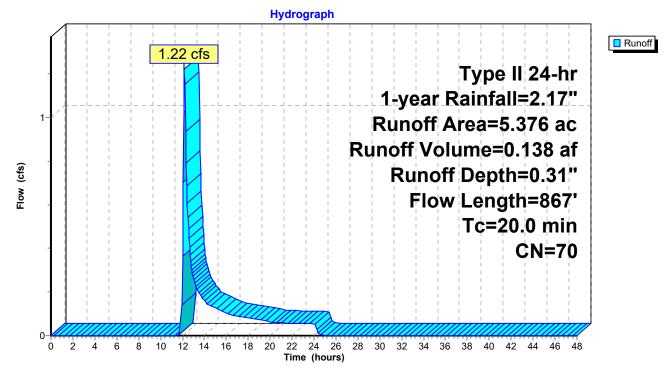
#### Summary for Subcatchment 32.1S: 32.1S

Runoff = 1.22 cfs @ 12.18 hrs, Volume= Routed to Pond 32.1P : 32.1P 0.138 af, Depth= 0.31"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 1-year Rainfall=2.17"

	Area	(ac)	CN De	scription				
*	0.	166	96 Gr					
	0.	888	58 Me	adow, non-	grazed, HS	IG B		
	4.	322	71 Me	adow, non-	grazed, HS	GC		
	5.376 70 Weighted Average							
	5.	376	10	0.00% Pervi	ious Area			
	Tc	Length	Slop	e Velocity	Capacity	Description		
_	(min)	(feet)	) (ft/ft	) (ft/sec)	(cfs)			
	8.0	100	0.045	0.21		Sheet Flow,		
						Grass: Short n= 0.150 P2= 2.50"		
	12.0	767	0.023	0 1.06		Shallow Concentrated Flow,		
						Short Grass Pasture Kv= 7.0 fps		
	20.0	867	Total					

# Subcatchment 32.1S: 32.1S



# Summary for Subcatchment 32S: Sub 32

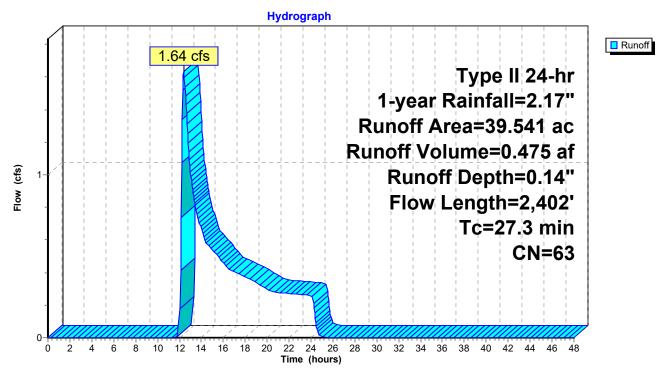
Runoff = 1.64 cfs @ 12.39 hrs, Volume= 0.475 af, Depth= 0.14" Routed to Link SP34 :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 1-year Rainfall=2.17"

	Area	(ac) C	N Desc	cription						
	0.124 48 Brush, Good, HSG B									
	25.962 58 Meadow, non-grazed, HSG B									
	4.042 71 Meadow, non-grazed, HSG C									
	2.796 98 Water Surface, HSG D									
	5.751 55 Woods, Good, HSG B									
_				el surface	•					
				phted Aver						
		745		3% Pervio						
	2.	796	7.07	% Impervi	ous Area					
	т.	1	0	17.1.14.1	0	Description				
	Tc (min)	Length	Slope	Velocity	Capacity	Description				
-	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)					
	9.7	100	0.0280	0.17		Sheet Flow,				
	2.6	160	0.0220	1.04		Grass: Short n= 0.150 P2= 2.50"				
	2.0	100	0.0220	1.04		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps				
	3.6	495	0.1050	2.27		Shallow Concentrated Flow,				
	0.0	-33	0.1000	2.21		Short Grass Pasture Kv= 7.0 fps				
	1.5	74	0.0270	0.82		Shallow Concentrated Flow,				
			0.02.0	0.02		Woodland Kv= 5.0 fps				
	1.9	99	0.0300	0.87		Shallow Concentrated Flow,				
						Woodland $Kv = 5.0 \text{ fps}$				
	6.5	550	0.0800	1.41		Shallow Concentrated Flow,				
						Woodland Kv= 5.0 fps				
	1.5	924	0.0910	10.13	5.27	Trap/Vee/Rect Channel Flow,				
						Bot.W=2.00' D=0.20' Z= 3.0 '/' Top.W=3.20'				
_						n= 0.013 Corrugated PE, smooth interior				
	27.3	2 402	Total							

27.3 2,402 Total

Subcatchment 32S: Sub 32



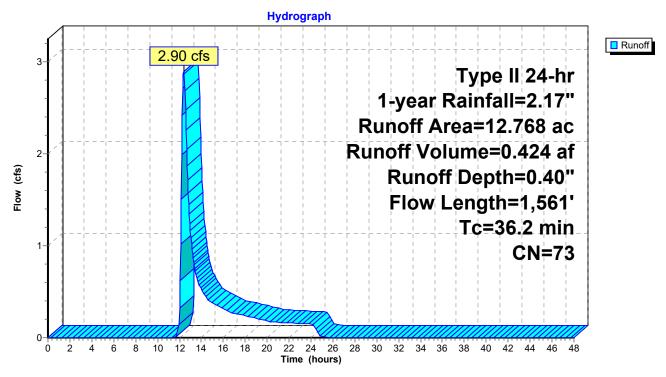
# Summary for Subcatchment 33.1S: 33.1S

[47] Hint: Peak is 143% of capacity of segment #3

2.90 cfs @ 12.39 hrs, Volume= 0.424 af, Depth= 0.40" Runoff = Routed to Pond 33.1P : 33.1P

	Area	(ac)	CN Des	cription							
*		536		Gravel							
	0.787 58 Meadow, non-grazed, HSG B										
	2.948 78 Meadow, non-grazed, HSG D										
*											
		285			grazed, HS	GC					
	0.	032	48 Brus	sh, Good, H	ISG B						
		768		ghted Aver	•						
		588		9% Pervio							
	0.	180	1.41	% Impervi	ous Area						
	т.	المربع مرافات	01	\/_l!t.	0	Description					
	Tc (min)	Length		Velocity (ft/sec)	Capacity (cfs)	Description					
	<u>(min)</u> 15.3	(feet) 100		0.11	(015)	Shoot Flow					
	15.5	100	0.0090	0.11		Sheet Flow, Grass: Short n= 0.150 P2= 2.50"					
	15.9	669	0.0100	0.70		Shallow Concentrated Flow,					
	15.5	003	0.0100	0.70		Short Grass Pasture Kv= 7.0 fps					
	2.5	638	0.0150	4.23	2.03	Trap/Vee/Rect Channel Flow,					
						Bot.W=2.00' D=0.20' Z= 2.0 '/' Top.W=2.80'					
						n= 0.013 Corrugated PE, smooth interior					
	2.5	154	0.0210	1.01		Shallow Concentrated Flow,					
						Short Grass Pasture Kv= 7.0 fps					
	36.2	1,561	Total								

Subcatchment 33.1S: 33.1S

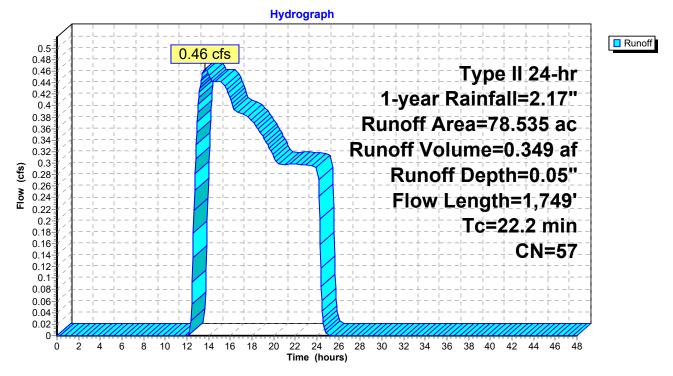


# Summary for Subcatchment 33S: Sub 33

Runoff = 0.46 cfs @ 13.67 hrs, Volume= 0.349 af, Depth= 0.05" Routed to Link SP34 :

Area	(ac) (	CN Des	cription		
0.	383	48 Brus	sh, Good, H	ISG B	
			/el surface		
0.	438		onnected r	D	
45.	013	58 Mea	dow, non-g	grazed, HS	GB
0.	353	71 Mea	dow, non-	grazed, HS	GC
0.	171	78 Mea	dow, non-	grazed, HS	G D
3.	827	61 >75	% Grass co	over, Good	, HSG B
			ds, Good,		
0.	282	70 Woo	ds, Good,	HSG C	
78.	535	57 Wei	ghted Aver	age	
78.	097		4% Pervio		
-	438		% Impervi		
0.	438	100.	00% Unco	nnected	
_		<u>.</u>		<b>a</b> 14	<b>—</b> • • •
Tc	Length		Velocity	Capacity	Description
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
8.9	100	0.0350	0.19		Sheet Flow,
					Grass: Short n= 0.150 P2= 2.50"
5.8	780	0.1010	2.22		Shallow Concentrated Flow,
					Short Grass Pasture Kv= 7.0 fps
3.9	531	0.1059	2.28		Shallow Concentrated Flow,
0.0	000	0 4005	4 50		Short Grass Pasture Kv= 7.0 fps
3.6	338	0.1005	1.59		Shallow Concentrated Flow,
					Woodland Kv= 5.0 fps
22.2	1,749	Total			



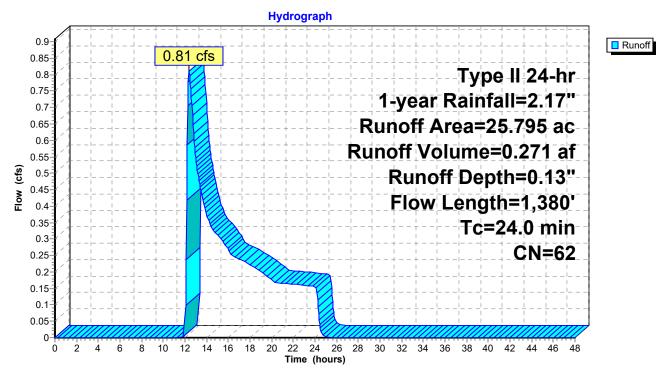


# Summary for Subcatchment 34S: Sub 34

Runoff = 0.81 cfs @ 12.37 hrs, Volume= 0.2 Routed to Pond 34P : VAN EPPS RD CULVERT

0.271 af, Depth= 0.13"

Area	(ac)	CN Des	cription		
	.189		sh, Good, H		
0	.572	96 Grav	/el surface	, HSG D	
0	.299	98 Unc	onnected r	oofs, HSG	D
16	.306			grazed, HS	
3	.458	71 Mea	dow, non-g	grazed, HS	GC
3	.128	61 >75	% Grass co	over, Good	, HSG B
1	.486	74 >75	% Grass co	over, Good	, HSG C
0	.357	55 Woo	ds, Good,	HSG B	
25	.795	62 Weig	ghted Aver	age	
25	.496	98.8	4% Pervio	us Area	
0	.299	1.16	% Impervi	ous Area	
0	.299	100.	00% Unco	nnected	
Tc	5		Velocity	Capacity	Description
(min)	(feet	) (ft/ft)	(ft/sec)	(cfs)	
6.8	100	0.0675	0.24		Sheet Flow,
					Grass: Short n= 0.150 P2= 2.50"
15.5	914	0.0198	0.98		Shallow Concentrated Flow,
					Short Grass Pasture Kv= 7.0 fps
0.2	42	0.0119	2.99	3.66	Pipe Channel,
					15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31'
					n= 0.025 Corrugated metal
1.5	324	0.0552	3.52		Shallow Concentrated Flow,
					Grassed Waterway Kv= 15.0 fps
24.0	1,380	Total			



## Subcatchment 34S: Sub 34

# Summary for Subcatchment 35S: Sub 35

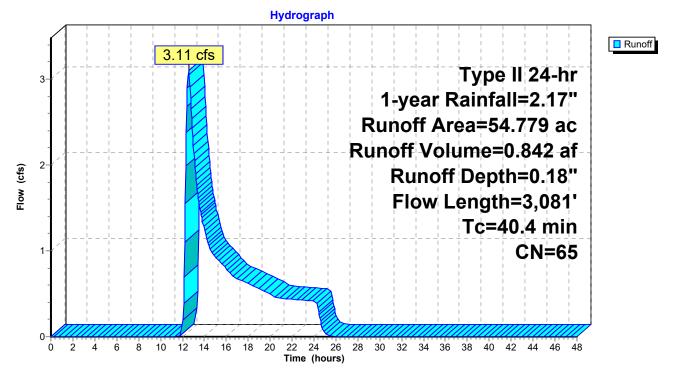
3.11 cfs @ 12.57 hrs, Volume= 0.842 af, Depth= 0.18" Runoff = Routed to Link SP35 :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 1-year Rainfall=2.17"

Are	a (ac)	CI	N Desc	cription		
	0.105	4	8 Brus	h, Good, H	ISG B	
	0.087	6	5 Brus	h, Good, H	ISG C	
	1.101				oofs, HSG	
	4.009				grazed, HS	
	3.901				grazed, HS	
	0.319	6			over, Good	
	1.272				over, Good	, HSG C
	1.962			ds, Good,		
	1.488			ds, Good,		
-	0.535	9		el surface	,	
-	4.779	6		phted Aver	0	
	3.678			9% Pervio		
	1.101			% Impervi		
	1.101		100.0	00% Unco	nnected	
т		**	Clana	Valaaitu	Consoitu	Description
To (min			Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
<u>(11111</u> 8.2			0.0440	0.21	(015)	Shoot Flow
0.		00	0.0440	0.21		Sheet Flow, Grass: Short n= 0.150 P2= 2.50"
6.6	: 3	93	0.0204	1.00		Shallow Concentrated Flow,
0.0	, ,	30	0.0204	1.00		Short Grass Pasture Kv= 7.0 fps
12.3	3 1,1	70	0.0510	1.58		Shallow Concentrated Flow,
12.0	, 1,1	10	0.0010	1.00		Short Grass Pasture Kv= 7.0 fps
5.3	3 2	72	0.0150	0.86		Shallow Concentrated Flow,
0.0		. –	0.0.00	0.00		Short Grass Pasture Kv= 7.0 fps
5.1	4	35	0.0410	1.42		Shallow Concentrated Flow,
						Short Grass Pasture Kv= 7.0 fps
3.0	) 7	11	0.1030	3.93	7.86	Parabolic Channel,
						W=3.00' D=1.00' Area=2.0 sf Perim=3.7'
						n= 0.080 Earth, long dense weeds
40.4	4 30	81	Total			

40.4 3,081 Total

# Subcatchment 35S: Sub 35



#### Summary for Subcatchment 36S: Sub 36

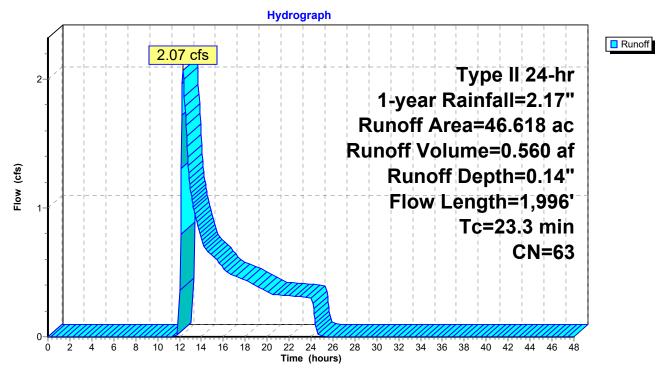
Runoff = 2.07 cfs @ 12.32 hrs, Volume= 0.560 af, Depth= 0.14" Routed to Link SP36 :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 1-year Rainfall=2.17"

	Area	(ac) C	N Dese	cription		
	0.	319 9	96 Grav	el surface	, HSG D	
	3.	277 !			grazed, HS	
	21.	346			grazed, HS	GC
_	21.	<u>676</u>	55 Woo	ds, Good,	HSG B	
	46.618 63 Weighted Average				age	
	46.	618	100.	00% Pervi	ous Area	
	Tc	Length	Slope	Velocity	Capacity	Description
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
	7.4	100	0.0550	0.23		Sheet Flow,
						Grass: Short n= 0.150 P2= 2.50"
	11.7	1,036	0.0442	1.47		Shallow Concentrated Flow,
						Short Grass Pasture Kv= 7.0 fps
	4.2	860	0.1400	3.38	5.91	Trap/Vee/Rect Channel Flow,
						Bot.W=2.00' D=0.50' Z= 3.0 '/' Top.W=5.00'
_						n= 0.080 Earth, long dense weeds
	~~~~	4 000	<b>T</b> ( )			

23.3 1,996 Total

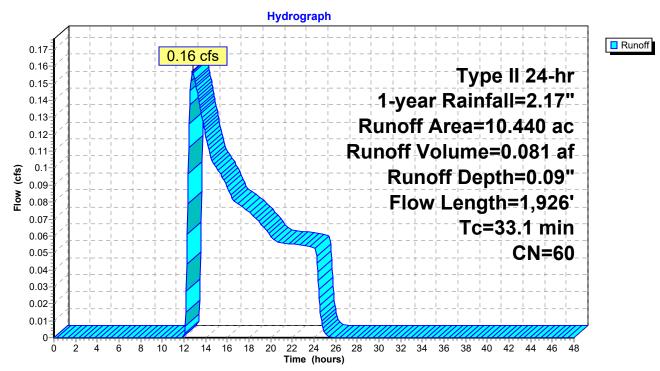
## Subcatchment 36S: Sub 36



## Summary for Subcatchment 37S: Sub 37

Runoff = 0.16 cfs @ 12.80 hrs, Volume= 0.081 af, Depth= 0.09" Routed to Link SP37 :

	Area	(ac) C	N Dese	cription					
					grazed, HS	G B			
	1.	673 క	55 Woo	ds, Good,	HSG B				
*	0.	606 9	98 Impe	ervious					
	10.	440 6	60 Weig	/eighted Average					
	9.	834	94.2	0% Pervio	us Area				
	0.	606	5.80	5.80% Impervious Area					
				·					
	Тс	Length	Slope	Velocity	Capacity	Description			
(	min)	(feet)	(ft/ft)	(ft/sec)	(cfs)				
	19.3	100	0.0050	0.09		Sheet Flow,			
						Grass: Short n= 0.150 P2= 2.50"			
	10.6	1,005	0.0507	1.58		Shallow Concentrated Flow,			
						Short Grass Pasture Kv= 7.0 fps			
	1.0	90	0.0889	1.49		Shallow Concentrated Flow,			
						Woodland Kv= 5.0 fps			
	2.2	731	0.0570	5.59	20.95	Trap/Vee/Rect Channel Flow,			
						Bot.W=6.00' D=0.50' Z= 3.0 '/' Top.W=9.00'			
						n= 0.035 Earth, dense weeds			
:	33.1	1,926	Total						



#### Subcatchment 37S: Sub 37

## Summary for Subcatchment 38S: Sub 38

Runoff = 2.95 cfs @ 12.72 hrs, Volume= 0.973 af, Depth= 0.16" Routed to Link SP38 :

Alea	(ac) C	N Desc	ription			
0.	437 9	6 Grav	el surface	, HSG D		
0.	789 9	8 Unco	onnected r	oofs, HSG	D	
29.	694 5	68 Mea	dow, non-g	grazed, HS	G B	
36.	187 7	1 Mea	dow, non-g	grazed, HS	GC	
3.	907 3	80 Woo	ds, Good,	HSG A		
0.	301 5	5 Woo	ds, Good,	HSG B		
71.	315 6	64 Weig	hted Aver	age		
70.	526	98.8	9% Pervio	us Area		
0.	789		% Impervio			
0.	789	100.	00% Unco	nnected		
_		<b>_</b> .				
Тс	Length	Slope	Velocity	Capacity	Description	
	-			• •	•	
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)		
<u>(min)</u> 7.7	-			• •	Sheet Flow,	
7.7	(feet) 100	(ft/ft) 0.0500	(ft/sec) 0.22	• •	Sheet Flow, Grass: Short n= 0.150 P2= 2.50"	
	(feet)	(ft/ft)	(ft/sec)	• •	Sheet Flow, Grass: Short n= 0.150 P2= 2.50" Shallow Concentrated Flow,	
7.7	(feet) 100 739	(ft/ft) 0.0500 0.0220	(ft/sec) 0.22 1.04	• •	Sheet Flow, Grass: Short n= 0.150 P2= 2.50" Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps	
7.7	(feet) 100	(ft/ft) 0.0500	(ft/sec) 0.22	• •	Sheet Flow, Grass: Short n= 0.150 P2= 2.50" Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps Shallow Concentrated Flow,	
7.7 11.9 6.6	(feet) 100 739 753	(ft/ft) 0.0500 0.0220 0.0744	(ft/sec) 0.22 1.04 1.91	• •	Sheet Flow, Grass: Short n= 0.150 P2= 2.50" Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps	
7.7	(feet) 100 739	(ft/ft) 0.0500 0.0220	(ft/sec) 0.22 1.04	• •	Sheet Flow, Grass: Short n= 0.150 P2= 2.50" Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps Shallow Concentrated Flow,	
7.7 11.9 6.6	(feet) 100 739 753	(ft/ft) 0.0500 0.0220 0.0744	(ft/sec) 0.22 1.04 1.91	• •	Sheet Flow, Grass: Short n= 0.150 P2= 2.50" Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps	

Hydrograph Runoff 2.95 cfs 3-Type II 24-hr 1-year Rainfall=2.17" Runoff Area=71.315 ac Runoff Volume=0.973 af 2 Flow (cfs) Runoff Depth=0.16" Flow Length=3,404' Tc=47.6 min CN=64 1 0-2 4 10 12 14 16 18 20 28 30 32 34 36 38 40 42 44 46 48 6 8 Ó

Subcatchment 38S: Sub 38

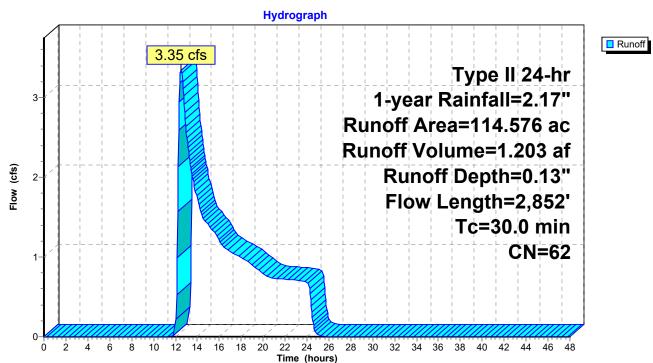
# 22 24 26

Time (hours)

## Summary for Subcatchment 39S: Sub 39

Runoff = 3.35 cfs @ 12.50 hrs, Volume= 1.203 af, Depth= 0.13" Routed to Link SP39 :

Area (	(ac) C	CN Description							
2.544 96 Gravel surface, HSG D									
0.425 98 Unconnected roofs, HSG D									
71.8	899	58 Mea	dow, non-g	grazed, HS	G B				
				grazed, HS					
				grazed, HS	G D				
			er Surface						
			ds, Good,						
			ds, Good,						
			ds, Good,						
114.			ghted Aver						
114.0			1% Pervio						
	557		% Impervi						
0.4	425	76.3	0% Uncon	nected					
Тс	Length	Slope	Velocity	Capacity	Description				
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	Description				
7.1	100	0.0600	0.23	(010)	Sheet Flow,				
7.1	100	0.0000	0.20		Grass: Short n= 0.150 P2= 2.50"				
17.7	2,151	0.0840	2.03		Shallow Concentrated Flow,				
	_,	5.00.0	2.00		Short Grass Pasture Kv= 7.0 fps				
5.2	601	0.1490	1.93		Shallow Concentrated Flow,				
					Woodland Kv= 5.0 fps				
30.0	2,852	Total			· · ·				



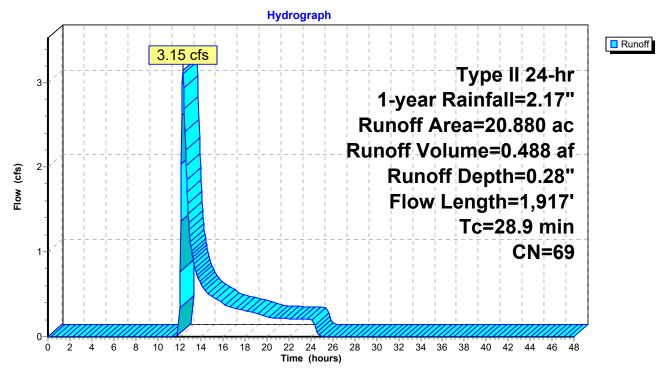
## Subcatchment 39S: Sub 39

## Summary for Subcatchment 40S: Sub 40

Runoff = 3.15 cfs @ 12.32 hrs, Volume= 0.488 af, Depth= 0.28" Routed to Reach 39R :

Area	(ac) C	N Dese	cription				
0.	.016	65 Brus	h, Good, H				
0.							
0.235 96 Gravel surface, HSG D 0.018 98 Unconnected roofs, HSG D							
-				grazed, HS			
				grazed, HS			
				grazed, HS			
-				over, Good	, HSG B		
			er Surface				
			ds, Good,				
			ds, Good,				
			phted Aver				
-	.222		6% Pervio				
	.658		% Impervi				
0.	.018	1.09	% Unconn	ected			
Tc	Length	Slope	Velocity	Capacity	Description		
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	Description		
7.3	100	0.0575	0.23	(00)	Sheet Flow,		
1.5	100	0.0070	0.20		Grass: Short n= 0.150 P2= 2.50"		
2.6	358	0.1089	2.31		Shallow Concentrated Flow,		
2.0	000	0.1000	2.01		Short Grass Pasture Kv= 7.0 fps		
0.4	38	0.1118	1.67		Shallow Concentrated Flow,		
					Woodland Kv= 5.0 fps		
9.8	1,118	0.0733	1.90		Shallow Concentrated Flow,		
-	, -	-	-		Short Grass Pasture Kv= 7.0 fps		
8.8	303	0.0132	0.57		Shallow Concentrated Flow,		
					Woodland Kv= 5.0 fps		
28.9	1,917	Total					

Subcatchment 40S: Sub 40

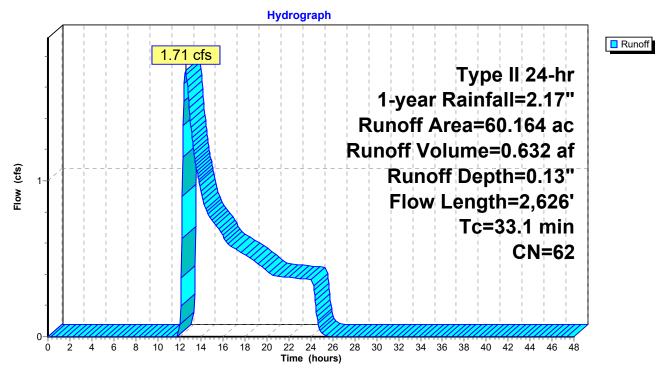


## Summary for Subcatchment 41S: Sub 41

Runoff = 1.71 cfs @ 12.55 hrs, Volume= 0.632 af, Depth= 0.13" Routed to Link SP41 :

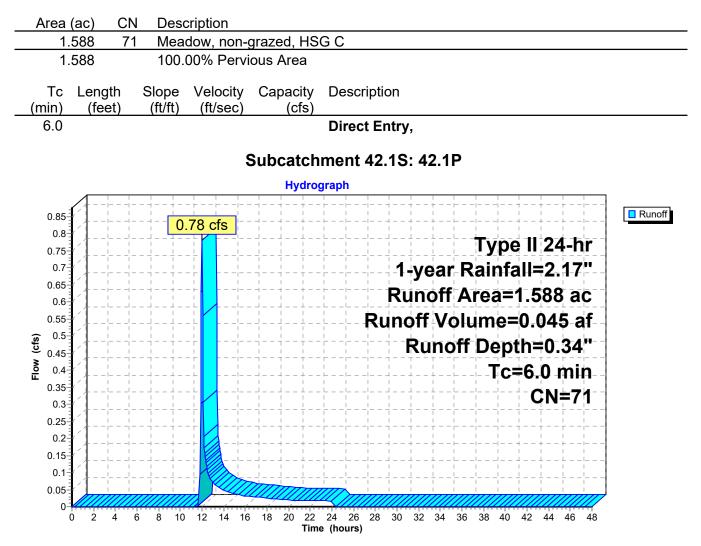
Area	(ac) C	N Dese	Description						
21.630 58 Meadow, non-grazed, HSG B									
8.	8.822 71 Meadow, non-grazed, HSG C								
2.302 78 Meadow, non-grazed, HSG D									
			ds, Good,						
			ds, Good,						
0.	278 9	96 Grav	el surface/	, HSG D					
60.	164 6	62 Weig	ghted Aver	age					
60.	164	100.	00% Pervi	ous Area					
_									
Тс	Length	Slope	Velocity	Capacity	Description				
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)					
13.4	100	0.0125	0.12		Sheet Flow,				
					Grass: Short n= 0.150 P2= 2.50"				
5.0	585	0.0765	1.94		Shallow Concentrated Flow,				
					Short Grass Pasture Kv= 7.0 fps				
7.8	652	0.0395	1.39		Shallow Concentrated Flow,				
					Short Grass Pasture Kv= 7.0 fps				
6.9	1,289	0.0436	3.13		Shallow Concentrated Flow,				
					Grassed Waterway Kv= 15.0 fps				
33.1	2,626	Total							

Subcatchment 41S: Sub 41



#### Summary for Subcatchment 42.1S: 42.1P

Runoff = 0.78 cfs @ 12.00 hrs, Volume= 0.045 af, Depth= 0.34" Routed to Pond 42P : 42P



## Summary for Subcatchment 42.2S: 42.2P

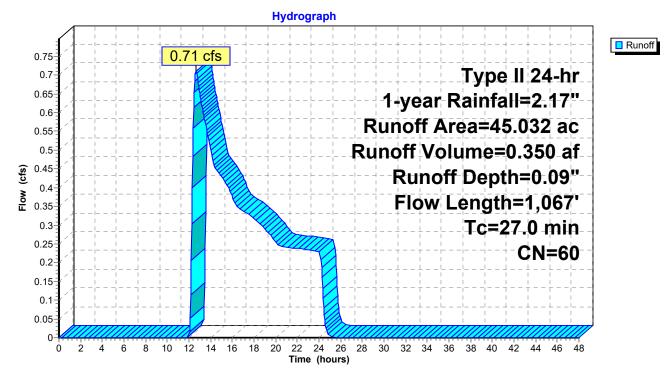
Runoff = 0.87 cfs @ 12.01 hrs, Volume= 0.063 af, Depth= 0.23" Routed to Pond 42P : 42P

Area (ac) CN Description	
0.922 58 Meadow, non-grazed, H	
2.347 71 Meadow, non-grazed, H	ISG C
3.269 67 Weighted Average	
3.269 100.00% Pervious Area	3
Tc Length Slope Velocity Capacit	ty Description
min) (feet) (ft/ft) (ft/sec) (cfs	· ·
6.0	Direct Entry,
Subaat	chment 42.2S: 42.2P
Subcato	chinent 42.25: 42.2P
Hyd	drograph
0.95	
0.93	
0.85	Type II 24-hr
0.8	
0.75	1-year Rainfall=2.17"
0.7	Runoff Area=3.269 ac
0.65	
0.6	Runoff Volume=0.063 af
	Runoff Depth=0.23"
	T P P T T T P P P T T T P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P -
	Tc=6.0 min
	CN=67
0.3	
0.25	
0.2	
0.15	
0.1	
0 2 4 6 8 10 12 14 16 18 20	22 24 26 28 30 32 34 36 38 40 42 44 46 48
	Time (hours)

## Summary for Subcatchment 42S: Sub 42

Runoff = 0.71 cfs @ 12.67 hrs, Volume= 0.350 af, Depth= 0.09" Routed to Link SP42 :

Area	(ac) C	N Dese	cription						
8.	572 5	58 Mea	dow, non-g	grazed, HS	G B				
11.	283 7	71 Mea	Meadow, non-grazed, HSG C						
23.	485 5	55 Woo	Woods, Good, HSG B						
			Woods, Good, HSG C						
0.	499 9	96 Grav	Gravel surface, HSG D						
45.	032 6		ghted Aver						
45.	032	100.	00% Pervi	ous Area					
_									
Tc	Length	Slope	Velocity	Capacity	Description				
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)					
13.4	100	0.0125	0.12		Sheet Flow,				
					Grass: Short n= 0.150 P2= 2.50"				
2.0	140	0.0270	1.15		Shallow Concentrated Flow,				
07	050	0 0000	0.00		Short Grass Pasture Kv= 7.0 fps				
6.7	252	0.0080	0.63		Shallow Concentrated Flow,				
	400	0 0000	4 40		Short Grass Pasture Kv= 7.0 fps				
1.4	103	0.0290	1.19		Shallow Concentrated Flow,				
3.5	472	0.2000	2.24		Short Grass Pasture Kv= 7.0 fps				
3.3	472	0.2000	2.24		Shallow Concentrated Flow, Woodland Kv= 5.0 fps				
07.0	1.007	Tatal							
27.0	1,067	Total							



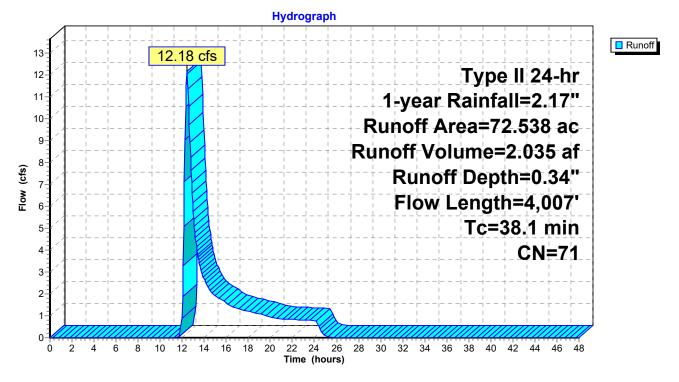
#### Subcatchment 42S: Sub 42

## Summary for Subcatchment 48S: Sub 48

Runoff = 12.18 cfs @ 12.43 hrs, Volume= Routed to Link SP48 : 2.035 af, Depth= 0.34"

	Area	(ac) (	CN Des	cription						
	3.	557	48 Brus	rush, Good, HSG B						
	14.091 65 Brush, Good, HSG C									
	7.	7.459 73 Brush, Good, HSG D								
*	-	649 96 Gravel surface								
*					of and Pav					
					grazed, HS					
					grazed, HS					
	-				grazed, HS					
					over, Good					
	-				over, Good					
					over, Good	, HSG D				
	-			er Surface						
				ods, Good,						
	-			ods, Good, ods, Good,						
		538 737		ghted Aver						
		801		97.52% Pervious Area 2.48% Impervious Area						
		001	2.40							
	Тс	Length	Slope	Velocity	Capacity	Description				
	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)					
	7.0	100		0.24	()	Sheet Flow,				
			5.0020	0.21		Grass: Short n= 0.150 P2= 2.50"				
	22.2	1,935	0.0430	1.45		Shallow Concentrated Flow,				
		.,				Short Grass Pasture Kv= 7.0 fps				
	8.9	1,972	0.0230	3.68	19.31	Trap/Vee/Rect Channel Flow,				
						Bot.W=9.00' D=0.50' Z= 3.0 '/' Top.W=12.00'				
						n= 0.035 Earth, dense weeds				
	38.1	4,007	Total							

#### Subcatchment 48S: Sub 48



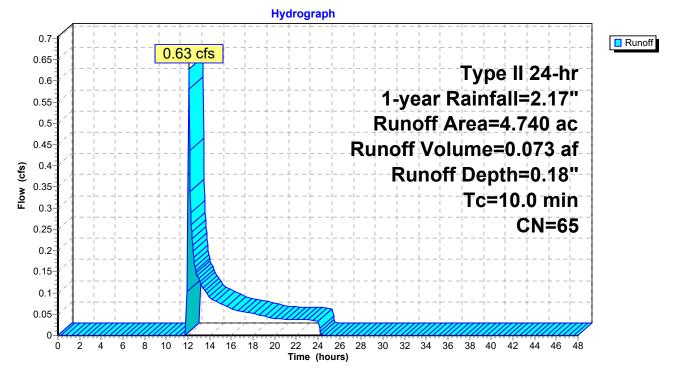
#### Summary for Subcatchment 49.1S: Sub 49.1

Runoff = 0.63 cfs @ 12.07 hrs, Volume= Routed to Pond 49.1P : 49.1P 0.073 af, Depth= 0.18"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 1-year Rainfall=2.17"

	Area	(ac)	CN	Desc	cription		
	0.	971	71	Mea	dow, non-g	grazed, HS	SG C
	1.992 58 Meadow, non-grazed, HSG B						
* 0.322 98 Impervious							
	0.	157	70	Woo	ds, Good,	HSG C	
	0.	095	65	Brus	h, Good, H	ISG C	
	0.	171	48	Brus	h, Good, H	ISG B	
	0.	853	61	>759	% Grass co	over, Good	I, HSG B
	0.	079	74	>75	% Grass co	over, Good	I, HSG C
*	0.	100	96	Grav	/el		
	4.	740	65	Weig	ghted Aver	age	
	4.	418		93.2	1% Pervio	us Area	
	0.	322		6.79	% Impervio	ous Area	
	Тс	Leng	th	Slope	Velocity	Capacity	Description
_	(min)	(fee	et)	(ft/ft)	(ft/sec)	(cfs)	
	10.0						Direct Entry,
							•

## Subcatchment 49.1S: Sub 49.1



## Summary for Subcatchment 49.2S: 49.2S

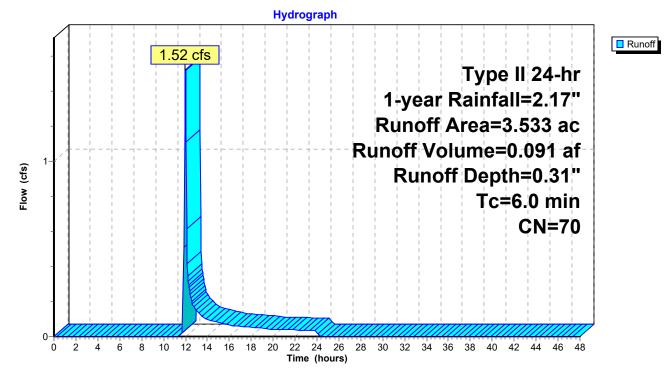
Runoff = 1.52 cfs @ 12.00 hrs, Volume= 0.0 Routed to Pond 49.2P : 49.2S

0.091 af, Depth= 0.31"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 1-year Rainfall=2.17"

	Area	(ac)	CN	Desc	Description							
	0.	083	61	>75%	75% Grass cover, Good, HSG B							
	0.	181	58	Mea	dow, non-g	grazed, HS	SG B					
	3.	264	71	Mea	dow, non-g	grazed, HS	SG C					
*	0.	005	98	Impe	ervious roo	f						
	3.	533	33 70 Weighted Average									
	3.	528		99.8	6% Pervio	us Area						
	0.	005		0.14	% Impervio	ous Area						
	Тс	Length Slope Velocity Capacity Description										
_	(min)	(fee	et)	(ft/ft)	(ft/ft) (ft/sec) (cfs)							
	6.0						Direct Entry,					

#### Subcatchment 49.2S: 49.2S

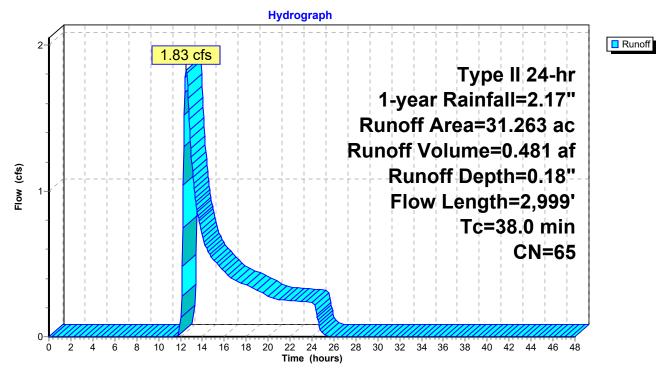


## Summary for Subcatchment 49S: Sub 49

Runoff = 1.83 cfs @ 12.53 hrs, Volume= Routed to Reach 42R : S-NSD-16 0.481 af, Depth= 0.18"

	Area	(ac) (	CN Des	cription		
	1.	236	48 Brus	sh, Good, I	HSG B	
				sh, Good, I		
		025		sh, Good, I		
				vel surface	, HSG D	
*				ervious		
					grazed, HS	
					grazed, HS	
					grazed, HS over, Good	
					over, Good over, Good	
				er Surface	,	,1886
				ods, Good,		
				ods, Good,		
	0.	215	77 Woo	ods, Good,	HSG D	
	31.	263	65 Wei	ghted Avei	age	
		069		88% Pervio		
	0.	194	0.62	2% Impervi	ous Area	
	Тс	Length	Slope	Velocity	Capacity	Description
	(min)	(feet)		(ft/sec)	(cfs)	Decemption
	7.1	100		0.23	()	Sheet Flow,
						Grass: Short n= 0.150 P2= 2.50"
	1.5	240	0.1520	2.73		Shallow Concentrated Flow,
						Short Grass Pasture Kv= 7.0 fps
	3.4	534	0.1367	2.59		Shallow Concentrated Flow,
						Short Grass Pasture Kv= 7.0 fps
	1.8	168	0.0506	1.57		Shallow Concentrated Flow,
	8.2	561	0.0267	1.14		Short Grass Pasture Kv= 7.0 fps Shallow Concentrated Flow,
	0.2	501	0.0207	1.14		Short Grass Pasture Kv= 7.0 fps
	16.0	1,396	0.0434	1.46		Shallow Concentrated Flow,
		.,000	0.0.01			Short Grass Pasture Kv= 7.0 fps
	38.0	2,999	Total			
		,				

Subcatchment 49S: Sub 49



## Summary for Subcatchment 50S: Sub 50

Runoff = 4.44 cfs @ 12.56 hrs, Volume= Routed to Link SP50 : 0.970 af, Depth= 0.25"

Area	(ac) C	N Desc	cription				
0.	0.310 48 Brush, Good, HSG B						
			h, Good, H				
			h, Good, H				
				oofs, HSG			
				grazed, HS			
				grazed, HS			
				grazed, HS	G D		
			er Surface				
			ds, Good,				
			ds, Good,				
			<u>el surface</u>				
-			phted Aver	•			
	199		98.75% Pervious Area				
-	572 163		1.25% Impervious Area 28.50% Unconnected				
0.	105	20.0		necleu			
Тс	Length	Slope	Velocity	Capacity	Description		
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	Decemption		
8.9	100	0.0350	0.19	()	Sheet Flow,		
0.0	100	0.0000	0.10		Grass: Short n= 0.150 P2= 2.50"		
7.4	815	0.0690	1.84		Shallow Concentrated Flow,		
			-		Short Grass Pasture Kv= 7.0 fps		
12.6	86	0.0760	0.11		Sheet Flow,		
					Woods: Light underbrush n= 0.400 P2= 2.50"		
9.7	510	0.0310	0.88		Shallow Concentrated Flow,		
					Woodland Kv= 5.0 fps		
4.9	1,112	0.0320	3.80	5.70	Trap/Vee/Rect Channel Flow,		
					Bot.W=2.00' D=0.50' Z= 2.0 '/' Top.W=4.00'		
					n= 0.035 Earth, dense weeds		
43.5	2,623	Total					

Hydrograph Runoff 4.44 cfs Type II 24-hr 1-year Rainfall=2.17" 4 Runoff Area=45.771 ac Runoff Volume=0.970 af 3 Flow (cfs) Runoff Depth=0.25" Flow Length=2,623' 2-Tc=43.5 min **CN=68** 1 0-2 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 4 6 8 Ó

Time (hours)

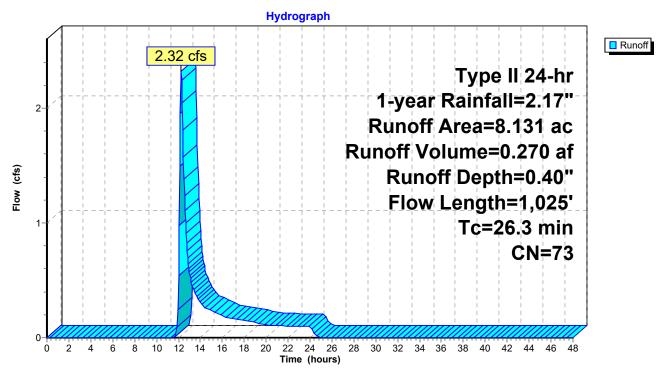
## Subcatchment 50S: Sub 50

## Summary for Subcatchment 51.1S: 51.1S

Runoff = 2.32 cfs @ 12.25 hrs, Volume= 0.270 af, Depth= 0.40" Routed to Pond 51.1P : 51.1P

Area	(ac) C	N Dese	cription					
5.	714	71 Mea	/leadow, non-grazed, HSG C					
0.	046	70 Woo	Voods, Good, HSG C					
0.	397	74 >75	•75% Grass cover, Good, HSG C					
0.	096	65 Brus	h, Good, H	ISG C				
			h, Good, H					
1.	769	78 Mea	dow, non-	grazed, HS	G D			
8.	131	73 Weig	ghted Aver	age				
8.	131	100.	00% Pervi	ous Area				
_		~		<b>•</b> •	<b>—</b> • • •			
Tc	Length	Slope	Velocity	Capacity	Description			
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)				
16.9	100	0.0070	0.10		Sheet Flow,			
					Grass: Short n= 0.150 P2= 2.50"			
5.4	334	0.0220	1.04		Shallow Concentrated Flow,			
					Short Grass Pasture Kv= 7.0 fps			
4.0	591	0.1250	2.47		Shallow Concentrated Flow,			
					Short Grass Pasture Kv= 7.0 fps			
26.3	1,025	Total						

Subcatchment 51.1S: 51.1S

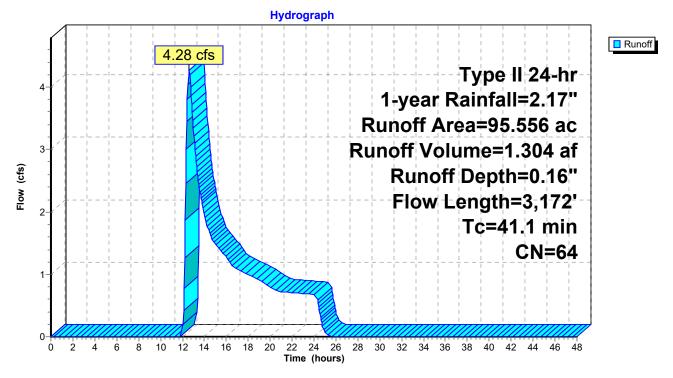


#### Summary for Subcatchment 51S: Sub 51

Runoff = 4.28 cfs @ 12.61 hrs, Volume= Routed to Link SP51 : 1.304 af, Depth= 0.16"

Area (	(ac) C	N Desc	cription				
0.8	0.877 48 Brush, Good, HSG B						
0.	779 6		h, Good, H				
0.1	113 7	73 Brus	h, Good, H	ISG D			
2.0	071 9	96 Grav					
0.729 98 Unconnected roofs, HSG D							
48.2	224 5	58 Mea	dow, non-g	grazed, HS	G B		
33.8		71 Mea	dow, non-g	grazed, HS	GC		
			dow, non-g	grazed, HS	G D		
				over, Good,			
				over, Good,	, HSG C		
			ds, Good,				
			ds, Good,				
0.1	135 7	77 Woo	ds, Good,	HSG D			
95.			ghted Aver				
94.8			4% Pervio				
	729		% Impervi				
0.	729	100.	00% Unco	nnected			
_		-					
	Length	Slope	Velocity	Capacity	Description		
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)			
6.7	100	0.0700	0.25		Sheet Flow,		
					Grass: Short n= 0.150 P2= 2.50"		
0.7	108	0.1300	2.52		Shallow Concentrated Flow,		
<b>.</b>	= 10				Short Grass Pasture Kv= 7.0 fps		
8.4	513	0.0210	1.01		Shallow Concentrated Flow,		
0.0	4.440	0 0000	0.05		Short Grass Pasture Kv= 7.0 fps		
9.3	1,142	0.0860	2.05		Shallow Concentrated Flow,		
0.0	<b>E 40</b>	0.0400	4 50		Short Grass Pasture Kv= 7.0 fps		
6.0	543	0.0460	1.50		Shallow Concentrated Flow,		
0.0	24	0.0500	10.00	15 50	Short Grass Pasture Kv= 7.0 fps		
0.0	34	0.0580	12.68	15.56	Pipe Channel,		
					15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31'		
2.4	162	0.0250	1.11		n= 0.013 Corrugated PE, smooth interior		
2.4	102	0.0250	1.11		Shallow Concentrated Flow,		
0.0	34	0.0580	12.68	15.56	Short Grass Pasture Kv= 7.0 fps Pipe Channel,		
0.0	54	0.0000	12.00	15.50	15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31'		
					n= 0.013 Corrugated PE, smooth interior		
5.3	200	0.0310	1.23		Shallow Concentrated Flow,		
0.0	392	0.0310	1.23		Short Grass Pasture Kv= 7.0 fps		
2.3	1//	0.0420	1.02		Shallow Concentrated Flow,		
2.0	144	0.0420	1.02		Woodland Kv= 5.0 fps		
/1 1	0.470	Total					

## Subcatchment 51S: Sub 51



#### Summary for Subcatchment 52.1S: 52.1S

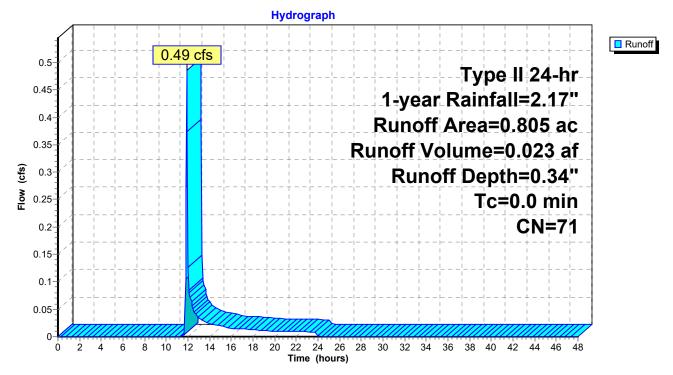
[46] Hint: Tc=0 (Instant runoff peak depends on dt)

Runoff = 0.49 cfs @ 11.91 hrs, Volume= 0.023 af, Depth= 0.34" Routed to Pond 52.1P : 52.1P

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 1-year Rainfall=2.17"

	Area (ac)	CN	Description
	0.805	71	Meadow, non-grazed, HSG C
_	0.805		100.00% Pervious Area

#### Subcatchment 52.1S: 52.1S

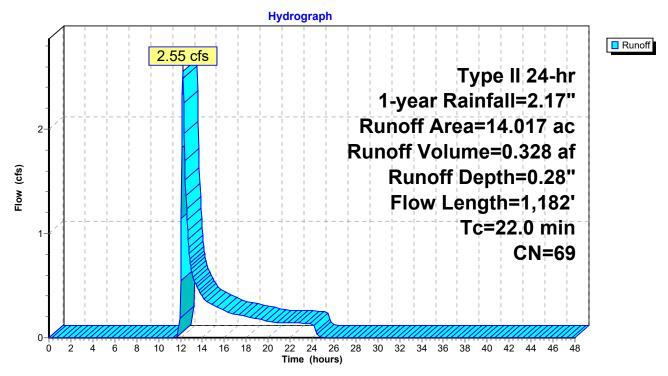


## Summary for Subcatchment 52S: Sub 52

Runoff = 2.55 cfs @ 12.21 hrs, Volume= 0.328 af, Depth= 0.28" Routed to Link SP52 :

	Area	(ac)	CN De	escription							
	0.	561	48 Brush, Good, HSG B								
	0.	166	73 Br	Brush, Good, HSG D							
	1.	1.696 58 Meadow, non-grazed, HSG B									
	9.328 71 Meadow, non-grazed, HSG C										
	0.	646	78 M	eadow, non-	grazed, HS	G D					
	0.	413	98 W	ater Surface	, HSG D						
	0.	321	55 W	oods, Good	, HSG B						
	0.	736	70 W	oods, Good	, HSG C						
	0.	150	96 G	avel surface	e, HSG D						
	14.	017	69 W	eighted Ave	rage						
	13.	604	97	.05% Pervio	ous Area						
	0.	413	2.	95% Imperv	ious Area						
	Тс	Length	Slop	e Velocity	Capacity	Description					
	(min)	(feet)	(ft/f	t) (ft/sec)	(cfs)	· · · · · · · · · · · · · · · · · · ·					
	11.1	100	0.020	0 0.15		Sheet Flow,					
						Grass: Short n= 0.150 P2= 2.50"					
	8.1	993	0.085	0 2.04		Shallow Concentrated Flow,					
						Short Grass Pasture Kv= 7.0 fps					
	2.8	89	0.011	2 0.53		Shallow Concentrated Flow,					
_						Woodland Kv= 5.0 fps					
	22.0	1,182	Total								

Subcatchment 52S: Sub 52

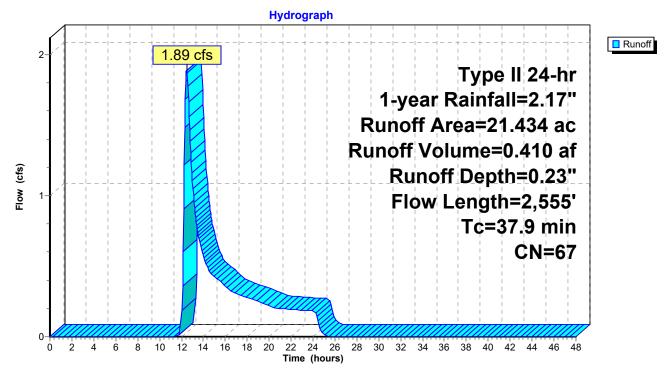


## Summary for Subcatchment 53S: Sub 53

Runoff = 1.89 cfs @ 12.48 hrs, Volume= 0.410 af, Depth= 0.23" Routed to Link SP53 :

Area	(ac) C	N Desc	cription				
1.	1.579 48 Brush, Good, HSG B						
0.	0.985 65 Brush, Good, HSG C						
4.	4.027 58 Meadow, non-grazed, HSG B						
	13.862 71 Meadow, non-grazed, HSG C						
			er Surface,				
			ds, Good,				
0.	345 9	96 Grav	el surface	, HSG D			
21.	434 6		ghted Aver				
	048		0% Pervio				
0.	386	1.80	% Impervi	ous Area			
_				<b>.</b>			
Tc	Length	Slope	Velocity	Capacity	Description		
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)			
14.6	100	0.0100	0.11		Sheet Flow,		
<b>.</b>	o 4 <del>-</del>		0.40		Grass: Short n= 0.150 P2= 2.50"		
2.4	347	0.1210	2.43		Shallow Concentrated Flow,		
0.0	4 - 4	0 4050	0.05		Short Grass Pasture Kv= 7.0 fps		
0.9	151	0.1656	2.85		Shallow Concentrated Flow,		
10.0	4 5 4 4	0 0 2 4 7	4 20		Short Grass Pasture Kv= 7.0 fps		
19.3	1,511	0.0347	1.30		Shallow Concentrated Flow,		
0.7	446	0.2690	11.02	16.53	Short Grass Pasture Kv= 7.0 fps		
0.7	440	0.2090	11.02	10.55	Trap/Vee/Rect Channel Flow, Bot.W=2.00' D=0.50' Z= 2.0 '/' Top.W=4.00'		
					n = 0.035 Earth, dense weeds		
27.0	0 555	Total					
37.9	2,555	Total					

# Subcatchment 53S: Sub 53



## Summary for Subcatchment 54S: Sub 54

Runoff = 5.74 cfs @ 12.47 hrs, Volume= 1.087 af, Depth= 0.28" Routed to Link SP54 :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 1-year Rainfall=2.17"

A	rea (	(ac) C	N Adj	Descript	tion				
	2.193 48			Brush, C	Good, HSG	B			
	4.806 65		Brush, C	Brush, Good, HSG C					
	2.566 98			Unconn	ected roofs	s, HSG D			
	5.3	345 5	8	Meadow	Meadow, non-grazed, HSG B				
	22.8	843 7	'1	Meadow	v, non-graz	ed, HSG C			
	2.3	315 6	51			r, Good, HSG B			
			'4			r, Good, HSG C			
			8		urface, HS				
			5	Woods, Good, HSG B					
			6		surface, HS				
	0.0	<u>)34 7</u>	0	Woods,	Good, HSC	GC			
	46.	515 7	0 69	Weighte	ed Average	, UI Adjusted			
	42.8	893		92.21%	Pervious A	Area			
		622		7.79% Impervious Area					
	2.5	566		70.84% Unconnected					
	Тс	Length	Slope	Velocity	Capacity	Description			
	in)	(feet)	(ft/ft)	(ft/sec)	(cfs)				
7	7.7	100	0.0500	0.22		Sheet Flow,			
						Grass: Short n= 0.150 P2= 2.50"			
2	4.0	375	0.0490	1.55		Shallow Concentrated Flow,			
						Short Grass Pasture Kv= 7.0 fps			
8	3.0	100	0.0450	0.21		Sheet Flow,			
						Grass: Short n= 0.150 P2= 2.50"			
2	3.0	498	0.0350	2.81		Shallow Concentrated Flow,			
						Grassed Waterway Kv= 15.0 fps			
2	2.8	166	0.0390	0.99		Shallow Concentrated Flow,			
						Woodland Kv= 5.0 fps			
	1.9	321	0.0312	2.84		Shallow Concentrated Flow,			
		4 - 0 4		0.04		Unpaved Kv= 16.1 fps			
11	1.4	1,584	0.0230	2.31	7.69				
						W=5.00' D=1.00' Area=3.3 sf Perim=5.5'			
						n= 0.070 Sluggish weedy reaches w/pools			
30	2 2	3 1/1	Total						

38.8 3,144 Total

Hydrograph Runoff 5.74 cfs 6-Type II 24-hr 1-year Rainfall=2.17" 5-Runoff Area=46.515 ac Runoff Volume=1.087 af 4 Flow (cfs) Runoff Depth=0.28" 3-Flow Length=3,144' Tc=38.8 min 2-**UI Adjusted CN=69** 1. 0-2 10 12 14 16 18 20 28 30 32 34 36 38 40 42 44 46 48 4 6 8 Ó

#### Subcatchment 54S: Sub 54

22 24 26

Time (hours)

## Summary for Subcatchment 55S: Sub 55

Runoff = 1.94 cfs @ 12.81 hrs, Volume= 0.544 af, Depth= 0.23" Routed to Link SP55 :

Area	(ac) C	N Desc	cription					
0.	0.418 48 Brush, Good, HSG B							
0.	0.321 65 Brush, Good, HSG C							
0.278 98 Unconnected roofs, HSG D								
	9.179 58 Meadow, non-grazed, HSG B							
	17.061 71 Meadow, non-grazed, HSG C							
			ds, Good,					
			ds, Good,					
6			el surface	,				
			ghted Aver					
	133		2% Pervio					
-	278		% Impervi					
0.	278	100.	00% Unco	nnected				
_				<b>.</b>				
Tc	Length	Slope	Velocity	Capacity	Description			
<u>(min)</u>	(feet)	<u>(ft/ft)</u>	(ft/sec)	(cfs)				
13.2	100	0.0130	0.13		Sheet Flow,			
0.0	000	0 0000	4.04		Grass: Short n= 0.150 P2= 2.50"			
3.0	330	0.0690	1.84		Shallow Concentrated Flow,			
0.4	770	0 0 0 0 0 0	4 20		Short Grass Pasture Kv= 7.0 fps			
9.4	778	0.0390	1.38		Shallow Concentrated Flow,			
13.0	689	0.0160	0.89		Short Grass Pasture Kv= 7.0 fps Shallow Concentrated Flow,			
15.0	009	0.0100	0.09		Short Grass Pasture Kv= 7.0 fps			
4.0	278	0.0280	1.17		Shallow Concentrated Flow,			
4.0	210	0.0200	1.17		Short Grass Pasture Kv= 7.0 fps			
9.0	20	0.0100	0.04		Sheet Flow,			
0.0		0.0100	0.01		Grass: Bermuda n= 0.410 P2= 2.50"			
4.9	80	0.1000	0.27		Sheet Flow,			
-					Grass: Short n= 0.150 P2= 2.50"			
1.2	125	0.0640	1.77		Shallow Concentrated Flow,			
					Short Grass Pasture Kv= 7.0 fps			
57.7	2,400	Total						

Hydrograph Runoff 1.94 cfs 2 Type II 24-hr 1-year Rainfall=2.17" Runoff Area=28.411 ac Runoff Volume=0.544 af Flow (cfs) Runoff Depth=0.23" Flow Length=2,400' Tc=57.7 min **CN=67** 0-2 4 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 ò 6 8

Time (hours)

## Subcatchment 55S: Sub 55

#### Summary for Subcatchment 56.1S: 56.1S

Runoff = 5.66 cfs @ 12.22 hrs, Volume= Routed to Pond 56.1P : 56.1P

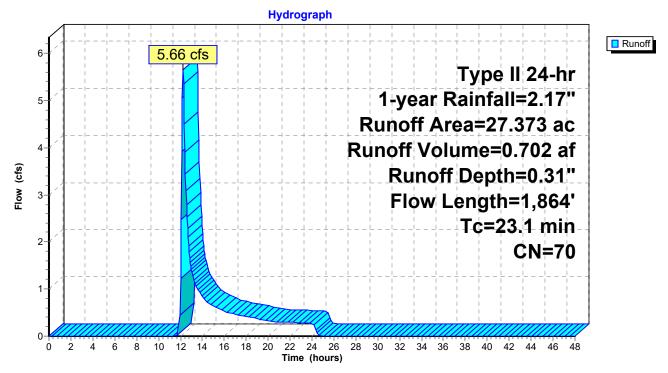
0.702 af, Depth= 0.31"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 1-year Rainfall=2.17"

	Area	(ac) C	N Dese	cription			
	-	169 5	58 Mea	dow, non-g	grazed, HS	G B	
*	0.	806 9	96 Grav	/el			
_	23.	398 7	'1 Mea	dow, non-g	grazed, HS	GC	
	27.	373 7	70 Weig	ghted Aver	age		
	27.	373	100.	00% Pervi	ous Area		
	Tc	Length	Slope	Velocity	Capacity	Description	
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)		
	9.4	100	0.0300	0.18		Sheet Flow,	
						Grass: Short n= 0.150 P2= 2.50"	
	7.7	1,108	0.1160	2.38		Shallow Concentrated Flow,	
						Short Grass Pasture Kv= 7.0 fps	
	6.0	656	0.0670	1.81		Shallow Concentrated Flow,	
_						Short Grass Pasture Kv= 7.0 fps	
	00.4	1 0 0 1	Tatal				

23.1 1,864 Total

## Subcatchment 56.1S: 56.1S



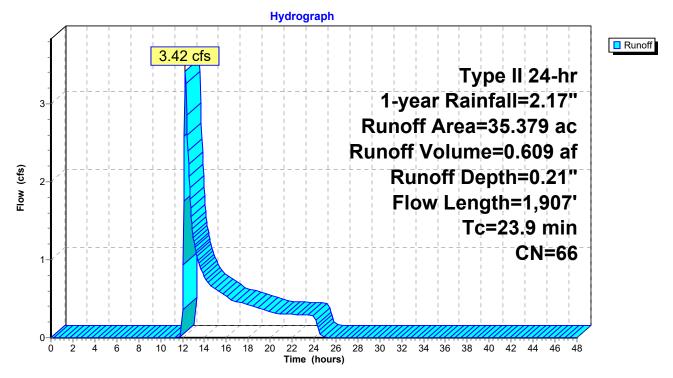
# Summary for Subcatchment 56S: Sub 56

Runoff = 3.42 cfs @ 12.27 hrs, Volume= 0.609 af, Depth= 0.21" Routed to Link SP56 :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 1-year Rainfall=2.17"

Area	(ac) C	N Desc	cription						
0.	895 4	8 Brus	h, Good, H	ISG B					
1.	1.460 65 Brush, Good, HSG C								
	10.196 58 Meadow, non-grazed, HSG B								
				grazed, HS	GC				
			ds, Good,						
			ds, Good,						
			phted Aver	U U					
35.	379	100.	00% Pervi	ous Area					
Та	l e e este	Clana	Valasity	Conceitur	Description				
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description				
8.2		0.0430		(015)	Shoot Flow				
0.2	100	0.0430	0.20		Sheet Flow, Grass: Short n= 0.150 P2= 2.50"				
1.6	139	0.0430	1.45		Shallow Concentrated Flow,				
1.0	100	0.0430	1.45		Short Grass Pasture Kv= 7.0 fps				
2.7	369	0.1030	2.25		Shallow Concentrated Flow,				
	000	0.1000	2.20		Short Grass Pasture Kv= 7.0 fps				
4.4	533	0.0820	2.00		Shallow Concentrated Flow,				
					Short Grass Pasture Kv= 7.0 fps				
0.9	206	0.2900	3.77		Shallow Concentrated Flow,				
					Short Grass Pasture Kv= 7.0 fps				
4.6	468	0.0580	1.69		Shallow Concentrated Flow,				
					Short Grass Pasture Kv= 7.0 fps				
1.5	92	0.0220	1.04		Shallow Concentrated Flow,				
					Short Grass Pasture Kv= 7.0 fps				
23.9	1,907	Total							

#### Subcatchment 56S: Sub 56



# Summary for Reach 33R:

[79] Warning: Submerged Pond 34P Primary device # 1 OUTLET by 0.26'

 Inflow Area =
 25.795 ac, 1.16% Impervious, Inflow Depth =
 0.13" for 1-year event

 Inflow =
 0.81 cfs @
 12.37 hrs, Volume=
 0.271 af

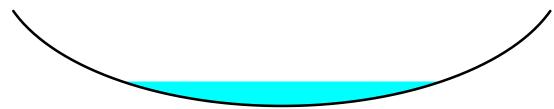
 Outflow =
 0.58 cfs @
 13.38 hrs, Volume=
 0.271 af, Atten= 29%, Lag= 60.1 min

 Routed to Link SP34 :
 13.38 hrs, Volume=
 0.271 af, Atten= 29%, Lag= 60.1 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Max. Velocity= 1.11 fps, Min. Travel Time= 28.2 min Avg. Velocity = 0.42 fps, Avg. Travel Time= 75.1 min

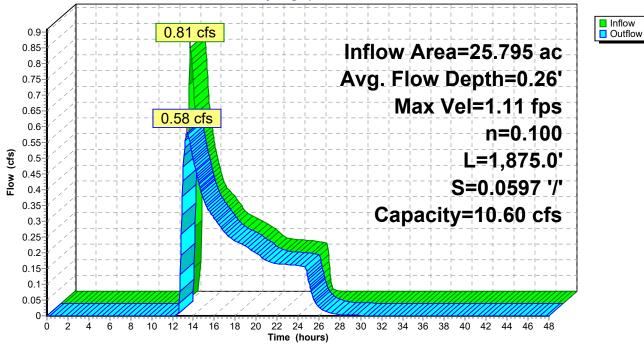
Peak Storage= 980 cf @ 12.91 hrs Average Depth at Peak Storage= 0.26', Surface Width= 3.04' Bank-Full Depth= 1.00' Flow Area= 4.0 sf, Capacity= 10.60 cfs

6.00' x 1.00' deep Parabolic Channel, n= 0.100 Earth, dense brush, high stage Length= 1,875.0' Slope= 0.0597 '/' Inlet Invert= 578.00', Outlet Invert= 466.00'

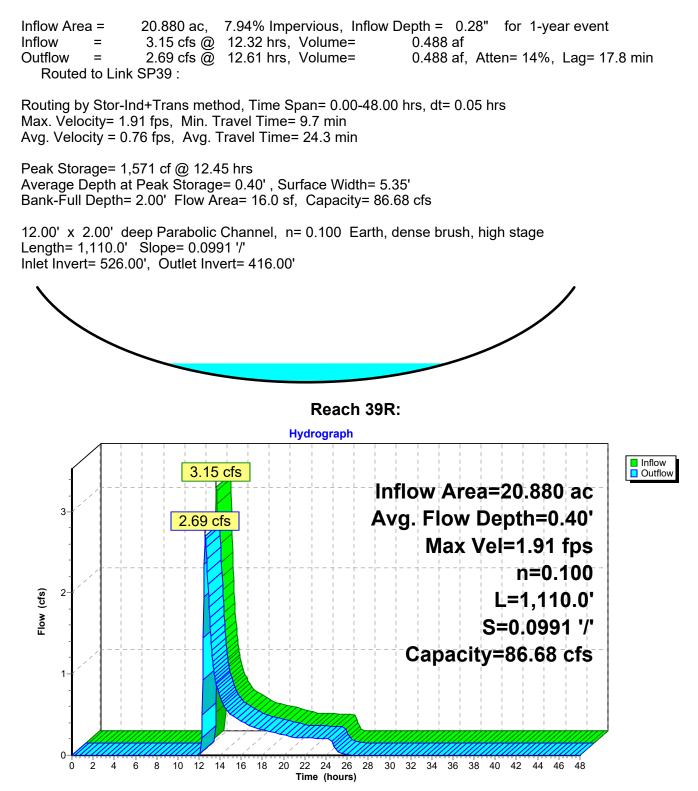


#### Reach 33R:

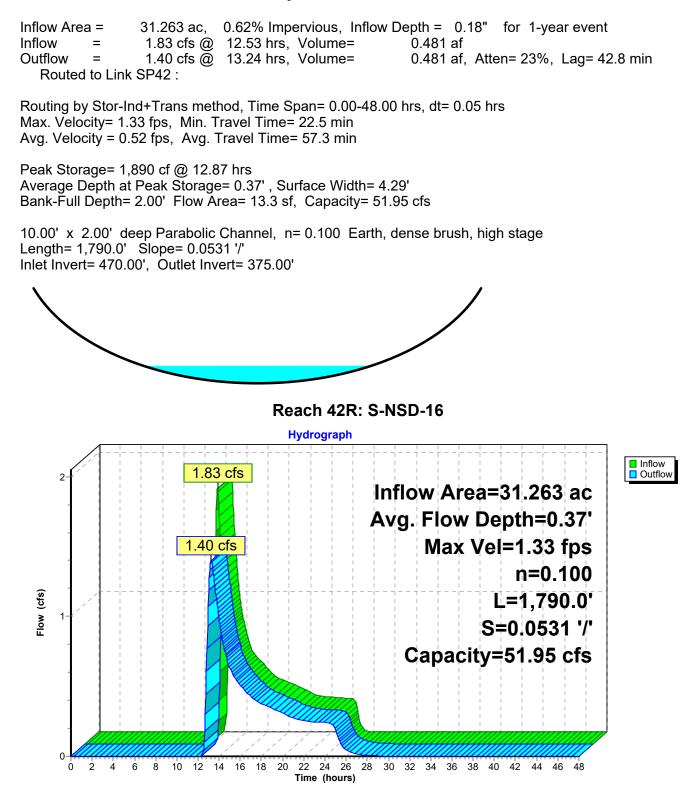
Hydrograph



## Summary for Reach 39R:



#### Summary for Reach 42R: S-NSD-16



#### Summary for Pond 25.1P: 25.1P

Inflow Area = 3.422 ac, 0.00% Impervious, Inflow Depth = 0.31" for 1-year event Inflow 1.05 cfs @ 12.08 hrs, Volume= 0.088 af = 0.00 cfs @ 24.53 hrs, Volume= Outflow = 0.000 af, Atten= 100%, Lag= 747.3 min 0.00 cfs @ 24.53 hrs, Volume= Primary = 0.000 af Routed to Link SP25 : 0.00 hrs, Volume= Secondary = 0.00 cfs @ 0.000 af Routed to Link SP25 :

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 604.67' @ 24.53 hrs Surf.Area= 5,998 sf Storage= 3,824 cf

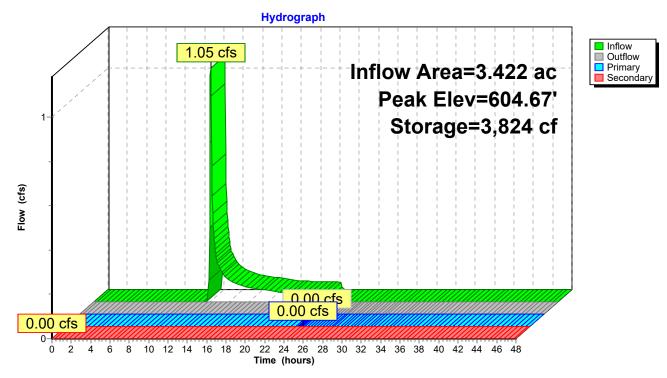
Plug-Flow detention time= 1,343.3 min calculated for 0.000 af (0% of inflow) Center-of-Mass det. time= 1,139.7 min (2,057.4 - 917.7)

Volume	Invert	Avail.Sto	rage Storage	e Description	
#1	604.00'	20,42	22 cf Custom	m Stage Data (Prismatic)Listed below (Recalc)	
Elevatio		ırf.Area	Inc.Store	Cum.Store	
(fee	et)	(sq-ft)	(cubic-feet)	(cubic-feet)	
604.0		5,355	0	0	
605.0		6,309	5,832	5,832	
606.0		7,289	6,799	12,631	
607.0	00	8,293	7,791	20,422	
Davias	Deutine	lun vout			
Device	Routing		Outlet Device		
#1	Primary	604.00'	12.0" Round		
				PP, projecting, no headwall, Ke= 0.900 Invert= 604.00' / 603.50'   S= 0.0250 '/'   Cc= 0.900	
				prrugated PE, smooth interior, Flow Area= 0.79 sf	
#2	Device 1	604.67'		<b>rifice/Grate</b> C= 0.600 Limited to weir flow at low heads	
#2 #3	Device 1 Device 1	606.50'		Orifice/Grate C= 0.600	
#0	Device	000.00		eir flow at low heads	
#4	Secondary	606.50'		- 3.0 '/' SideZ x 4.0' breadth Broad-Crested Rectangular We	eir
	<b>,</b>			0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00	
				3.50 4.00 4.50 5.00 5.50	
			Coef. (English	sh) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66	
			2.68 2.72 2.	2.73 2.76 2.79 2.88 3.07 3.32	
				IW=604.67' (Free Discharge)	
<u>_1=C</u> ι	ilvert (Passe	es 0.00 cfs of	1.24 cfs potent	itial flow)	

**1**-2=Orifice/Grate (Orifice Controls 0.00 cfs @ 0.21 fps)

-3=Orifice/Grate (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=604.00' (Free Discharge) 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs) Pond 25.1P: 25.1P



## Summary for Pond 27.1P: 27.1P

Inflow Area = 3.749 ac, 0.00% Impervious, Inflow Depth = 0.34" for 1-year event Inflow 1.22 cfs @ 12.10 hrs. Volume= 0.105 af = 0.00 cfs @ 0.00 hrs, Volume= Outflow = 0.000 af, Atten= 100%, Lag= 0.0 min 0.00 hrs, Volume= Primary = 0.00 cfs @ 0.000 af Routed to Link SP27 : 0.00 hrs, Volume= Secondary = 0.00 cfs @ 0.000 af Routed to Link SP27 :

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 551.57' @ 24.90 hrs Surf.Area= 3,339 sf Storage= 4,582 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow) Center-of-Mass det. time= (not calculated: no outflow)

Volume	Invert	Avail.Sto	rage Storage	e Description
#1	550.00'	14,36	60 cf Custon	n Stage Data (Prismatic)Listed below (Recalc)
<b>Flavesti</b>			la e Otene	Ourse Otherse
Elevatio		rf.Area	Inc.Store	Cum.Store
(fee	1	(sq-ft)	(cubic-feet)	(cubic-feet)
550.0		2,458	0	0
551.0		3,040	2,749	2,749
552.0		3,560	3,300	6,049
553.0		4,149	3,855	9,904
554.0	00	4,763	4,456	14,360
Device	Routing	Invert	Outlet Device	es
#1	Primary	550.00'	18.0" Round	d Culvert
			L= 40.0' CP	PP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet	Invert= 550.00' / 549.50' S= 0.0125 '/' Cc= 0.900
			n= 0.013 Co	prrugated PE, smooth interior, Flow Area= 1.77 sf
#2	Device 1	552.84'	4.0" Vert. Or	rifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	553.50'	48.0" Horiz.	Orifice/Grate C= 0.600
			Limited to we	eir flow at low heads
#4	Secondary	553.50'	10.0' long +	3.0 '/' SideZ x 4.0' breadth Broad-Crested Rectangular Weir
			Head (feet) (	0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00
			2.50 3.00 3.	.50 4.00 4.50 5.00 5.50
			Coef. (Englisl	h) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66
			2.68 2.72 2.	.73 2.76 2.79 2.88 3.07 3.32

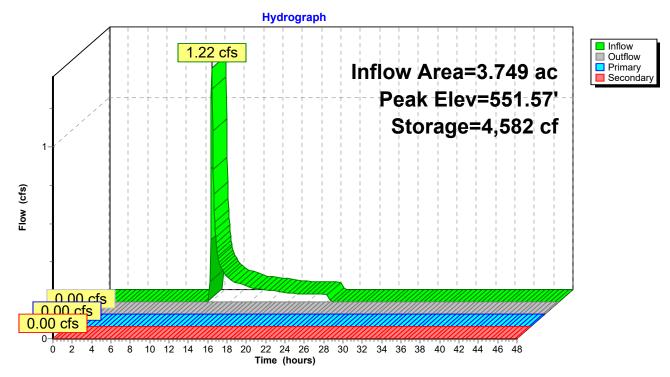
Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=550.00' (Free Discharge)

-1=Culvert (Controls 0.00 cfs)

-2=Orifice/Grate (Controls 0.00 cfs)

**--3=Orifice/Grate** (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=550.00' (Free Discharge) 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs) Pond 27.1P: 27.1P



#### Summary for Pond 28.1P: 28.1P

Inflow Area = 2.160 ac, 0.00% Impervious, Inflow Depth = 0.34" for 1-year event Inflow 0.79 cfs @ 12.07 hrs. Volume= 0.061 af = 0.00 cfs @ 0.00 hrs, Volume= Outflow = 0.000 af, Atten= 100%, Lag= 0.0 min 0.00 hrs, Volume= Primary = 0.00 cfs @ 0.000 af Routed to Link SP28 : 0.00 hrs, Volume= 0.000 af Secondary = 0.00 cfs @ Routed to Link SP28 :

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 558.71' @ 24.70 hrs Surf.Area= 3,916 sf Storage= 2,640 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow) Center-of-Mass det. time= (not calculated: no outflow)

Volume	Invert	Avail.Sto	rage Storage	Description				
#1	558.00'			n Stage Data (Prismatic)Listed below (Recalc)				
		- ,		( )				
Elevatio	on Su	ırf.Area	Inc.Store	Cum.Store				
(fee	et)	(sq-ft)	(cubic-feet)	(cubic-feet)				
558.0	00	3,511	0	0				
559.0		4,080	3,796	3,796				
560.0		4,671	4,376	8,171				
561.0	00	5,288	4,980	13,151				
Device	Routing	Invert	Outlet Device	es				
#1	Primary	558.00'	12.0" Round	d Culvert				
	,		L= 22.0' CP	P, projecting, no headwall, Ke= 0.900				
				Invert= 558.00' / 557.75' S= 0.0114 '/' Cc= 0.900				
				rrugated PE, smooth interior, Flow Area= 0.79 sf				
#2	Device 1	559.50'		ifice/Grate C= 0.600 Limited to weir flow at low heads				
#3	Device 1	560.50'		Orifice/Grate C= 0.600				
	<b>_</b> .			ir flow at low heads				
#4	Secondary	560.50'		3.0 '/' SideZ x 4.0' breadth Broad-Crested Rectangular Weir				
				0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00				
				50 4.00 4.50 5.00 5.50				
				h) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66				
			2.08 2.72 2.	73 2.76 2.79 2.88 3.07 3.32				
	Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=558.00' (Free Discharge)							

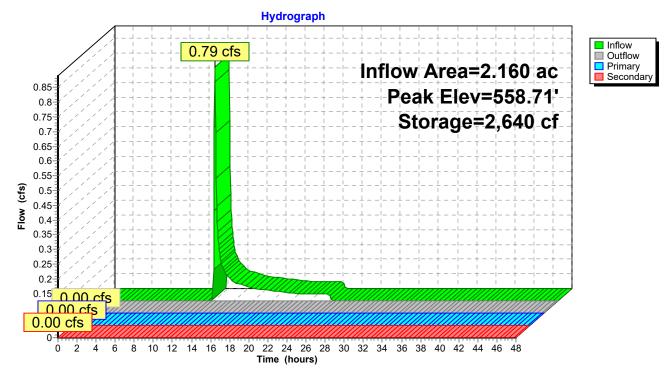
-1=Culvert (Controls 0.00 cfs)

-2=Orifice/Grate (Controls 0.00 cfs)

-2=Orifice/Grate (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=558.00' (Free Discharge) 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 28.1P: 28.1P



# Summary for Pond 30.1P: 30.1P

Inflow Area = 4.003 ac, 0.00% Impervious, Inflow Depth = 0.34" for 1-year event 0.80 cfs @ 12.31 hrs, Volume= Inflow = 0.112 af 0.01 cfs @ 24.52 hrs, Volume= 0.040 af, Atten= 98%, Lag= 732.2 min Outflow = 0.01 cfs @ 24.52 hrs, Volume= Discarded = 0.040 af Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af Routed to Link SP30 : 0.00 hrs, Volume= Secondary = 0.00 cfs @ 0.000 af Routed to Link SP30 :

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 460.00' @ 24.52 hrs Surf.Area= 4,563 sf Storage= 4,290 cf

Plug-Flow detention time= 1,058.4 min calculated for 0.040 af (35% of inflow) Center-of-Mass det. time= 877.8 min (1,805.4 - 927.6)

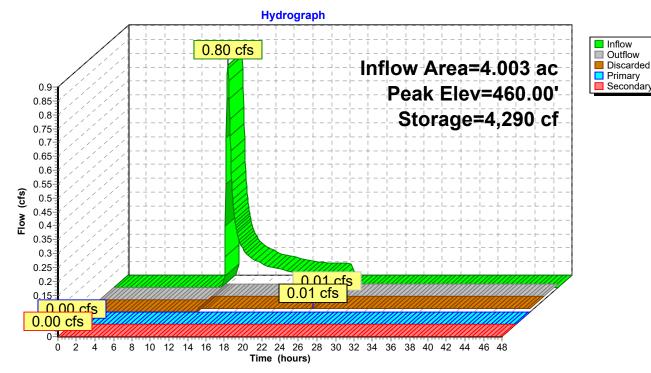
Volume	Invert	Avail.Sto	rage Storage	e Description
#1	459.00'	20,70	02 cf Custom	m Stage Data (Prismatic)Listed below (Recalc)
Elevatio			In a Starra	Curre Store
Elevatio		Irf.Area	Inc.Store	Cum.Store
(fee	/	(sq-ft)	(cubic-feet)	(cubic-feet)
459.0	-	3,996	0	0
460.0		4,562	4,279	4,279
461.0		5,153	4,858	9,137
462.0		5,770	5,462	14,598
463.0	00	6,437	6,104	20,702
D	Desting			
Device	Routing	Invert	• • • • • • • • • • • • •	
#1	Primary	459.00'	24.0" Round	
				PP, projecting, no headwall, Ke= 0.900
				Invert= 459.00' / 458.50' S= 0.0208 '/' Cc= 0.900
				prrugated PE, smooth interior, Flow Area= 3.14 sf
#2	Device 1	461.00'		Drifice/Grate C= 0.600
			Limited to we	eir flow at low heads
#3	Device 1	462.50'	48.0" Horiz.	Orifice/Grate C= 0.600
				eir flow at low heads
#4	Secondary	462.50'		- 3.0 '/' SideZ x 4.0' breadth Broad-Crested Rectangular Weir
			Head (feet) (	0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00
			2.50 3.00 3.	.50 4.00 4.50 5.00 5.50
			Coef. (Englisl	sh) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66
			2.68 2.72 2.	.73 2.76 2.79 2.88 3.07 3.32
#5	Discarded	459.00'	0.129 in/hr E	Exfiltration over Surface area

**Discarded OutFlow** Max=0.01 cfs @ 24.52 hrs HW=460.00' (Free Discharge) **5=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=459.00' (Free Discharge) 1=Culvert (Controls 0.00 cfs) 2=Orifice/Grate (Controls 0.00 cfs) 3=Orifice/Grate (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=459.00' (Free Discharge)

-4=Broad-Crested Rectangular Weir ( Controls 0.00 cfs)



Pond 30.1P: 30.1P

## Summary for Pond 31.1P: 31.1P

Inflow Area = 0.925 ac, 0.00% Impervious, Inflow Depth = 0.31" for 1-year event Inflow 0.32 cfs @ 12.05 hrs. Volume= 0.024 af = 0.02 cfs @ 16.70 hrs, Volume= Outflow = 0.024 af, Atten= 95%, Lag= 278.7 min 16.70 hrs, Volume= Discarded = 0.02 cfs @ 0.024 af 0.00 hrs, Volume= Primary 0.00 cfs @ 0.000 af = Routed to Link SP34 : Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af Routed to Link SP34 :

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 510.12' @ 16.70 hrs Surf.Area= 3,826 sf Storage= 460 cf

Plug-Flow detention time= 355.6 min calculated for 0.024 af (100% of inflow) Center-of-Mass det. time= 355.4 min (1,271.1 - 915.8)

Volume	Invert	Avail.Sto	rage Storage [	Description
#1	510.00'	14,18	B7 cf Custom	Stage Data (Prismatic)Listed below (Recalc)
<b>-</b> 1		5. A.		0
Elevatio		Irf.Area	Inc.Store	Cum.Store
(fee		<u>(sq-ft)</u>	(cubic-feet)	(cubic-feet)
510.0		3,748	0	0
511.0		4,388	4,068	4,068
512.0		5,053	4,721	8,789
513.0	0	5,744	5,399	14,187
Device	Deviting	luo via uti	Outlat Daviasa	
Device	Routing	Invert	Outlet Devices	
#1	Primary	510.00'	12.0" Round	
				P, projecting, no headwall, Ke= 0.900
				nvert= 510.00' / 509.50' S= 0.0100 '/' Cc= 0.900
				rugated PE, smooth interior, Flow Area= 0.79 sf
#2	Device 1	512.50'		Drifice/Grate C= 0.600
				r flow at low heads
#3	Secondary	512.50'		3.0 '/' SideZ x 4.0' breadth Broad-Crested Rectangular Weir
				.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00
				50 4.00 4.50 5.00 5.50
				) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66
				73 2.76 2.79 2.88 3.07 3.32
#4	Discarded	510.00'	0.179 in/hr Ex	cfiltration over Surface area

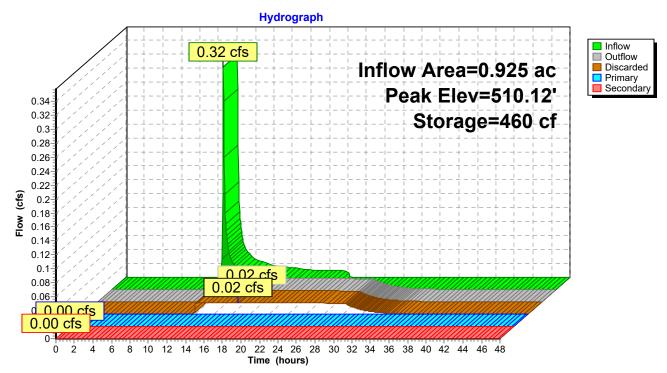
**Discarded OutFlow** Max=0.02 cfs @ 16.70 hrs HW=510.12' (Free Discharge) **4=Exfiltration** (Exfiltration Controls 0.02 cfs)

**Primary OutFlow** Max=0.00 cfs @ 0.00 hrs HW=510.00' (Free Discharge)

-1=Culvert (Controls 0.00 cfs)

**2=Orifice/Grate** (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=510.00' (Free Discharge) —3=Broad-Crested Rectangular Weir (Controls 0.00 cfs) Pond 31.1P: 31.1P



## Summary for Pond 32.1P: 32.1P

Inflow Area = 5.376 ac, 0.00% Impervious, Inflow Depth = 0.31" for 1-year event Inflow 1.22 cfs @ 12.18 hrs. Volume= 0.138 af = 0.00 cfs @ 0.00 hrs, Volume= Outflow = 0.000 af, Atten= 100%, Lag= 0.0 min 0.00 hrs, Volume= Primary = 0.00 cfs @ 0.000 af Routed to Link SP34 : 0.00 hrs, Volume= Secondary = 0.00 cfs @ 0.000 af Routed to Link SP34 :

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 552.53' @ 25.15 hrs Surf.Area= 11,564 sf Storage= 6,008 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow) Center-of-Mass det. time= (not calculated: no outflow)

Volume	Invert	Avail.Sto	rage Storage	e Description
#1	552.00'	52,98	39 cf Custon	m Stage Data (Prismatic)Listed below (Recalc)
	-	<i>с</i> ,		
Elevatio		urf.Area	Inc.Store	Cum.Store
(fee	1	(sq-ft)	(cubic-feet)	(cubic-feet)
552.0		10,968	0	0
553.0		12,086	11,527	11,527
554.0	00	13,228	12,657	24,184
555.0		14,396	13,812	37,996
556.0	00	15,589	14,993	52,989
<b>_</b> .				
Device	Routing	Invert	Outlet Device	
#1	Primary	552.00'	12.0" Round	d Culvert
				PP, projecting, no headwall, Ke= 0.900
				Invert= 552.00' / 551.75' S= 0.0100 '/' Cc= 0.900
				prrugated PE, smooth interior, Flow Area= 0.79 sf
#2	Device 1	553.00'		rifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	555.50'	48.0" Horiz.	Orifice/Grate C= 0.600
				eir flow at low heads
#4	Secondary	555.50'		- 3.0 '/' SideZ x 4.0' breadth Broad-Crested Rectangular Weir
				0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00
			2.50 3.00 3.	5.50 4.00 4.50 5.00 5.50
			Coef. (Englis	sh) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66
			2.68 2.72 2.	.73 2.76 2.79 2.88 3.07 3.32

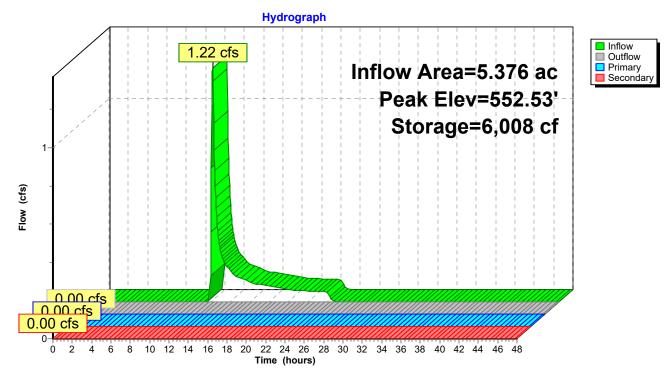
Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=552.00' (Free Discharge)

-1=Culvert (Controls 0.00 cfs)

-2=Orifice/Grate (Controls 0.00 cfs)

**3=Orifice/Grate** (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=552.00' (Free Discharge) 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs) Pond 32.1P: 32.1P



#### Summary for Pond 33.1P: 33.1P

Inflow Area = 12.768 ac, 1.41% Impervious, Inflow Depth = 0.40" for 1-year event Inflow = 2.90 cfs @ 12.39 hrs, Volume= 0.424 af 0.03 cfs @ 24.73 hrs, Volume= 0.042 af, Atten= 99%, Lag= 740.5 min Outflow = 0.03 cfs @ 24.73 hrs, Volume= Primary = 0.042 af Routed to Link SP34 : 0.00 cfs @ 0.00 hrs, Volume= 0.000 af Secondary = Routed to Link SP34 :

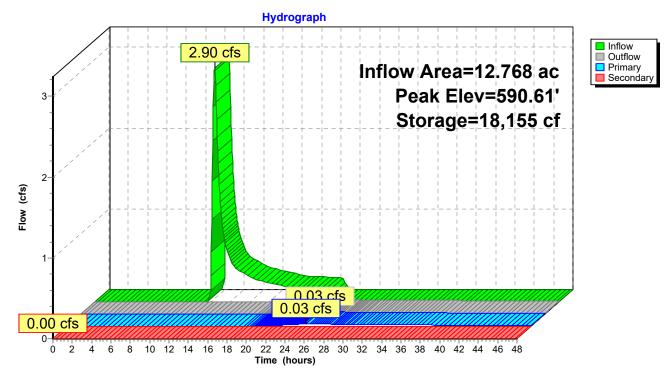
Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 590.61' @ 24.73 hrs Surf.Area= 30,088 sf Storage= 18,155 cf

Plug-Flow detention time= 1,213.0 min calculated for 0.042 af (10% of inflow) Center-of-Mass det. time= 1,023.6 min (1,945.9 - 922.3)

Volume	Invert	Avail.Sto	rage Storage	Description			
#1	590.00'	130,28	B5 cf Custom	n Stage Data (Pr	<b>ismatic)</b> Listed below (Recalc)		
Elevatio (fee		urf.Area	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)			
<u>`</u>	1	(sq-ft)					
590.0		29,006	0 0				
591.0		30,767	29,887	29,887			
592.0		32,552	31,660	61,546			
593.0		34,363	33,458	95,004			
594.0	0	36,199	35,281	130,285			
Device	Routing	Invert	Outlet Device	S			
#1	Primary	590.00'	12.0" Round	I Culvert			
	2		L= 30.0' CPI	P, projecting, no	headwall, Ke= 0.900		
					589.75' S= 0.0083 '/' Cc= 0.900		
			n= 0.013 Cor	rrugated PE, sm	ooth interior, Flow Area= 0.79 sf		
#2	Device 1	590.50'	4.0" Vert. Ori	ifice/Grate C=	0.600 Limited to weir flow at low heads		
#3	Device 1	593.50'	48.0" Horiz. (	Orifice/Grate	C= 0.600		
			Limited to we	ir flow at low hea	ads		
#4	Secondary	593.50'	Head (feet) 0 2.50 3.00 3.4 Coef. (English	Limited to weir flow at low heads <b>10.0' long + 3.0 '/' SideZ x 4.0' breadth Broad-Crested Rectangular We</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66 2.68 2.72 2.73 2.76 2.79 2.88 3.07 3.32			
1=Cul	Primary OutFlow Max=0.03 cfs @ 24.73 hrs HW=590.61' (Free Discharge) 1=Culvert (Passes 0.03 cfs of 1.06 cfs potential flow) 2=Orifice/Grate (Orifice Controls 0.03 cfs @ 1.15 fps) -3=Orifice/Grate ( Controls 0.00 cfs)						
Seconda	ary OutFlow		fs @ 0.00 hrs I	HW=590.00' (F	ree Discharge)		

**4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 33.1P: 33.1P



#### Summary for Pond 34P: VAN EPPS RD CULVERT

Inflow Area = 25.795 ac. 1.16% Impervious, Inflow Depth = 0.13" for 1-year event Inflow 0.81 cfs @ 12.37 hrs, Volume= 0.271 af = 0.81 cfs @ 12.37 hrs, Volume= Outflow = 0.271 af, Atten= 0%, Lag= 0.3 min 0.81 cfs @ 12.37 hrs, Volume= Primary = 0.271 af Routed to Reach 33R : 0.00 hrs, Volume= 0.000 af Secondary = 0.00 cfs @ Routed to Reach 33R :

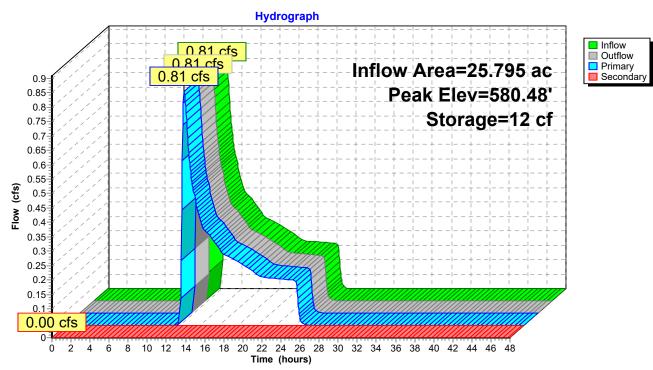
Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 580.48' @ 12.37 hrs Surf.Area= 66 sf Storage= 12 cf

Plug-Flow detention time= 0.2 min calculated for 0.271 af (100% of inflow) Center-of-Mass det. time= 0.2 min (998.8 - 998.6)

Volume	Invert	: Avail.	Storage	Storage Description					
#1	580.00'	32	2,769 cf	Custom Stage Da	<b>ata (Irregular)</b> Liste	ed below (Recalc)			
Elevatio		urf.Area	Perim.	Inc.Store	Cum.Store	Wet.Area			
(fee	1	(sq-ft)	(feet)	(cubic-feet)	(cubic-feet)	(sq-ft)			
580.0		1	5.0	0	0	1			
582.0	00	935	220.0	644	644	3,857			
584.0	00	6,900	505.0	6,917	7,561	20,316			
585.0	00	12,860	515.0	9,727	17,288	21,274			
586.0	00	18,260	645.0	15,481	32,769	33,289			
Device	Routing	Inve	ert Outle	et Devices					
#1	Primary	580.0	0' <b>15.0</b>	" Round Culvert					
	,, <b>,</b>		L= 7	9.0' CPP, projecti			000		
				Inlet / Outlet Invert= 580.00' / 578.00' S= 0.0253 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf					
40	0								
#2	Secondary	585.0		' long + 3.0 '/' Side			kectangular weir		
				d (feet) 0.20 0.40					
			Coe	f. (English) 2.68 2	.10 2.10 2.64 2.6	03 2.04 2.04 2.03			
						、 、			

Primary OutFlow Max=0.81 cfs @ 12.37 hrs HW=580.48' (Free Discharge) ←1=Culvert (Inlet Controls 0.81 cfs @ 1.86 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=580.00' (Free Discharge) 2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)



#### Pond 34P: VAN EPPS RD CULVERT

#### Summary for Pond 42P: 42P

Inflow Area = 4.857 ac, 0.00% Impervious, Inflow Depth = 0.26" for 1-year event Inflow 1.64 cfs @ 12.00 hrs. Volume= 0.107 af = 0.00 cfs @ 0.00 hrs, Volume= Outflow = 0.000 af, Atten= 100%, Lag= 0.0 min 0.00 hrs, Volume= Primary = 0.00 cfs @ 0.000 af Routed to Link SP42 : 0.00 hrs, Volume= Secondary = 0.00 cfs @ 0.000 af Routed to Link SP42 :

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 458.43' @ 24.40 hrs Surf.Area= 11,044 sf Storage= 4,668 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow) Center-of-Mass det. time= (not calculated: no outflow)

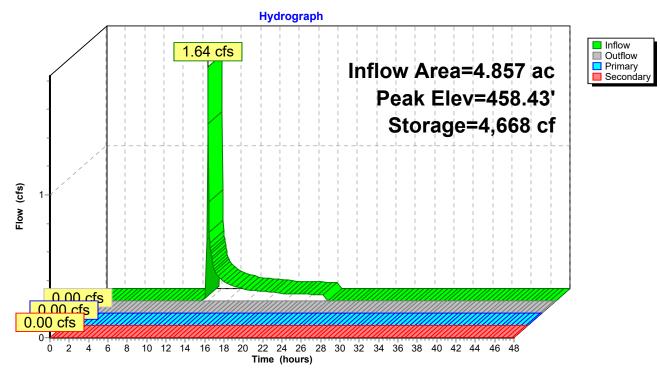
Volume	Invert	Avail.	Storage	Storage Description					
#1	458.00'	37	7,253 cf	Custom Stage Da	<b>ta (Irregular)</b> Listed	below (Recalc)			
<b>E</b> 1					0				
Elevatio		urf.Area	Perim.	Inc.Store	Cum.Store	Wet.Area			
(fee	et)	(sq-ft)	(feet)	(cubic-feet)	(cubic-feet)	<u>(sq-ft)</u>			
458.0	00	10,519	610.0	0	0	10,519			
459.0	00	11,752	622.6	11,130	11,130	11,900			
460.0	00	13,010	635.2	12,376	23,505	13,309			
461.0	00	14,498	714.6	13,747	37,253	21,865			
Device	Routing	Inve	ert Outle	et Devices					
#1									
# I	Primary	458.0		" Round Culvert	a na haadwall. Ka	- 0.000			
				2.0' CPP, projectin					
						.0391 '/' Cc= 0.900			
40	Davis 1	450 7		.013 Corrugated PE					
#2	Device 1	459.7		<b>4.0" Vert. Orifice/Grate</b> C= 0.600 Limited to weir flow at low heads					
#3	Device 1	460.5		<b>48.0" Horiz. Orifice/Grate</b> C= 0.600					
				ted to weir flow at lo					
#4	Secondary	460.5				road-Crested Rectangular	Weir		
						0 1.40 1.60 1.80 2.00			
			2.50	3.00 3.50 4.00 4.	.50 5.00 5.50				
			Coet	f. (English) 2.38 2.5	54 2.69 2.68 2.67	2.67 2.65 2.66 2.66			
			2.68	2.72 2.73 2.76 2.	.79 2.88 3.07 3.32				
	OutFlow M			) hrs HW=458.00'	(Free Discharge)				

-1=Culvert (Controls 0.00 cfs)

2=Orifice/Grate (Controls 0.00 cfs) 3=Orifice/Grate (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=458.00' (Free Discharge) 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 42P: 42P



## Summary for Pond 49.1P: 49.1P

Inflow Area = 4.740 ac. 6.79% Impervious, Inflow Depth = 0.18" for 1-year event Inflow 0.63 cfs @ 12.07 hrs. Volume= 0.073 af = 0.00 cfs @ 0.00 hrs, Volume= Outflow = 0.000 af, Atten= 100%, Lag= 0.0 min 0.00 hrs, Volume= Primary = 0.00 cfs @ 0.000 af Routed to Link SP42 : 0.00 hrs, Volume= Secondary = 0.00 cfs @ 0.000 af Routed to Link SP42 :

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 532.48' @ 24.60 hrs Surf.Area= 6,763 sf Storage= 3,174 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow) Center-of-Mass det. time= (not calculated: no outflow)

Volume	Invert	Avail.Sto	rage Storage	e Description
#1	532.00'	32,64	42 cf Custom	n Stage Data (Prismatic)Listed below (Recalc)
<b>Flave</b> ti				Quint Others
Elevatio		urf.Area	Inc.Store	Cum.Store
(fee	1	(sq-ft)	(cubic-feet)	(cubic-feet)
532.0		6,368	0	0
533.0		7,185	6,777	6,777
534.0		8,079	7,632	14,409
535.0	00	9,092	8,586	22,994
536.0	00	10,204	9,648	32,642
		_		
Device	Routing	Invert	Outlet Device	es
#1	Primary	532.00'	24.0" Round	d Culvert
			L= 25.0' CPI	P, projecting, no headwall, Ke= 0.900
			Inlet / Outlet I	Invert= 532.00' / 531.75' S= 0.0100 '/' Cc= 0.900
			n= 0.013 Cor	rrugated PE, smooth interior, Flow Area= 3.14 sf
#2	Device 1	535.83'	4.0" Vert. Ori	<b>ifice/Grate</b> C= 0.600 Limited to weir flow at low heads
#3	Device 1	535.50'	48.0" Horiz. (	Orifice/Grate C= 0.600
			Limited to we	eir flow at low heads
#4	Secondary	535.50'	10.0' long +	3.0 '/' SideZ x 4.0' breadth Broad-Crested Rectangular Weir
	,			0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00
				.50 4.00 4.50 5.00 5.50
				h) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66
				73 2.76 2.79 2.88 3.07 3.32

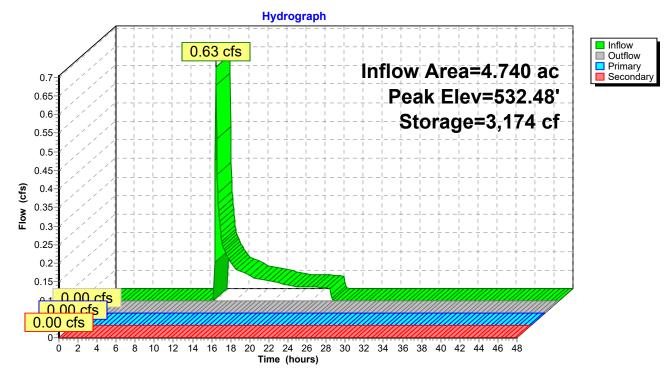
Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=532.00' (Free Discharge)

-1=Culvert (Controls 0.00 cfs)

-2=Orifice/Grate (Controls 0.00 cfs)

**--3=Orifice/Grate** (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=532.00' (Free Discharge) 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs) Pond 49.1P: 49.1P



# Summary for Pond 49.2P: 49.2S

0.14% Impervious, Inflow Depth = 0.31" for 1-year event Inflow Area = 3.533 ac, 1.52 cfs @ 12.00 hrs, Volume= Inflow = 0.091 af 0.03 cfs @ 24.06 hrs, Volume= 0.015 af, Atten= 98%, Lag= 723.5 min Outflow = 0.03 cfs @ 24.06 hrs, Volume= Primary = 0.015 af Routed to Link SP42 : 0.00 cfs @ 0.00 hrs, Volume= 0.000 af Secondary = Routed to Link SP42 :

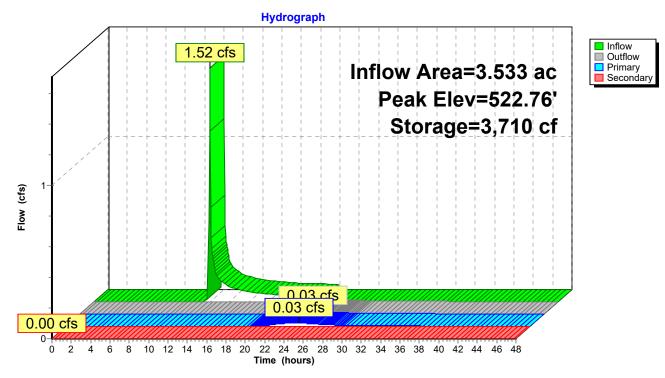
Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 522.76' @ 24.06 hrs Surf.Area= 5,258 sf Storage= 3,710 cf

Plug-Flow detention time= 935.3 min calculated for 0.015 af (17% of inflow) Center-of-Mass det. time= 741.8 min (1,653.6 - 911.8)

Volume	Invert	Avail.Sto	prage Storage Description			
#1	522.00'	11,00	01 cf Custom Stage Data (Prismatic)Listed below (Recalc)			
Elevatio (fee		rf.Area (sq-ft)	Inc.Store Cum.Store (cubic-feet) (cubic-feet)			
522.0 523.0 524.0	0	4,515 5,494 6,498	0 0 5,005 5,005 5,996 11,001			
Device	Routing	Invert	Outlet Devices			
#1	Primary	522.00'	<b>12.0" Round Culvert</b> L= 25.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 522.00' / 521.75' S= 0.0100 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf			
#2	Device 1	522.67'	6.0" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads			
#3	Device 1	523.50'	48.0" Vert. Orifice/Grate C= 0.600			
#4	Secondary	523.50'	Limited to weir flow at low heads <b>10.0' long + 3.0 '/' SideZ x 4.0' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66 2.68 2.72 2.73 2.76 2.79 2.88 3.07 3.32			
Primary OutFlow Max=0.02 cfs @ 24.06 hrs HW=522.76' (Free Discharge) 1=Culvert (Passes 0.02 cfs of 1.50 cfs potential flow) 2=Orifice/Grate (Orifice Controls 0.02 cfs @ 1.02 fps) 3=Orifice/Grate ( Controls 0.00 cfs)						
Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=522.00' (Free Discharge)						

4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 49.2P: 49.2S



## Summary for Pond 51.1P: 51.1P

Inflow Area = 8.131 ac, 0.00% Impervious, Inflow Depth = 0.40"for 1-year event Inflow = 2.32 cfs @ 12.25 hrs. Volume= 0.270 af 0.00 cfs @ 0.00 hrs, Volume= Outflow = 0.000 af, Atten= 100%, Lag= 0.0 min 0.00 hrs, Volume= Primary = 0.00 cfs @ 0.000 af Routed to Link SP51 : 0.00 hrs, Volume= 0.000 af Secondary = 0.00 cfs @ Routed to Link SP51:

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 603.44' @ 25.55 hrs Surf.Area= 8,839 sf Storage= 11,772 cf

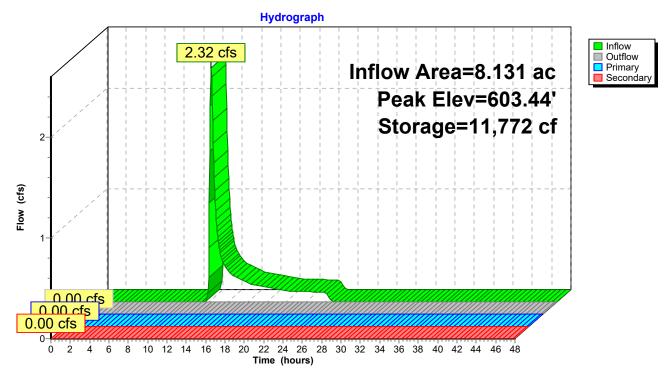
Plug-Flow detention time= (not calculated: initial storage exceeds outflow) Center-of-Mass det. time= (not calculated: no outflow)

Volume	Invert	Avail.Sto	rage Storage	e Description			
#1	602.00'	49,22	22 cf Custom	n Stage Data (Prismatic)Listed below (Recalc)			
	•	<b>C</b> A					
Elevatio		urf.Area	Inc.Store	Cum.Store			
(fee	1	(sq-ft)	(cubic-feet)	(cubic-feet)			
602.0		7,555	0	0			
603.0		8,441	7,998	7,998			
604.0		9,351	8,896	16,894			
605.0		10,287	9,819	26,713			
606.0		11,248	10,768	37,481			
607.0	0	12,234	11,741	49,222			
Device	Routing	Invert	Outlet Device	es			
#1	Primary	600.00'	12.0" Round	d Culvert			
	5		L= 40.0' CPF	P, projecting, no headwall, Ke= 0.900			
				Invert= 600.00' / 598.00' S= 0.0500 '/' Cc= 0.900			
			n= 0.013 Cor	rrugated PE, smooth interior, Flow Area= 0.79 sf			
#2	Device 1	605.00'		<b>ifice/Grate</b> C= 0.600 Limited to weir flow at low heads			
#3	Device 1	606.50'	48.0" Horiz. (	Orifice/Grate C= 0.600			
			Limited to wei	eir flow at low heads			
#4	Secondary	606.50'	10.0' long +	3.0 '/' SideZ x 4.0' breadth Broad-Crested Rectangular W	/eir		
			Head (feet) 0	0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00			
			2.50 3.00 3.5	.50 4.00 4.50 5.00 5.50			
			Coef. (English	h) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66			
			2.68 2.72 2.7	.73 2.76 2.79 2.88 3.07 3.32			
				V=602.00' (Free Discharge)			
<b>A</b>	•		3.66 cfs potenti	tial flow)			
⊢_2=	T-2=Orifice/Grate (Controls 0.00 cfs)						

-2=Orifice/Grate (Controls 0.00 cfs) -3=Orifice/Grate (Controls 0.00 cfs)

-3=Orifice/Grate (Controls 0.00 cis)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=602.00' (Free Discharge) 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs) Pond 51.1P: 51.1P



## Summary for Pond 52.1P: 52.1P

Inflow Area = 0.805 ac, 0.00% Impervious, Inflow Depth = 0.34" for 1-year event Inflow = 0.49 cfs @ 11.91 hrs. Volume= 0.023 af 0.00 cfs @ 0.00 hrs, Volume= Outflow = 0.000 af, Atten= 100%, Lag= 0.0 min 0.00 hrs, Volume= Primary = 0.00 cfs @ 0.000 af Routed to Link SP52 : 0.00 hrs, Volume= Secondary = 0.00 cfs @ 0.000 af Routed to Link SP52 :

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 648.26' @ 24.05 hrs Surf.Area= 3,908 sf Storage= 984 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow) Center-of-Mass det. time= (not calculated: no outflow)

Volume	Invert	Avail.Sto	rage Storage [	Description	
#1	648.00'	14,79	00 cf Custom	Stage Data (Prismatic)Listed below (Recalc)	
Elevatio	on Su	ırf.Area	Inc.Store	Cum.Store	
(fee		(sq-ft)	(cubic-feet)	(cubic-feet)	
648.0	00	3,699	0	0	
649.0	00	4,506	4,103	4,103	
650.0	00	5,337	4,922	9,024	
651.0	00	6,194	5,766	14,790	
Device	Routing	Invert	Outlet Devices	S	
#1	Primary	648.00'	12.0" Round	Culvert	
	-		L= 20.0' CPP	P, projecting, no headwall, Ke= 0.900	
				nvert= 648.00' / 647.50' S= 0.0250 '/' Cc= 0.900	
	<b>D</b> · · · ·	0.40 501		rugated PE, smooth interior, Flow Area= 0.79 sf	
#2	Device 1	649.50'	<b>6.0" Vert. Orifice/Grate</b> C= 0.600 Limited to weir flow at low heads		
#3	Device 1	650.50'	<b>48.0" Horiz. Orifice/Grate</b> C= 0.600		
	<b>o</b> 1			r flow at low heads	
#4	Secondary	650.50'		3.0 '/' SideZ x 4.0' breadth Broad-Crested Rectangular We	
				0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00	
				50 4.00 4.50 5.00 5.50	
				n) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66	
			2.00 2.12 2.1	73 2.76 2.79 2.88 3.07 3.32	
<b>Drimary OutElow</b> Max-0.00 cfc $@$ 0.00 hrs. $HW/=648.00'$ (Eree Discharge)					

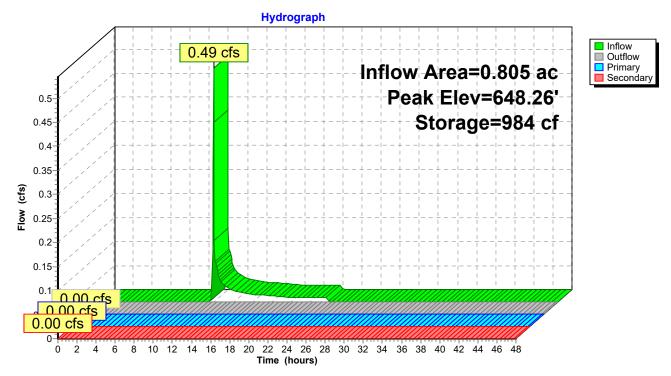
Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=648.00' (Free Discharge)

-1=Culvert (Controls 0.00 cfs)

2=Orifice/Grate (Controls 0.00 cfs) 3=Orifice/Grate (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=648.00' (Free Discharge) 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 52.1P: 52.1P



## Summary for Pond 56.1P: 56.1P

Inflow Area = 27.373 ac, 0.00% Impervious, Inflow Depth = 0.31" for 1-year event Inflow 5.66 cfs @ 12.22 hrs, Volume= 0.702 af = 0.30 cfs @ 21.03 hrs, Volume= Outflow = 0.308 af, Atten= 95%, Lag= 528.2 min 0.30 cfs @ 21.03 hrs, Volume= Primary = 0.308 af Routed to Link SP56 : 0.00 hrs, Volume= Secondary = 0.00 cfs @ 0.000 af Routed to Link SP56 :

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 415.35' @ 21.03 hrs Surf.Area= 17,943 sf Storage= 22,420 cf

Plug-Flow detention time= 696.7 min calculated for 0.308 af (44% of inflow) Center-of-Mass det. time= 520.6 min (1,448.2 - 927.6)

Volume	Invert	Avail.Sto	rage Storage	e Description	
#1	414.00'		<u> </u>	m Stage Data (Prismatic)Listed below (Recalc)	
_		<i>.</i> .			
Elevatio		urf.Area	Inc.Store	Cum.Store	
(fee	1	(sq-ft)	(cubic-feet)	(cubic-feet)	
414.0	-	15,198	0	0	
415.0	-	17,220	16,209	16,209	
416.0		19,266	18,243	34,452	
417.0		21,338	20,302	54,754	
418.0	-	23,435	22,387	77,141	
419.0		25,558	24,497	101,637	
420.0	0	27,705	26,632	128,269	
Device	Routing	Invert	Outlet Device	es	
#1	Primary	414.00'	12.0" Round	d Culvert X 2.00	
			L= 70.0' CPI	PP, projecting, no headwall, Ke= 0.900	
				Invert= 414.00' / 413.50' S= 0.0071 '/' Cc= 0.900	
			n= 0.013 Cor	prrugated PE, smooth interior, Flow Area= 0.79 sf	
#2	Device 1	415.00'	6.0" Vert. Ori	rifice/Grate C= 0.600 Limited to weir flow at low heads	
#3	Device 1	419.50'	48.0" Horiz. (	Orifice/Grate X 2.00 C= 0.600	
			Limited to we	eir flow at low heads	
#4	Secondary	419.50'	10.0' long +	- 3.0 '/' SideZ x 4.0' breadth Broad-Crested Rectangula	r Weir
				0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00	
				5.50 4.00 4.50 5.00 5.50	
				sh) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66	
			2.68 2.72 2.	2.73 2.76 2.79 2.88 3.07 3.32	

Primary OutFlow Max=0.30 cfs @ 21.03 hrs HW=415.35' (Free Discharge)

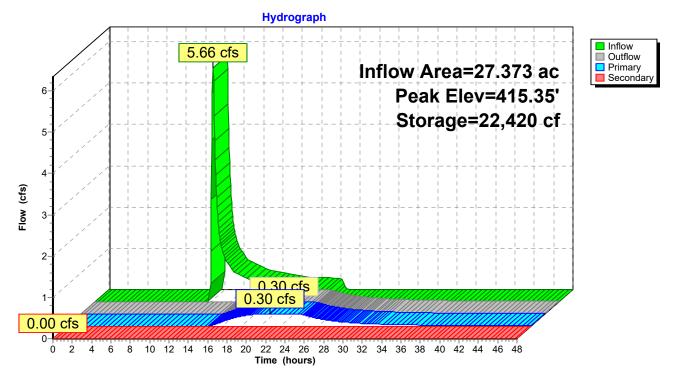
**1=Culvert** (Passes 0.30 cfs of 5.52 cfs potential flow)

-2=Orifice/Grate (Orifice Controls 0.30 cfs @ 2.02 fps)

-3=Orifice/Grate (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=414.00' (Free Discharge) 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

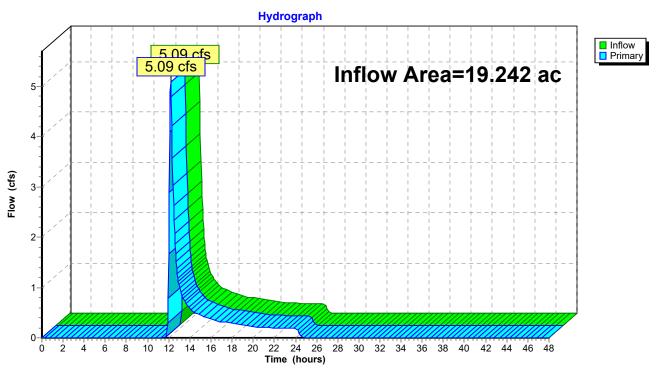
Pond 56.1P: 56.1P



# Summary for Link SP25:

Inflow Area =	19.242 ac,	0.51% Impervious, In	nflow Depth = 0.33"	for 1-year event
Inflow =	5.09 cfs @	12.19 hrs, Volume=	0.526 af	
Primary =	5.09 cfs @	12.19 hrs, Volume=	0.526 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

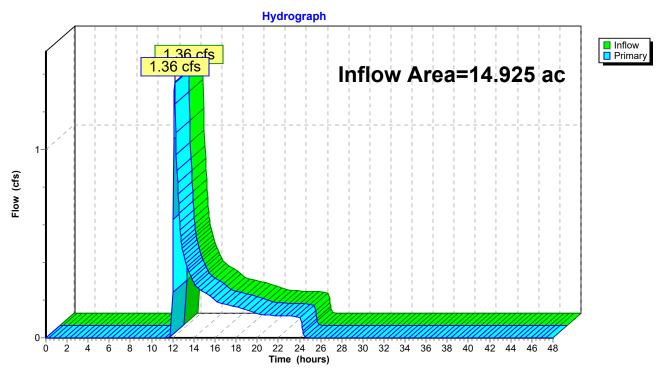


#### Link SP25:

# Summary for Link SP26:

Inflow Area =	14.925 ac,	5.39% Impervious, Inflow I	Depth = 0.18"	for 1-year event
Inflow =	1.36 cfs @	12.19 hrs, Volume=	0.229 af	-
Primary =	1.36 cfs @	12.19 hrs, Volume=	0.229 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

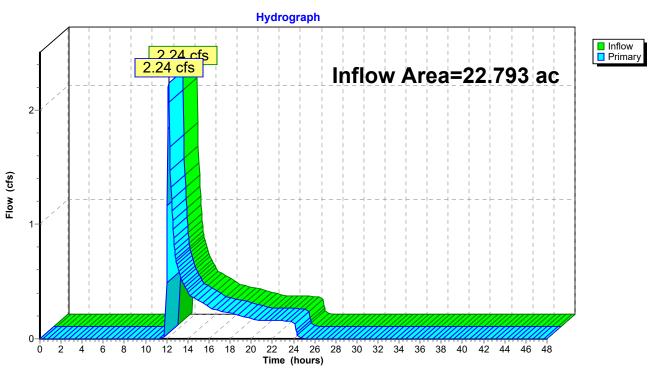


#### Link SP26:

# Summary for Link SP27:

Inflow Area	a =	22.793 ac,	1.95% Impervious, Inflow	Depth = 0.17"	for 1-year event
Inflow	=	2.24 cfs @	12.17 hrs, Volume=	0.328 af	
Primary	=	2.24 cfs @	12.17 hrs, Volume=	0.328 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

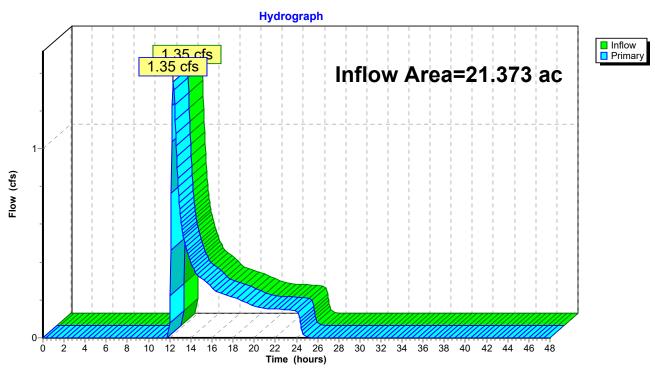


## Link SP27:

# Summary for Link SP28:

Inflow Area =	21.373 ac,	0.53% Impervious, Inf	low Depth = $0.17$ "	for 1-year event
Inflow =	1.35 cfs @	12.34 hrs, Volume=	0.295 af	
Primary =	1.35 cfs @	12.34 hrs, Volume=	0.295 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

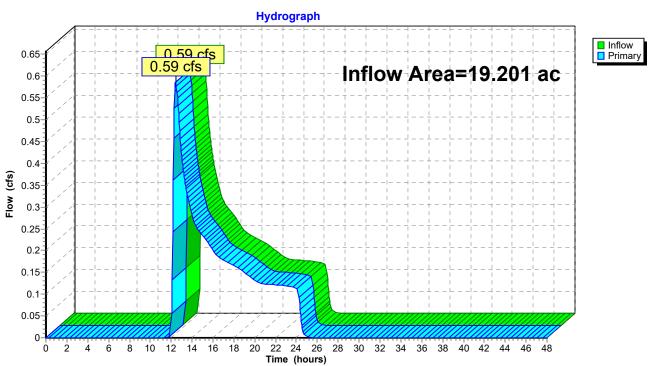


#### Link SP28:

# Summary for Link SP29:

Inflow Area	=	19.201 ac,	1.25% Impervious, Inflov	v Depth = 0.13"	for 1-year event
Inflow	=	0.59 cfs @	12.42 hrs, Volume=	0.202 af	
Primary	=	0.59 cfs @	12.42 hrs, Volume=	0.202 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

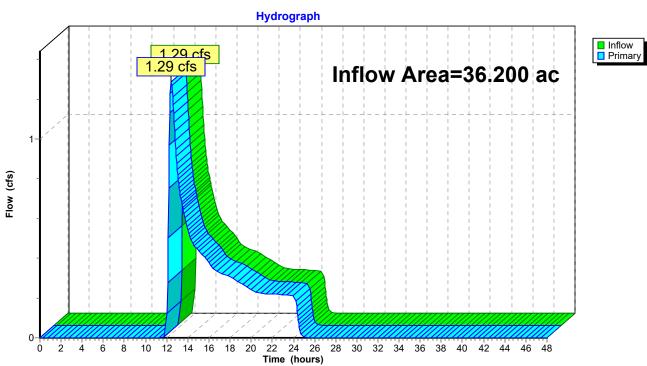


#### Link SP29:

# Summary for Link SP30:

Inflow Area =	36.200 ac,	1.23% Impervious, Inflow D	epth = 0.13"	for 1-year event
Inflow =	1.29 cfs @	12.43 hrs, Volume=	0.387 af	-
Primary =	1.29 cfs @	12.43 hrs, Volume=	0.387 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

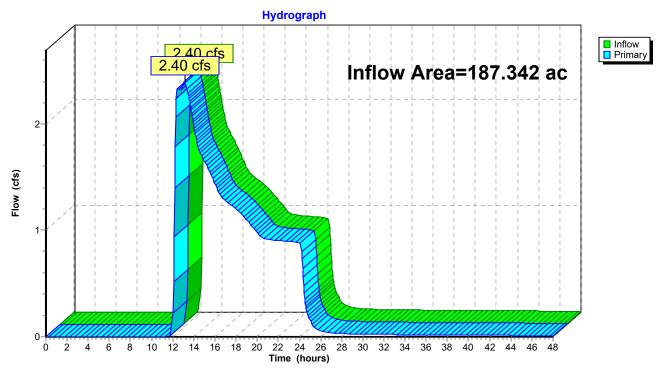


## Link SP30:

# Summary for Link SP34:

Inflow Area	a =	187.342 ac,	1.98% Impervious, Ir	nflow Depth > 0.09"	for 1-year event
Inflow	=	2.40 cfs @	13.11 hrs, Volume=	1.394 af	
Primary	=	2.40 cfs @	13.11 hrs, Volume=	1.394 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

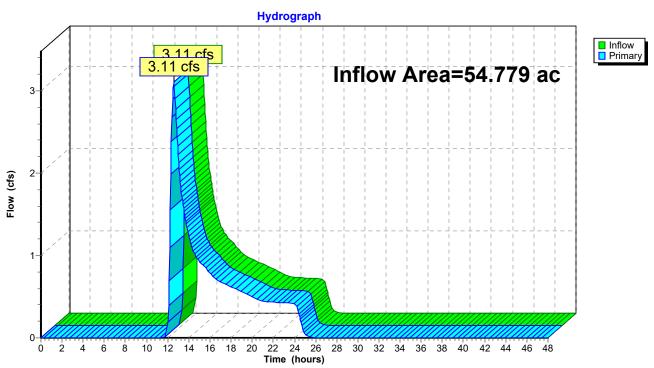


## Link SP34:

# Summary for Link SP35:

Inflow Area	ı =	54.779 ac,	2.01% Impervious, Inf	low Depth = 0.18"	for 1-year event
Inflow	=	3.11 cfs @	12.57 hrs, Volume=	0.842 af	
Primary	=	3.11 cfs @	12.57 hrs, Volume=	0.842 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

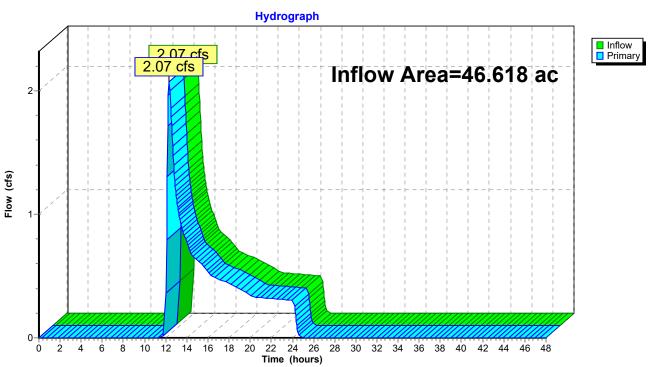


## Link SP35:

# Summary for Link SP36:

Inflow Area =	46.618 ac,	0.00% Impervious, Inflow	Depth = 0.14"	for 1-year event
Inflow =	2.07 cfs @	12.32 hrs, Volume=	0.560 af	
Primary =	2.07 cfs @	12.32 hrs, Volume=	0.560 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs



## Link SP36:

# Summary for Link SP37:

Inflow Area =	10.440 ac,	5.80% Impervious, Inflow D	epth = 0.09"	for 1-year event
Inflow =	0.16 cfs @	12.80 hrs, Volume=	0.081 af	-
Primary =	0.16 cfs @	12.80 hrs, Volume=	0.081 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

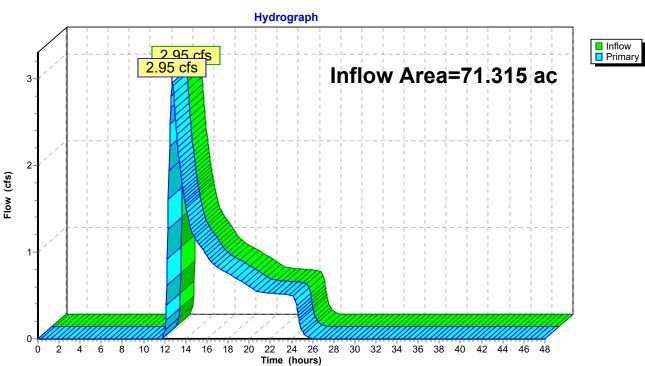
#### Hydrograph Inflow Primary 0.16.cfs 0.16 cfs 0.17 Inflow Area=10.440 ac 0.16 0.15 0.14 0.13 0.12 0.11 0.1 Flow (cfs) 0.09 0.08 0.07 0.06 0.05 0.04 0.03 0.02 0.01 0 2 4 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 Ó 6 Time (hours)

#### Link SP37:

# Summary for Link SP38:

Inflow Area =	71.315 ac,	1.11% Impervious, Inflow [	Depth = 0.16"	for 1-year event
Inflow =	2.95 cfs @	12.72 hrs, Volume=	0.973 af	
Primary =	2.95 cfs @	12.72 hrs, Volume=	0.973 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

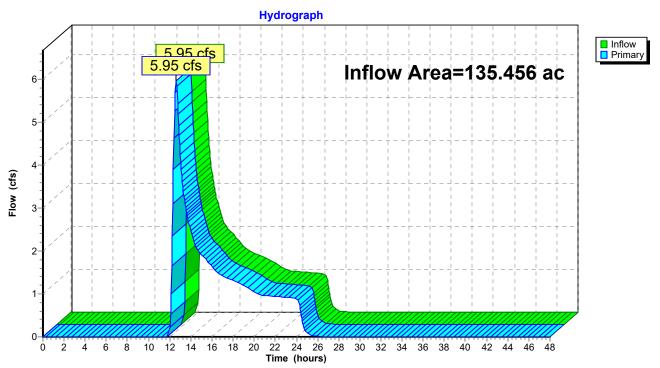


#### Link SP38:

# Summary for Link SP39:

Inflow Area =	=	135.456 ac,	1.64% Impervious, I	nflow Depth = 0.15"	for 1-year event
Inflow =	:	5.95 cfs @	12.59 hrs, Volume=	1.691 af	
Primary =		5.95 cfs @	12.59 hrs, Volume=	1.691 af, Att	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

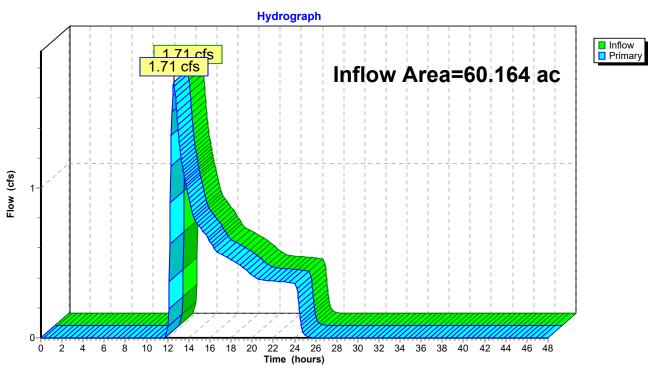


## Link SP39:

# Summary for Link SP41:

Inflow Area =	60.164 ac,	0.00% Impervious, Inflow	/ Depth = 0.13"	for 1-year event
Inflow =	1.71 cfs @	12.55 hrs, Volume=	0.632 af	
Primary =	1.71 cfs @	12.55 hrs, Volume=	0.632 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

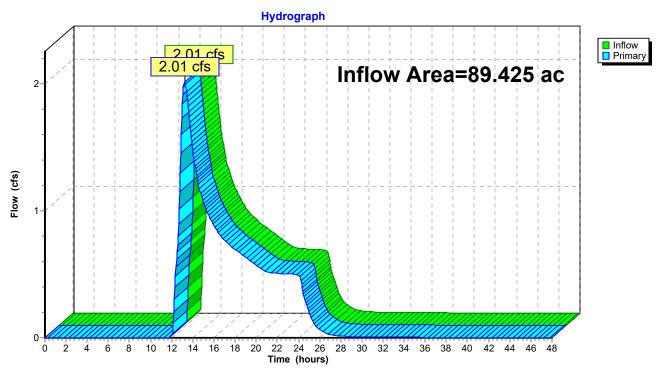


## Link SP41:

# Summary for Link SP42:

Inflow Area =	89.425 ac,	0.58% Impervious, Inflo	w Depth > 0.11"	for 1-year event
Inflow =	2.01 cfs @	13.21 hrs, Volume=	0.846 af	
Primary =	2.01 cfs @	13.21 hrs, Volume=	0.846 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

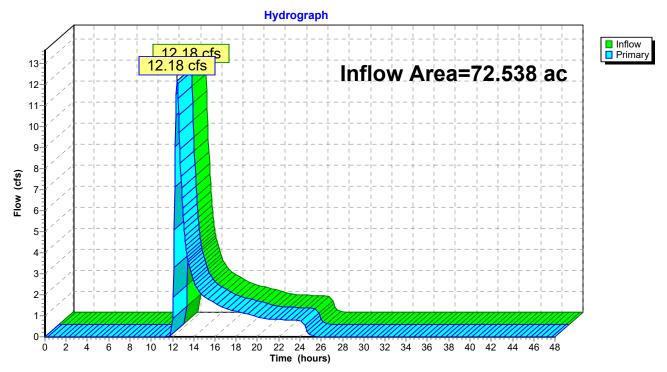


## Link SP42:

# Summary for Link SP48:

Inflow Area =	72.538 a	ac, 2.48% Impervious	s, Inflow Depth = 0.3	4" for 1-year event
Inflow =	12.18 cfs	s @ 12.43 hrs, Volun	ne= 2.035 af	
Primary =	12.18 cfs	s @ 12.43 hrs, Volun	ne= 2.035 af,	Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

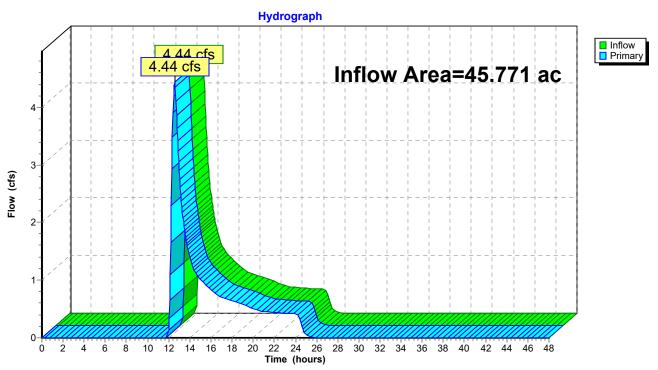


## Link SP48:

# Summary for Link SP50:

Inflow Area =	45.771 ac,	1.25% Impervious, Inflow D	epth = 0.25"	for 1-year event
Inflow =	4.44 cfs @	12.56 hrs, Volume=	0.970 af	-
Primary =	4.44 cfs @	12.56 hrs, Volume=	0.970 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

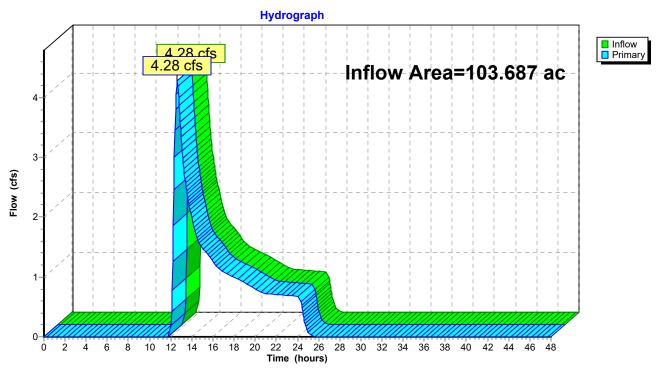


## Link SP50:

# Summary for Link SP51:

Inflow Area =	103.687 ac,	0.70% Impervious, I	nflow Depth = 0.15"	for 1-year event
Inflow =	4.28 cfs @	12.61 hrs, Volume=	1.304 af	
Primary =	4.28 cfs @	12.61 hrs, Volume=	1.304 af, Att	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

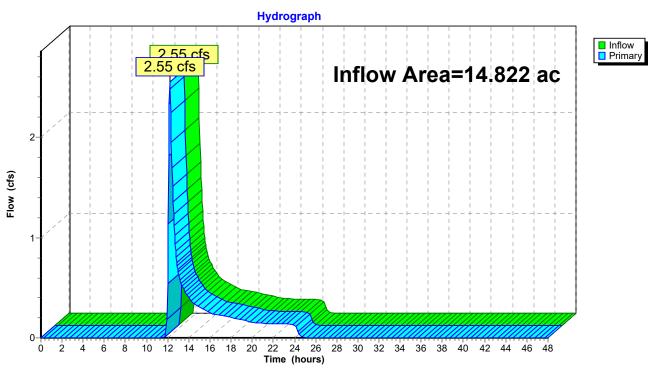


## Link SP51:

# Summary for Link SP52:

Inflow Area =	14.822 ac,	2.79% Impervious, Inflow D	epth = 0.27"	for 1-year event
Inflow =	2.55 cfs @	12.21 hrs, Volume=	0.328 af	
Primary =	2.55 cfs @	12.21 hrs, Volume=	0.328 af, Att	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

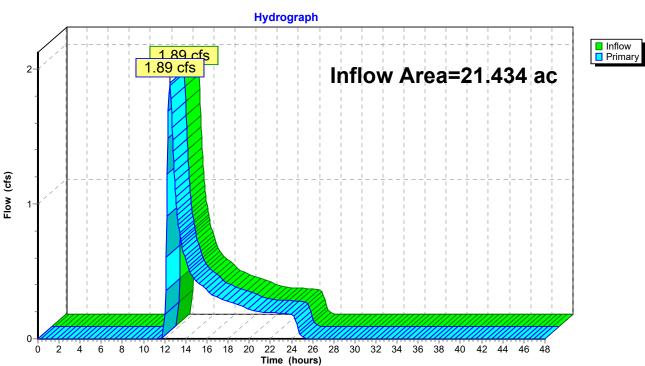


## Link SP52:

# Summary for Link SP53:

Inflow Area =	21.434 ac,	1.80% Impervious, Inflo	w Depth = 0.23"	for 1-year event
Inflow =	1.89 cfs @	12.48 hrs, Volume=	0.410 af	-
Primary =	1.89 cfs @	12.48 hrs, Volume=	0.410 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

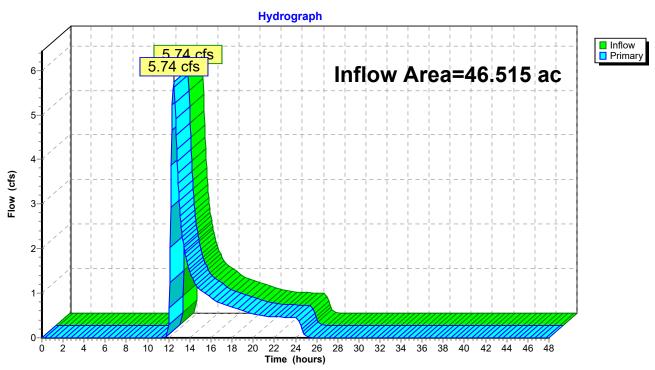


## Link SP53:

# Summary for Link SP54:

Inflow Area =	46.515 ac,	7.79% Impervious, Inflo	w Depth = 0.28"	for 1-year event
Inflow =	5.74 cfs @	12.47 hrs, Volume=	1.087 af	-
Primary =	5.74 cfs @	12.47 hrs, Volume=	1.087 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

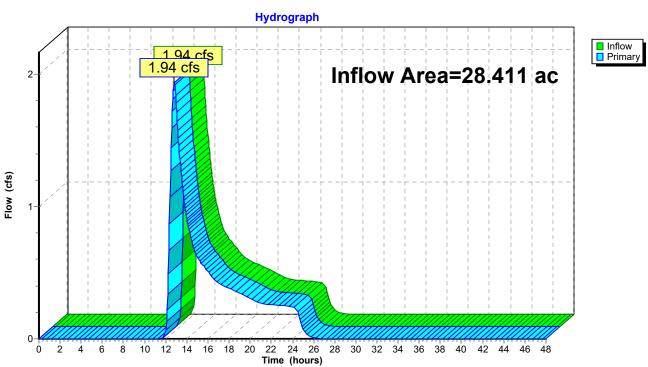


## Link SP54:

# Summary for Link SP55:

Inflow Area =	28.411 ac,	0.98% Impervious, Inflow I	Depth = $0.23''$	for 1-year event
Inflow =	1.94 cfs @	12.81 hrs, Volume=	0.544 af	
Primary =	1.94 cfs @	12.81 hrs, Volume=	0.544 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

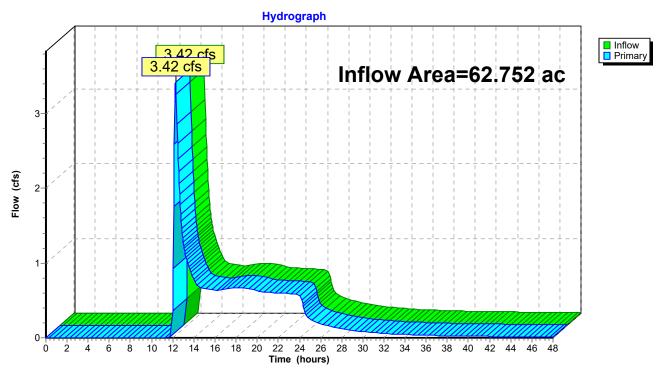


## Link SP55:

# Summary for Link SP56:

Inflow Area =	62.752 ac,	0.00% Impervious, Int	flow Depth > 0.18"	for 1-year event
Inflow =	3.42 cfs @	12.27 hrs, Volume=	0.917 af	
Primary =	3.42 cfs @	12.27 hrs, Volume=	0.917 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs



## Link SP56:

Mill Pt Post 2	Тур
Prepared by TRC Companies	
HvdroCAD® 10.20-5a s/n 01402 © 2023 HvdroCAD Softw	vare Solutions LLC

Time span=0.00-48.00 hrs, dt=0.05 hrs, 961 points Runoff by SCS TR-20 method, UH=SCS, Weighted-CN Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 25.1S: Sub 25.1	Runoff Area=3.422 ac 0.00% Impervious Runoff Depth=1.01" Flow Length=564' Tc=12.4 min CN=70 Runoff=4.59 cfs 0.287 af
Subcatchment 25S: Sub 25	Runoff Area=15.820 ac 0.63% Impervious Runoff Depth=1.18" Flow Length=1,104' Tc=22.2 min CN=73 Runoff=18.53 cfs 1.555 af
Subcatchment 26S: Sub 26	Runoff Area=14.925 ac 5.39% Impervious Runoff Depth=0.75" Flow Length=1,324' Tc=18.0 min CN=65 Runoff=11.13 cfs 0.935 af
Subcatchment 27.1S: Sub 27.1	Runoff Area=3.749 ac 0.00% Impervious Runoff Depth=1.06" Flow Length=831' Tc=14.7 min CN=71 Runoff=4.91 cfs 0.332 af
Subcatchment 27S: Sub 27	Runoff Area=19.044 ac 2.34% Impervious Runoff Depth=0.80" Flow Length=1,602' Tc=17.8 min CN=66 Runoff=15.57 cfs 1.270 af
Subcatchment 28.1S: Sub 28.1	Runoff Area=2.160 ac 0.00% Impervious Runoff Depth=1.06" Flow Length=409' Tc=11.9 min CN=71 Runoff=3.15 cfs 0.191 af
Subcatchment 28S: Sub 28 Flow Lengtl	Runoff Area=19.213 ac 0.59% Impervious Runoff Depth=0.75" n=1,727' Tc=27.4 min UI Adjusted CN=65 Runoff=10.83 cfs 1.204 af
Subcatchment 29S: Sub 29	Runoff Area=19.201 ac 1.25% Impervious Runoff Depth=0.62" Flow Length=1,656' Tc=26.3 min CN=62 Runoff=8.26 cfs 0.985 af
Subcatchment 30.1S: Sub 30.1	Runoff Area=4.003 ac 0.00% Impervious Runoff Depth=1.06" Flow Length=1,131' Tc=29.7 min CN=71 Runoff=3.40 cfs 0.355 af
Subcatchment 30S: Sub 30	Runoff Area=32.197 ac 1.38% Impervious Runoff Depth=0.66" Flow Length=2,349' Tc=29.2 min CN=63 Runoff=14.29 cfs 1.770 af
Subcatchment 31.1S: Sub 31.1	Runoff Area=0.925 ac 0.00% Impervious Runoff Depth=1.01" Flow Length=267' Tc=10.3 min CN=70 Runoff=1.34 cfs 0.078 af
Subcatchment 31S: Sub 31	Runoff Area=24.402 ac 0.00% Impervious Runoff Depth=0.62" Flow Length=2,354' Tc=30.5 min CN=62 Runoff=9.46 cfs 1.252 af
Subcatchment 32.1S: 32.1S	Runoff Area=5.376 ac 0.00% Impervious Runoff Depth=1.01" Flow Length=867' Tc=20.0 min CN=70 Runoff=5.54 cfs 0.452 af
Subcatchment 32S: Sub 32	Runoff Area=39.541 ac 7.07% Impervious Runoff Depth=0.66" Flow Length=2,402' Tc=27.3 min CN=63 Runoff=18.41 cfs 2.173 af
Subcatchment 33.1S: 33.1S	Runoff Area=12.768 ac 1.41% Impervious Runoff Depth=1.18" Flow Length=1,561' Tc=36.2 min CN=73 Runoff=10.75 cfs 1.255 af
Subcatchment 33S: Sub 33	Runoff Area=78.535 ac 0.56% Impervious Runoff Depth=0.42" Flow Length=1,749' Tc=22.2 min CN=57 Runoff=19.73 cfs 2.721 af

## Mill Pt Post 2

Prepared by TRC Companies HydroCAD® 10.20-5a s/n 01402 © 2023 HydroCAD Software Solutions LLC

 Type II 24-hr
 10-year Rainfall=3.50"

 Printed
 7/19/2024

 LLC
 Page 138

Hydrocado 10.20-5a S/1101402 @ 2025	riyulocad Soltware Solutions LLC Page 130
Subcatchment 34S: Sub 34	Runoff Area=25.795 ac 1.16% Impervious Runoff Depth=0.62" Flow Length=1,380' Tc=24.0 min CN=62 Runoff=11.86 cfs 1.323 af
Subcatchment 35S: Sub 35	Runoff Area=54.779 ac 2.01% Impervious Runoff Depth=0.75" Flow Length=3,081' Tc=40.4 min CN=65 Runoff=23.34 cfs 3.433 af
Subcatchment 36S: Sub 36	Runoff Area=46.618 ac 0.00% Impervious Runoff Depth=0.66" Flow Length=1,996' Tc=23.3 min CN=63 Runoff=24.27 cfs 2.562 af
Subcatchment 37S: Sub 37	Runoff Area=10.440 ac 5.80% Impervious Runoff Depth=0.53" Flow Length=1,926' Tc=33.1 min CN=60 Runoff=3.02 cfs 0.462 af
Subcatchment 38S: Sub 38	Runoff Area=71.315 ac 1.11% Impervious Runoff Depth=0.71" Flow Length=3,404' Tc=47.6 min CN=64 Runoff=24.59 cfs 4.190 af
Subcatchment 39S: Sub 39	Runoff Area=114.576 ac 0.49% Impervious Runoff Depth=0.62" Flow Length=2,852' Tc=30.0 min CN=62 Runoff=44.91 cfs 5.877 af
Subcatchment 40S: Sub 40	Runoff Area=20.880 ac   7.94% Impervious   Runoff Depth=0.95" Flow Length=1,917'   Tc=28.9 min   CN=69   Runoff=15.72 cfs   1.660 af
Subcatchment 41S: Sub 41	Runoff Area=60.164 ac 0.00% Impervious Runoff Depth=0.62" Flow Length=2,626' Tc=33.1 min CN=62 Runoff=21.94 cfs 3.086 af
Subcatchment 42.1S: 42.1P	Runoff Area=1.588 ac 0.00% Impervious Runoff Depth=1.06" Tc=6.0 min CN=71 Runoff=2.90 cfs 0.141 af
Subcatchment 42.2S: 42.2P	Runoff Area=3.269 ac 0.00% Impervious Runoff Depth=0.85" Tc=6.0 min CN=67 Runoff=4.62 cfs 0.232 af
Subcatchment 42S: Sub 42	Runoff Area=45.032 ac 0.00% Impervious Runoff Depth=0.53" Flow Length=1,067' Tc=27.0 min CN=60 Runoff=15.07 cfs 1.994 af
Subcatchment 48S: Sub 48	Runoff Area=72.538 ac 2.48% Impervious Runoff Depth=1.06" Flow Length=4,007' Tc=38.1 min CN=71 Runoff=51.67 cfs 6.430 af
Subcatchment 49.1S: Sub 49.1	Runoff Area=4.740 ac 6.79% Impervious Runoff Depth=0.75" Tc=10.0 min CN=65 Runoff=4.84 cfs 0.297 af
Subcatchment 49.2S: 49.2S	Runoff Area=3.533 ac 0.14% Impervious Runoff Depth=1.01" Tc=6.0 min CN=70 Runoff=6.07 cfs 0.297 af
Subcatchment 49S: Sub 49	Runoff Area=31.263 ac 0.62% Impervious Runoff Depth=0.75" Flow Length=2,999' Tc=38.0 min CN=65 Runoff=13.91 cfs 1.959 af
Subcatchment 50S: Sub 50	Runoff Area=45.771 ac 1.25% Impervious Runoff Depth=0.90" Flow Length=2,623' Tc=43.5 min CN=68 Runoff=23.82 cfs 3.438 af
Subcatchment 51.1S: 51.1S	Runoff Area=8.131 ac 0.00% Impervious Runoff Depth=1.18" Flow Length=1,025' Tc=26.3 min CN=73 Runoff=8.53 cfs 0.799 af
Subcatchment 51S: Sub 51	Runoff Area=95.556 ac 0.76% Impervious Runoff Depth=0.71" Flow Length=3,172' Tc=41.1 min CN=64 Runoff=36.64 cfs 5.615 af

Mill Pt Post 2

Prepared by TRC Companies HydroCAD® 10.20-5a s/n 01402 © 2023 HydroCAD Software Solutions LLC

Subcatchment 52.1S: 52.	<b>1S</b> Runoff Area=0.805 ac 0.00% Impervious Runoff Depth=1.06" Tc=0.0 min CN=71 Runoff=1.76 cfs 0.071 af
Subcatchment 52S: Sub	<b>52</b> Runoff Area=14.017 ac 2.95% Impervious Runoff Depth=0.95" Flow Length=1,182' Tc=22.0 min CN=69 Runoff=12.69 cfs 1.114 af
Subcatchment 53S: Sub	<b>53</b> Runoff Area=21.434 ac 1.80% Impervious Runoff Depth=0.85" Flow Length=2,555' Tc=37.9 min CN=67 Runoff=11.37 cfs 1.518 af
Subcatchment 54S: Sub	54Runoff Area=46.515 ac7.79% ImperviousRunoff Depth=0.95"Flow Length=3,144'Tc=38.8 minUI Adjusted CN=69Runoff=28.37 cfs3.698 af
Subcatchment 55S: Sub	55 Runoff Area=28.411 ac 0.98% Impervious Runoff Depth=0.85" Flow Length=2,400' Tc=57.7 min CN=67 Runoff=11.07 cfs 2.013 af
Subcatchment 56.1S: 56.	<b>1S</b> Runoff Area=27.373 ac0.00% ImperviousRunoff Depth=1.01"Flow Length=1,864'Tc=23.1 minCN=70Runoff=25.68 cfs2.300 af
Subcatchment 56S: Sub	56         Runoff Area=35.379 ac         0.00% Impervious         Runoff Depth=0.80"           Flow Length=1,907'         Tc=23.9 min         CN=66         Runoff=23.94 cfs         2.360 af
Reach 33R:	Avg. Flow Depth=0.84' Max Vel=2.37 fps Inflow=7.80 cfs 1.323 af n=0.100 L=1,875.0' S=0.0597 '/' Capacity=10.60 cfs Outflow=7.28 cfs 1.323 af
Reach 39R:	Avg. Flow Depth=0.87' Max Vel=3.19 fps Inflow=15.72 cfs 1.660 af n=0.100 L=1,110.0' S=0.0991 '/' Capacity=86.68 cfs Outflow=14.73 cfs 1.660 af
Reach 42R: S-NSD-16	Avg. Flow Depth=1.01' Max Vel=2.54 fps Inflow=13.91 cfs 1.959 af n=0.100 L=1,790.0' S=0.0531 '/' Capacity=51.95 cfs Outflow=12.08 cfs 1.959 af
Pond 25.1P: 25.1P	Peak Elev=605.04' Storage=6,104 cf Inflow=4.59 cfs 0.287 af Primary=0.33 cfs 0.198 af Secondary=0.00 cfs 0.000 af Outflow=0.33 cfs 0.198 af
Pond 27.1P: 27.1P	Peak Elev=553.14' Storage=10,490 cf Inflow=4.91 cfs 0.332 af Primary=0.15 cfs 0.119 af Secondary=0.00 cfs 0.000 af Outflow=0.15 cfs 0.119 af
Pond 28.1P: 28.1P	Peak Elev=559.67' Storage=6,649 cf Inflow=3.15 cfs 0.191 af Primary=0.07 cfs 0.055 af Secondary=0.00 cfs 0.000 af Outflow=0.07 cfs 0.055 af
<b>Pond 30.1P: 30.1P</b> Discarded=0.02 cfs 0.046 af	Peak Elev=461.21' Storage=10,254 cf Inflow=3.40 cfs 0.355 af Primary=0.20 cfs 0.121 af Secondary=0.00 cfs 0.000 af Outflow=0.21 cfs 0.167 af
<b>Pond 31.1P: 31.1P</b> Discarded=0.02 cfs 0.051 af	Peak Elev=510.66' Storage=2,621 cf Inflow=1.34 cfs 0.078 af Primary=0.00 cfs 0.000 af Secondary=0.00 cfs 0.000 af Outflow=0.02 cfs 0.051 af
Pond 32.1P: 32.1P	Peak Elev=553.30' Storage=15,199 cf Inflow=5.54 cfs 0.452 af Primary=0.15 cfs 0.173 af Secondary=0.00 cfs 0.000 af Outflow=0.15 cfs 0.173 af
Pond 33.1P: 33.1P	Peak Elev=591.35' Storage=40,913 cf Inflow=10.75 cfs 1.255 af Primary=0.35 cfs 0.758 af Secondary=0.00 cfs 0.000 af Outflow=0.35 cfs 0.758 af

<b>Mill Pt Post 2</b> Prepared by TRC Comp <u>HydroCAD® 10.20-5a s/n 0</u>			r <i>10-year Rainfall=3.50"</i> Printed 7/19/2024 <u>Page 140</u>
Pond 34P: VAN EPPS R		Peak Elev=583.42' Storage=4,265 c 323 af Secondary=0.00 cfs 0.000 at	
Pond 42P: 42P	Primary=0.00 cfs	Peak Elev=459.42' Storage=16,219 000 af Secondary=0.00 cfs 0.000 at	
Pond 49.1P: 49.1P	Primary=0.00 cfs	Peak Elev=533.82' Storage=12,939 000 af Secondary=0.00 cfs 0.000 at	
Pond 49.2P: 49.2S	Primary=0.43 cfs	Peak Elev=523.13' Storage=5,720 221 af Secondary=0.00 cfs 0.000 at	
Pond 51.1P: 51.1P	Primary=0.23 cfs	Peak Elev=605.30' Storage=29,832 179 af Secondary=0.00 cfs 0.000 at	
Pond 52.1P: 52.1P	Primary=0.00 cfs	Peak Elev=648.77' Storage=3,108 000 af Secondary=0.00 cfs 0.000 at	
Pond 56.1P: 56.1P	Primary=1.30 cfs	Peak Elev=417.13' Storage=57,652 c 892 af Secondary=0.00 cfs 0.000 at	
Link SP25:			Inflow=18.53 cfs 1.753 af Primary=18.53 cfs 1.753 af
Link SP26:			Inflow=11.13 cfs 0.935 af Primary=11.13 cfs 0.935 af
Link SP27:			Inflow=15.57 cfs 1.389 af Primary=15.57 cfs 1.389 af
Link SP28:			Inflow=10.83 cfs 1.259 af Primary=10.83 cfs 1.259 af
Link SP29:			Inflow=8.26 cfs 0.985 af Primary=8.26 cfs 0.985 af
Link SP30:			Inflow=14.29 cfs 1.891 af Primary=14.29 cfs 1.891 af
Link SP34:			Inflow=47.38 cfs 8.401 af Primary=47.38 cfs 8.401 af
Link SP35:			Inflow=23.34 cfs 3.433 af Primary=23.34 cfs 3.433 af
Link SP36:			Inflow=24.27 cfs 2.562 af Primary=24.27 cfs 2.562 af
Link SP37:			Inflow=3.02 cfs 0.462 af Primary=3.02 cfs 0.462 af
Link SP38:			Inflow=24.59 cfs 4.190 af Primary=24.59 cfs 4.190 af

HydroCAD® 10.20-5a s/n 01402 © 2023 HydroCAD Software Solutions LLC	Page 141
Link SP39:	Inflow=57.34 cfs 7.536 af
	Primary=57.34 cfs 7.536 af
Link SP41:	Inflow=21.94 cfs 3.086 af
	Primary=21.94 cfs 3.086 af
	Inflow=19.06 cfs_4.175 af
Link SP42:	Primary=19.06 cfs 4.175 af
	·
Link SP48:	Inflow=51.67 cfs 6.430 af
	Primary=51.67 cfs 6.430 af
Link SP50:	Inflow=23.82 cfs 3.438 af
	Primary=23.82 cfs 3.438 af
Link SP51:	Inflow=36.64 cfs 5.793 af
	Primary=36.64 cfs 5.793 af
Link SP52:	Inflow=12.69 cfs 1.114 af Primary=12.69 cfs 1.114 af
Link SP53:	Inflow=11.37 cfs 1.518 af
	Primary=11.37 cfs 1.518 af
Link SP54:	Inflow=28.37 cfs 3.698 af
	Primary=28.37 cfs 3.698 af
Link SP55:	Inflow=11.07 cfs 2.013 af
	Primary=11.07 cfs 2.013 af
Link SP56:	Inflow=24.07 cfs 4.252 af Primary=24.07 cfs 4.252 af
	1 milary=24.07 013 4.232 al

Mill Pt Post 2

Prepared by TRC Companies

Type II 24-hr 10-year Rainfall=3.50"

Printed 7/19/2024

Total Runoff Area = 1,185.203 ac Runoff Volume = 73.684 af Average Runoff Depth = 0.75" 98.41% Pervious = 1,166.310 ac 1.59% Impervious = 18.893 ac

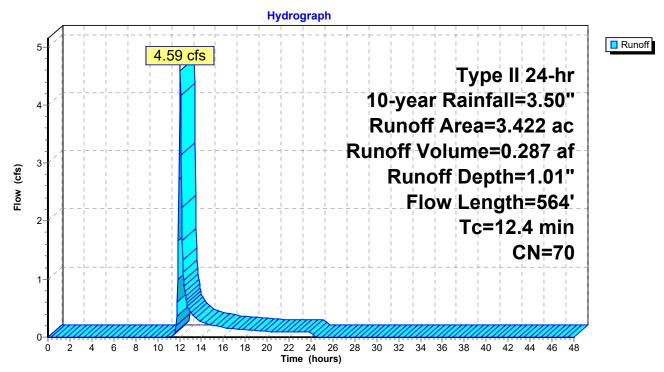
## Summary for Subcatchment 25.1S: Sub 25.1

Runoff = 4.59 cfs @ 12.06 hrs, Volume= 0.287 af, Depth= 1.01" Routed to Pond 25.1P : 25.1P

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 10-year Rainfall=3.50"

Area	(ac) C	N Dese	cription						
C	2.622 71 Meadow, non-grazed, HSG C 0.225 96 Gravel surface, HSG C 0.575 58 Meadow, non-grazed, HSG B								
3	3.422         70         Weighted Average           3.422         100.00% Pervious Area								
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description				
5.6	100	0.1080	0.30		Sheet Flow, Grass: Short n= 0.150 P2= 2.50"				
0.5	35	0.0270	1.15		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps				
6.3	429	0.0260	1.13		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps				
12.4	564	Total			· · · · · · · · · · · · · · · · · · ·				

## Subcatchment 25.1S: Sub 25.1



## Summary for Subcatchment 25S: Sub 25

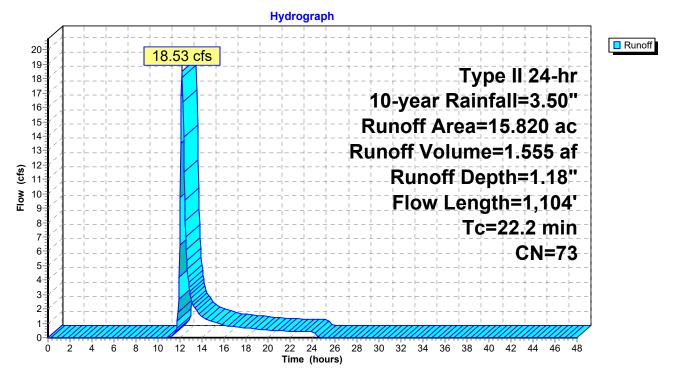
Runoff = 18.53 cfs @ 12.17 hrs, Volume= 1 Routed to Link SP25 :

1.555 af, Depth= 1.18"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 10-year Rainfall=3.50"

0.050         48         Brush, Good, HSG B           0.279         65         Brush, Good, HSG C           0.181         73         Brush, Good, HSG D           0.099         98         Unconnected roofs, HSG D           0.210         58         Meadow, non-grazed, HSG B           10.133         71         Meadow, non-grazed, HSG C           3.694         78         Meadow, non-grazed, HSG C           0.455         74         >75% Grass cover, Good, HSG C           0.457         80         >75% Grass cover, Good, HSG D           0.020         70         Woods, Good, HSG C           0.202         96         Gravel surface, HSG D           15.820         73         Weighted Average           15.721         99.37% Pervious Area           0.099         0.63% Impervious Area           0.099         100.00% Unconnected	Area	(ac) (	CN De	escription								
0.18173Brush, Good, HSG D0.09998Unconnected roofs, HSG D0.21058Meadow, non-grazed, HSG B10.13371Meadow, non-grazed, HSG C3.69478Meadow, non-grazed, HSG D0.45574>75% Grass cover, Good, HSG C0.49780>75% Grass cover, Good, HSG D0.02070Woods, Good, HSG C0.20296Gravel surface, HSG D15.82073Weighted Average15.72199.37% Pervious Area0.0990.63% Impervious Area0.099100.00% UnconnectedTcLengthSlopeVelocityCapacityDescription(min)(feet)(ft/ft)(ft/ft)(ft/sec)(cfs)	0	.050	48 Br	Brush, Good, HSG B								
0.09998Unconnected roofs, HSG D0.21058Meadow, non-grazed, HSG B10.13371Meadow, non-grazed, HSG C3.69478Meadow, non-grazed, HSG D0.45574>75% Grass cover, Good, HSG C0.49780>75% Grass cover, Good, HSG D0.02070Woods, Good, HSG C0.20296Gravel surface, HSG D15.82073Weighted Average15.72199.37% Pervious Area0.0990.63% Impervious Area0.099100.00% UnconnectedTcLengthSlopeVelocityCapacityDescription(min)(feet)(ft/ft)(ft/ft)(ft/sec)(cfs)	0	.279	65 Br									
0.21058Meadow, non-grazed, HSG B10.13371Meadow, non-grazed, HSG C3.69478Meadow, non-grazed, HSG D0.45574>75% Grass cover, Good, HSG C0.49780>75% Grass cover, Good, HSG D0.02070Woods, Good, HSG C0.20296Gravel surface, HSG D15.82073Weighted Average15.72199.37% Pervious Area0.0990.63% Impervious Area0.099100.00% UnconnectedTc Length Slope Velocity Capacity Description(min)(feet)(ft/ft)(ft/ft)(ft/sec)(cfs)	0	.181	73 Br	ush, Good, I	HSG D							
10.13371Meadow, non-grazed, HSG C3.69478Meadow, non-grazed, HSG D0.45574>75% Grass cover, Good, HSG C0.49780>75% Grass cover, Good, HSG D0.02070Woods, Good, HSG C0.20296Gravel surface, HSG D15.82073Weighted Average15.72199.37% Pervious Area0.0990.63% Impervious Area0.099100.00% UnconnectedTcLengthSlopeVelocityCapacityDescription(min)(feet)(ft/ft)(ft/ft)(ft/sec)(cfs)	0	.099	98 Ui	connected i	roofs, HSG	D						
3.69478Meadow, non-grazed, HSG D0.45574>75% Grass cover, Good, HSG C0.49780>75% Grass cover, Good, HSG D0.02070Woods, Good, HSG C0.20296Gravel surface, HSG D15.82073Weighted Average15.72199.37% Pervious Area0.0990.63% Impervious Area0.099100.00% UnconnectedTcLengthSlopeVelocityCapacityDescription(min)(feet)(ft/ft)	0	.210	58 M	eadow, non-	grazed, HS	ig B						
0.455         74         >75% Grass cover, Good, HSG C           0.497         80         >75% Grass cover, Good, HSG D           0.020         70         Woods, Good, HSG C           0.202         96         Gravel surface, HSG D           15.820         73         Weighted Average           15.721         99.37% Pervious Area           0.099         0.63% Impervious Area           0.099         100.00% Unconnected   Tc Length Slope Velocity Capacity Description (min) (feet) (ft/ft) (ft/sec) (cfs)	10	.133	71 M	eadow, non-	grazed, HS	ig c						
0.49780>75% Grass cover, Good, HSG D0.02070Woods, Good, HSG C0.20296Gravel surface, HSG D15.82073Weighted Average15.72199.37% Pervious Area0.0990.63% Impervious Area0.099100.00% UnconnectedTc Length Slope Velocity Capacity Description(min)(feet)(ft/ft)(ft/ft)(ft/sec)(cfs)	3	.694	78 M	eadow, non-	grazed, HS	ig d						
0.02070Woods, Good, HSG C0.20296Gravel surface, HSG D15.82073Weighted Average15.72199.37% Pervious Area0.0990.63% Impervious Area0.099100.00% UnconnectedTc Length Slope Velocity Capacity Description(min)(feet)(ft/ft)(ft/sec)(cfs)	0	.455	74 >7	5% Grass c	over, Good	, HSG C						
0.20296Gravel surface, HSG D15.82073Weighted Average15.72199.37% Pervious Area0.0990.63% Impervious Area0.099100.00% UnconnectedTc Length Slope Velocity Capacity Description(min)(feet)(ft/ft)(ft/ft)(ft/sec)(cfs)	0	.497	80 >7	5% Grass c	over, Good	, HSG D						
15.82073Weighted Average15.72199.37% Pervious Area0.0990.63% Impervious Area0.099100.00% UnconnectedTc Length Slope Velocity Capacity Description(min)(ft/ft)(ft/ft)(ft/sec)(cfs)	0	.020	70 W	oods, Good,	HSG C							
15.72199.37% Pervious Area0.0990.63% Impervious Area0.099100.00% UnconnectedTcLengthSlopeVelocityCapacityDescription(min)(ft/ft)(ft/sec)(cfs)	0	.202	96 G	avel surface	e, HSG D							
0.0990.63% Impervious Area0.099100.00% UnconnectedTcLengthSlopeVelocityCapacityDescription(min)(feet)(ft/ft)(ft/ft)(ft/sec)(cfs)	15	.820	73 W	eighted Ave	rage							
0.099 100.00% Unconnected Tc Length Slope Velocity Capacity Description (min) (feet) (ft/ft) (ft/sec) (cfs)	15	.721	99	.37% Pervic	ous Area							
Tc Length Slope Velocity Capacity Description (min) (feet) (ft/ft) (ft/sec) (cfs)	0											
(min) (feet) (ft/ft) (ft/sec) (cfs)	0	.099	10	0.00% Ünco	onnected							
(min) (feet) (ft/ft) (ft/sec) (cfs)												
	Tc	Length	h Slop	e Velocity	Capacity	Description						
	(min)	(feet)	:) (ft/f	t) (ft/sec)	(cfs)							
8.2 100 0.0430 0.20 Sheet Flow,	8.2	100	0.043	0 0.20		Sheet Flow,						
Grass: Short n= 0.150 P2= 2.50"						Grass: Short n= 0.150 P2= 2.50"						
11.3 717 0.0230 1.06 Shallow Concentrated Flow,	11.3	717	7 0.023	0 1.06		Shallow Concentrated Flow,						
Short Grass Pasture Kv= 7.0 fps												
2.7 287 1.76 Direct Entry, CF	2.7	287	7	1.76								
22.2 1,104 Total	22.2	1,104	4 Total									

## Subcatchment 25S: Sub 25



## Summary for Subcatchment 26S: Sub 26

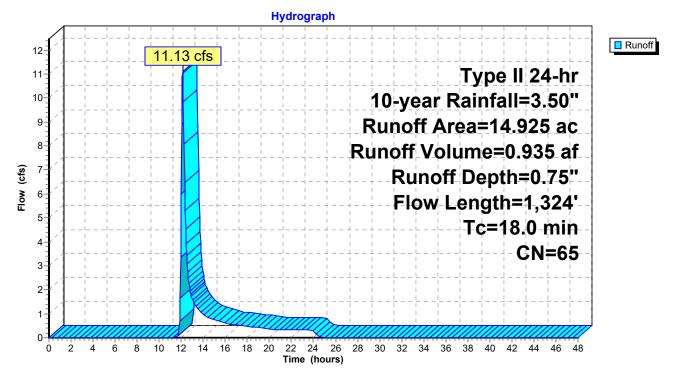
Runoff = 11.13 cfs @ 12.13 hrs, Volume= 0.9 Routed to Link SP26 :

0.935 af, Depth= 0.75"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 10-year Rainfall=3.50"

_	Area	(ac) (	CN Des	cription		
	0.	114	48 Brus	sh, Good, H	ISG B	
	0.	057	96 Gra	vel surface	, HSG D	
*	0.	804	98 Imp	ervious		
	6.	796	58 Mea	dow, non-	grazed, HS	G B
	2.	989	71 Mea	dow, non-	grazed, HS	GC
	2.	988	61 >75	% Grass co	over, Good	, HSG B
	0.	965	74 >75	% Grass co	over, Good	, HSG C
	0.	212	78 Mea	idow, non-	grazed, HS	G D
14.925 65 Weighted Average						
	14.121 94.61% Pervious Area					
	0.804 5.39% Impervious Area				ous Area	
	Тс	Length	•	•	Capacity	Description
	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
	9.7	100	0.0280	0.17		Sheet Flow,
						Grass: Short n= 0.150 P2= 2.50"
	2.2	340	0.1340	2.56		Shallow Concentrated Flow,
						Short Grass Pasture Kv= 7.0 fps
	2.7	259	0.0540	1.63		Shallow Concentrated Flow,
						Short Grass Pasture Kv= 7.0 fps
	3.4	625		3.06		Direct Entry, CF
	18.0	1,324	Total			

Subcatchment 26S: Sub 26



## Summary for Subcatchment 27.1S: Sub 27.1

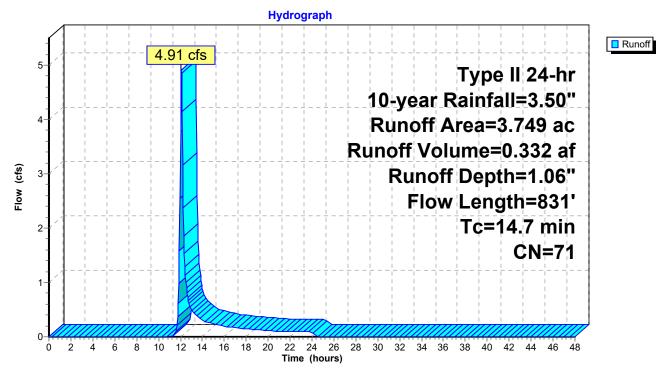
Runoff = 4.91 cfs @ 12.08 hrs, Volume= 0.332 Routed to Pond 27.1P : 27.1P

0.332 af, Depth= 1.06"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 10-year Rainfall=3.50"

	Area	(ac) C	N Dese	cription		
					grazed, HS grazed, HS	
*			6 Grav	•	Jiazeu, 115	66
				ghted Aver	200	
	-	749 7 749		00% Pervi		
	5.	749	100.		ous Alea	
	Тс	Length	Slope	Velocity	Capacity	Description
	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
	6.7	100	0.0700	0.25		Sheet Flow,
						Grass: Short n= 0.150 P2= 2.50"
	3.1	391	0.0900	2.10		Shallow Concentrated Flow,
						Short Grass Pasture Kv= 7.0 fps
	3.2	175	0.0170	0.91		Shallow Concentrated Flow,
						Short Grass Pasture Kv= 7.0 fps
	1.7	165	0.0530	1.61		Shallow Concentrated Flow,
						Short Grass Pasture Kv= 7.0 fps
	14.7	831	Total			

## Subcatchment 27.1S: Sub 27.1



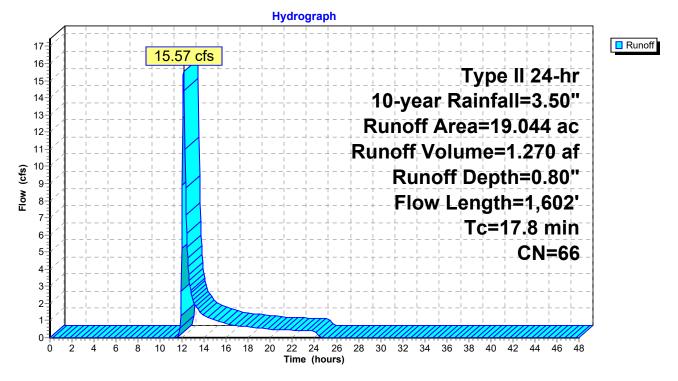
## Summary for Subcatchment 27S: Sub 27

Runoff = 15.57 cfs @ 12.13 hrs, Volume= 1.270 af, Depth= 0.80" Routed to Link SP27 :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 10-year Rainfall=3.50"

Area	(ac) C	N Des	cription							
0.	254	96 Grav	Gravel surface, HSG D							
0.	064	98 Unc	onnected r	oofs, HSG	D					
8.	719	58 Mea	dow, non-	grazed, HS	G B					
7.	839			grazed, HS						
				over, Good						
				over, Good						
				over, Good	, HSG D					
0.	381	98 Wat	er Surface	, HSG D						
19.	044		ghted Aver	0						
18.	18.599 97.66% Pervious Area									
-	0.445 2.34% Impervious Area									
0.	0.064 14.38% Unconnected									
_		-								
Tc	Length	Slope	Velocity	Capacity	Description					
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)						
6.9	100	0.0650	0.24		Sheet Flow,					
					Grass: Short n= 0.150 P2= 2.50"					
7.4	832	0.0720	1.88		Shallow Concentrated Flow,					
					Short Grass Pasture Kv= 7.0 fps					
3.5	670		3.19		Direct Entry, CF					
17.8	1,602	Total								

## Subcatchment 27S: Sub 27



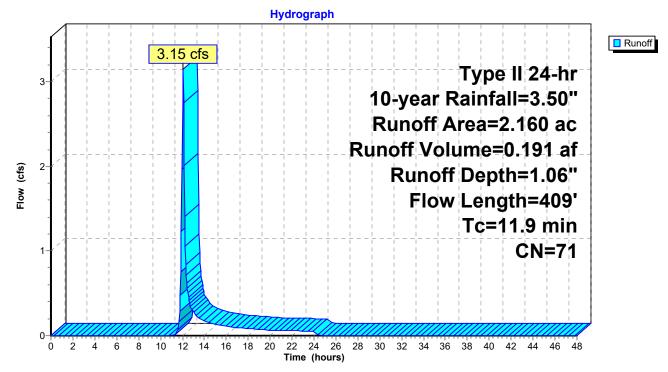
## Summary for Subcatchment 28.1S: Sub 28.1

Runoff = 3.15 cfs @ 12.05 hrs, Volume= Routed to Pond 28.1P : 28.1P 0.191 af, Depth= 1.06"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 10-year Rainfall=3.50"

	Area	(ac)	CN D	escription				
*	0.	051	96 G	ravel				
	0.	068	58 N	leadow, no	n-grazed, HS	G B		
	2.	041	71 N	leadow, no	n-grazed, HS	G C		
_	2.160 71 Weighted Average							
	2.160 100.00% Pervious Area							
	Tc	Length	Slop	be Velocit	y Capacity	Description		
	(min)	(feet)	) (ft/	ft) (ft/sec	:) (cfs)			
	8.2	100	0.042	20 0.2	0	Sheet Flow,		
						Grass: Short n= 0.150 P2= 2.50"		
	3.7	309	0.040	0 1.4	0	Shallow Concentrated Flow,		
						Short Grass Pasture Kv= 7.0 fps		
_	11.9	409	Total					

## Subcatchment 28.1S: Sub 28.1



## Summary for Subcatchment 28S: Sub 28

[47] Hint: Peak is 166% of capacity of segment #3

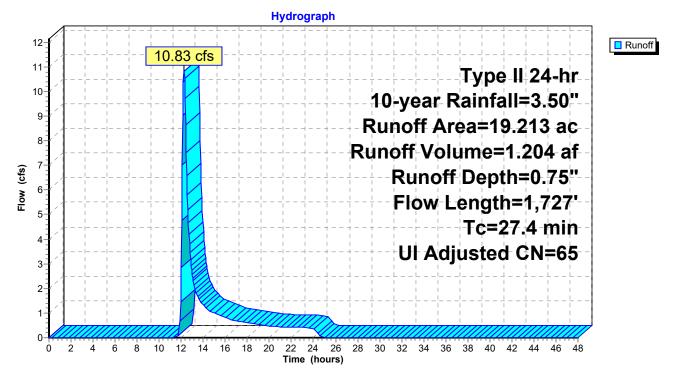
10.83 cfs @ 12.25 hrs, Volume= 1.204 af, Depth= 0.75" Runoff = Routed to Link SP28 :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 10-year Rainfall=3.50"

Area	a (ac)	CN Adj	Descrip	Description					
	).547	96	Gravels	surface, HS	G D				
(	).114	98	Unconn	ected roofs	, HSG D				
ł	3.804	58	Meadov	v, non-graz	ed, HSG B				
-	7.984	71			ed, HSG C				
(	).902	61			, Good, HSG B				
	).862	74	>75% G	Grass cover	, Good, HSG C				
19	9.213	66 65	Weiahte	ed Average	, UI Adjusted				
19	9.099		0	99.41% Pervious Area					
	).114		0.59% Impervious Area						
(	).114		100.00% Unconnected						
To	Lengt	n Slope	Velocity	Capacity	Description				
(min)	(feet	) (ft/ft)	(ft/sec)	(cfs)					
16.9	10	0.0070	0.10		Sheet Flow,				
					Grass: Short n= 0.150 P2= 2.50"				
7.4	819	9 0.0700	1.85		Shallow Concentrated Flow,				
					Short Grass Pasture Kv= 7.0 fps				
3.1	808	3 0.0420	4.36	6.53	•				
					Bot.W=2.00' D=0.50' Z= 2.0 '/' Top.W=4.00'				
					n= 0.035 Earth, dense weeds				
	4 70								

27.4 1,727 Total

## Subcatchment 28S: Sub 28

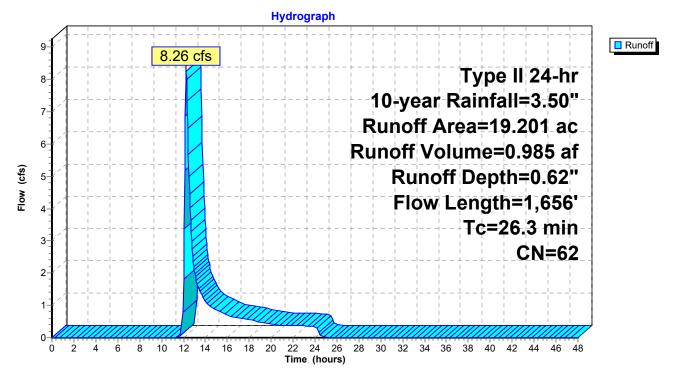


# Summary for Subcatchment 29S: Sub 29

Runoff = 8.26 cfs @ 12.25 hrs, Volume= 0.985 af, Depth= 0.62" Routed to Link SP29 :

Area	(ac) C	N Des	cription							
0.	326	96 Grav	Gravel surface, HSG D							
0.	240	98 Unc	Inconnected roofs, HSG D							
14.	674		leadow, non-grazed, HSG B							
3.	955		Vleadow, non-grazed, HSG C							
0.	006	55 Woo	/oods, Good, HSG B							
19.	201	62 Weig	ghted Aver	age						
18.	961	98.7	5% Pervio	us Area						
0.	240	1.25	% Impervi	ous Area						
0.	240	100.	00% Unco	nnected						
Тс	Length	Slope	Velocity	Capacity	Description					
<u>(min)</u>	(feet)	(ft/ft)	(ft/sec)	(cfs)						
8.9	100	0.0350	0.19		Sheet Flow,					
					Grass: Short					
16.5	1,490	0.0460	1.50		Shallow Concentrated Flow,					
					Short Grass Pasture Kv= 7.0 fps					
0.9	66		1.22		Direct Entry, CF					
26.3	1,656	Total								

# Subcatchment 29S: Sub 29



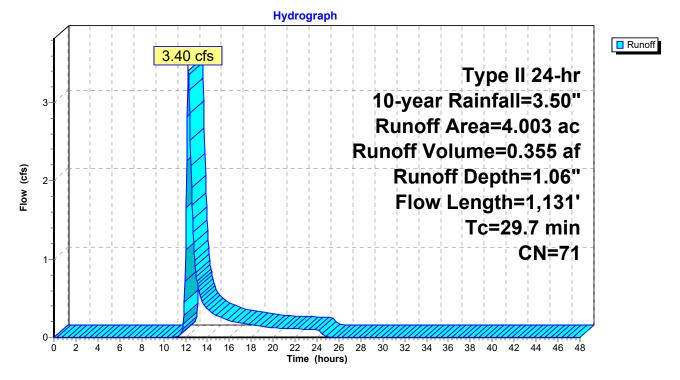
#### Summary for Subcatchment 30.1S: Sub 30.1

Runoff = 3.40 cfs @ 12.27 hrs, Volume= 0.355 af, Depth= 1.06" Routed to Pond 30.1P : 30.1P

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 10-year Rainfall=3.50"

Area	(ac) C	N Dese	cription						
4.	4.003 71 Meadow, non-grazed, HSG C								
4.	.003	100.	00% Pervi	ous Area					
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description				
15.3	100	0.0090	0.11		Sheet Flow,				
14.4	1,031	0.0290	1.19		Grass: Short n= 0.150 P2= 2.50" Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps				
29.7	1,131	Total							

Subcatchment 30.1S: Sub 30.1



#### Summary for Subcatchment 30S: Sub 30

[47] Hint: Peak is 232% of capacity of segment #6

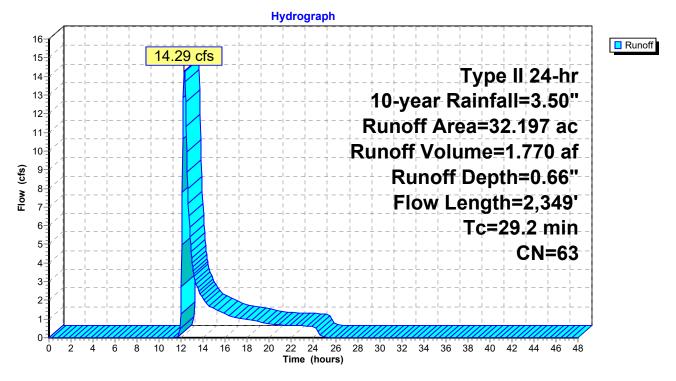
14.29 cfs @ 12.29 hrs, Volume= 1.770 af, Depth= 0.66" Runoff = Routed to Link SP30 :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 10-year Rainfall=3.50"

_	Area	(ac) C	N Desc	cription								
	0.	214 4	18 Brus	h, Good, H	ISG B							
	0.	283 6	65 Brus	Brush, Good, HSG C								
	1.013 96 Gravel surface, HSG D											
	0.445 98 Unconnected roofs, HSG D											
					grazed, HS							
					grazed, HS							
					over, Good,							
	-				over, Good,	, HSG C						
				ds, Good,								
_				ds, Good,								
				phted Aver								
		752		2% Pervio								
		445		% Impervi								
	0.	445	100.	00% Unco	nnected							
	Тс	Length	Slope	Velocity	Capacity	Description						
	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	Decemption						
_	11.1	100	0.0200	0.15		Sheet Flow,						
			0.0200			Grass: Short n= 0.150 P2= 2.50"						
	3.4	228	0.0260	1.13		Shallow Concentrated Flow,						
		-	-	-		Short Grass Pasture Kv= 7.0 fps						
	0.6	171	0.1050	4.86		Shallow Concentrated Flow,						
						Grassed Waterway Kv= 15.0 fps						
	2.8	279	0.0570	1.67		Shallow Concentrated Flow,						
						Short Grass Pasture Kv= 7.0 fps						
	6.5	554	0.0410	1.42		Shallow Concentrated Flow,						
						Short Grass Pasture Kv= 7.0 fps						
	4.8	1,017	0.0290	3.52	6.15	Trap/Vee/Rect Channel Flow,						
						Bot.W=2.00' D=0.50' Z= 3.0 '/' Top.W=5.00'						
_						n= 0.035 Earth, dense weeds						
	00.0	0 0 4 0	<b>T</b>									

29.2 2,349 Total

# Subcatchment 30S: Sub 30



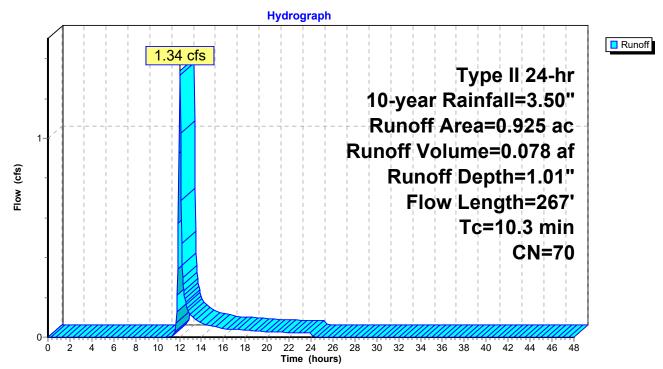
#### Summary for Subcatchment 31.1S: Sub 31.1

Runoff = 1.34 cfs @ 12.03 hrs, Volume= 0.078 af, Depth= 1.01" Routed to Pond 31.1P : 31.1P

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 10-year Rainfall=3.50"

_	Area	(ac) C	N Desc	cription				
	-				grazed, HS			
	0.878 71 Meadow, non-grazed, HSG C							
	0.925 70 Weighted Average							
0.925 100.00% Pervious Area								
	Tc	Length	Slope	Velocity	Capacity	Description		
	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	·		
	9.1	100	0.0330	0.18		Sheet Flow,		
						Grass: Short n= 0.150 P2= 2.50"		
	0.9	90	0.0522	1.60		Shallow Concentrated Flow,		
						Short Grass Pasture Kv= 7.0 fps		
	0.3	77	0.0130	4.02	20.10	Trap/Vee/Rect Channel Flow,		
						Bot.W=2.00' D=1.00' Z= 3.0 '/' Top.W=8.00'		
						n= 0.030 Earth, grassed & winding		
	10.3	267	Total					

#### Subcatchment 31.1S: Sub 31.1



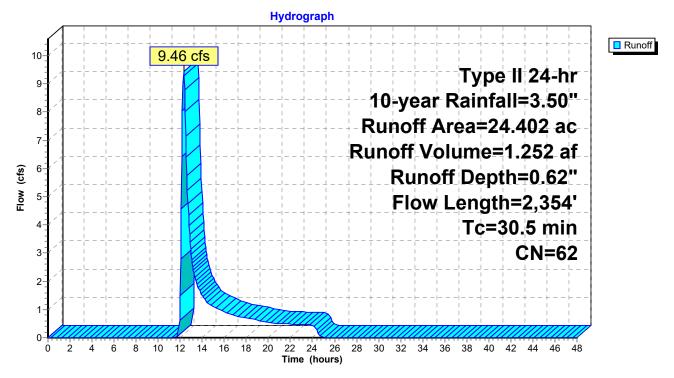
### Summary for Subcatchment 31S: Sub 31

[47] Hint: Peak is 226% of capacity of segment #3

Runoff = 9.46 cfs @ 12.31 hrs, Volume= 1.252 af, Depth= 0.62" Routed to Link SP34 :

Area	(ac) C	N Dese	cription		
0.	.029 4	18 Brus	h, Good, H	ISG B	
14.	.311 5			grazed, HS	
6.	.600 7			grazed, HS	GC
			ds, Good,		
			ds, Good,		
			el surface	,	
			phted Aver		
24.	402	100.	00% Pervi	ous Area	
Тс	Length	Slope	Velocity	Capacity	Description
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	Description
8.2	100	0.0420	0.20	(010)	Sheet Flow,
0.2	100	0.0420	0.20		Grass: Short $n= 0.150$ P2= 2.50"
18.9	1,401	0.0310	1.23		Shallow Concentrated Flow,
	.,				Short Grass Pasture Kv= 7.0 fps
3.4	853	0.0938	4.18	4.18	
					W=3.00' D=0.50' Area=1.0 sf Perim=3.2'
					n= 0.050 Mountain streams w/large boulders
30.5	2,354	Total			

Subcatchment 31S: Sub 31



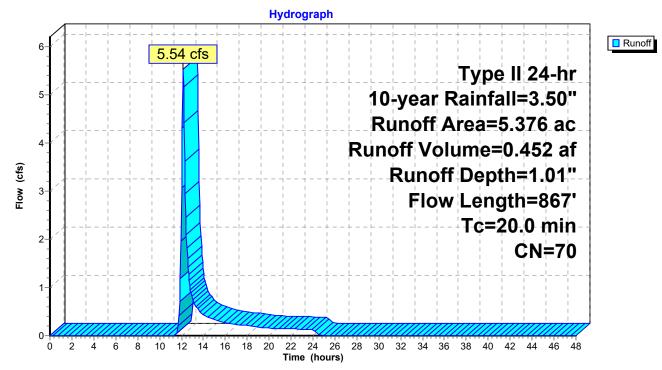
#### Summary for Subcatchment 32.1S: 32.1S

Runoff = 5.54 cfs @ 12.15 hrs, Volume= Routed to Pond 32.1P : 32.1P 0.452 af, Depth= 1.01"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 10-year Rainfall=3.50"

	Area	(ac) (	CN Des	scription					
*	0.	166	96 Gra	vel					
	0.	888	58 Mea	adow, non-	grazed, HS	G B			
	4.	322	71 Mea	adow, non-	grazed, HS	GC			
	5.376 70 Weighted Average								
	5.376 100.00% Pervious Area								
	Tc	Length	Slope	Velocity	Capacity	Description			
	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)				
	8.0	100	0.0450	0.21		Sheet Flow,			
						Grass: Short n= 0.150 P2= 2.50"			
	12.0	767	0.0230	1.06		Shallow Concentrated Flow,			
						Short Grass Pasture Kv= 7.0 fps			
_	20.0	867	Total						

# Subcatchment 32.1S: 32.1S



#### Summary for Subcatchment 32S: Sub 32

[47] Hint: Peak is 349% of capacity of segment #7

Runoff = 18.41 cfs @ 12.26 hrs, Volume= Routed to Link SP34 :

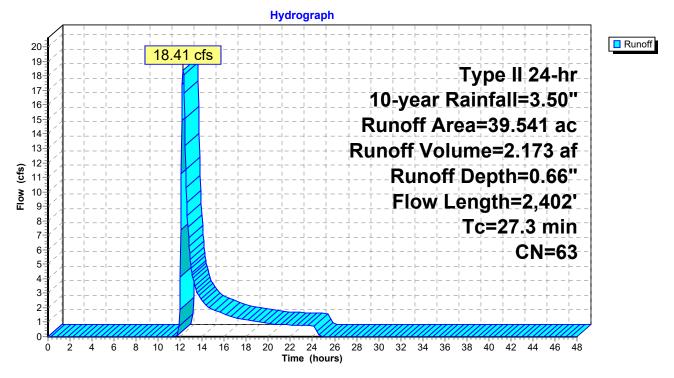
2.173 af, Depth= 0.66"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 10-year Rainfall=3.50"

_	Area	(ac) C	N Desc	cription						
	0.	124 4	8 Brus	h, Good, H	ISG B					
	25.962 58 Meadow, non-grazed, HSG B									
	4.042 71 Meadow, non-grazed, HSG C									
	2.796 98 Water Surface, HSG D									
	5.751 55 Woods, Good, HSG B									
_	0.			el surface	, HSG D					
				ghted Aver						
		745		3% Pervio						
	2.	796	7.07	% Impervi	ous Area					
	<b>–</b>	1	01	V. L	0					
	Tc	Length	Slope	Velocity		Description				
_	(min)	(feet)	<u>(ft/ft)</u>	(ft/sec)	(cfs)					
	9.7	100	0.0280	0.17		Sheet Flow,				
	2.6	100	0 0000	1 0 1		Grass: Short n= 0.150 P2= 2.50"				
	2.6	160	0.0220	1.04		Shallow Concentrated Flow,				
	3.6	495	0.1050	2.27		Short Grass Pasture Kv= 7.0 fps Shallow Concentrated Flow,				
	5.0	495	0.1000	2.21		Short Grass Pasture Kv= 7.0 fps				
	1.5	74	0.0270	0.82		Shallow Concentrated Flow,				
	1.0	17	0.0210	0.02		Woodland Kv= 5.0 fps				
	1.9	99	0.0300	0.87		Shallow Concentrated Flow,				
						Woodland Kv= 5.0 fps				
	6.5	550	0.0800	1.41		Shallow Concentrated Flow,				
						Woodland Kv= 5.0 fps				
	1.5	924	0.0910	10.13	5.27	Trap/Vee/Rect Channel Flow,				
						Bot.W=2.00' D=0.20' Z= 3.0 '/' Top.W=3.20'				
_						n= 0.013 Corrugated PE, smooth interior				
	27.3	2 4 0 2	Total							

27.3 2,402 Total

# Subcatchment 32S: Sub 32



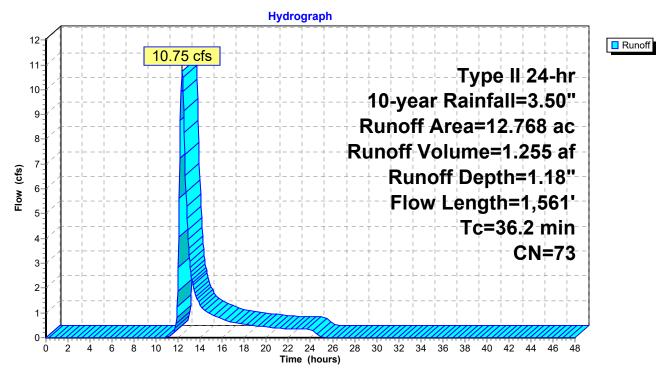
### Summary for Subcatchment 33.1S: 33.1S

[47] Hint: Peak is 530% of capacity of segment #3

Runoff = 10.75 cfs @ 12.34 hrs, Volume= Routed to Pond 33.1P : 33.1P 1.255 af, Depth= 1.18"

	Area	(ac)	CN D	escription						
*	0.	536	96 G	Gravel						
	0.	787	58 M	eadow, no	on-graz	ed, HS	IG B			
2.948 78 Meadow, non-grazed, HSG D							G D			
*	0.	180	98 In	pervious						
		285		eadow, no			GC			
_	0.	.032	48 B	ush, Goo	d, HSG	В				
	12.	768		eighted A						
		.588		8.59% Per						
	0.	180	1.	41% Impe	ervious	Area				
	_		<u> </u>							
		Length				pacity	Description			
_	(min)	(feet)			-	(cfs)				
	15.3	100	0.009	0 0.	11		Sheet Flow,			
							Grass: Short n= 0.150 P2= 2.50"			
	15.9	669	0.010	0 0.	70		Shallow Concentrated Flow,			
	<u>م ح</u>	000	0.045	o 44	22	0.00	Short Grass Pasture Kv= 7.0 fps			
	2.5	638	0.015	0 4.2	23	2.03	· · · · · · · · · · · · · · · · · · ·			
							Bot.W=2.00' D=0.20' Z= 2.0 '/' Top.W=2.80'			
	2.5	15/	0.021	0 1.0	11		n= 0.013 Corrugated PE, smooth interior			
	2.5	154	0.021	0 1.0	1		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps			
_	26.0	4 504	Tatal							
	36.2	1,561	Total							

Subcatchment 33.1S: 33.1S

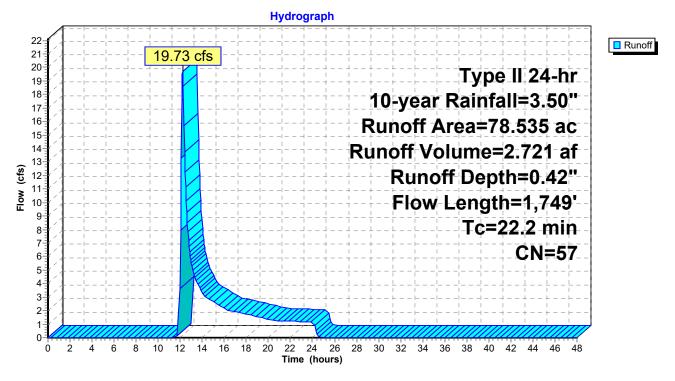


# Summary for Subcatchment 33S: Sub 33

Runoff = 19.73 cfs @ 12.22 hrs, Volume= 2.721 af, Depth= 0.42" Routed to Link SP34 :

Area	(ac) C	N Dese	cription							
0.	.383 4	48 Brus	Brush, Good, HSG B							
0.	.083 9	96 Grav	Gravel surface, HSG D							
				oofs, HSG						
				grazed, HS						
				grazed, HS						
				grazed, HS						
				over, Good	, HSG B					
			ds, Good,							
			ds, Good,							
			ghted Aver							
	.097		4% Pervio							
	.438		% Impervi							
0.	.438	100.	00% Unco	nnected						
т.	1 4	0	V/-1!+	0	Description					
Tc	Length	Slope	Velocity	Capacity	Description					
<u>(min)</u>	(feet)	<u>(ft/ft)</u>	(ft/sec)	(cfs)						
8.9	100	0.0350	0.19		Sheet Flow,					
<b>5</b> 0	700	0 4 0 4 0	0.00		Grass: Short n= 0.150 P2= 2.50"					
5.8	780	0.1010	2.22		Shallow Concentrated Flow,					
2.0	504	0 4050	2.20		Short Grass Pasture Kv= 7.0 fps					
3.9	531	0.1059	2.28		Shallow Concentrated Flow,					
3.6	338	0.1005	1.59		Short Grass Pasture Kv= 7.0 fps Shallow Concentrated Flow,					
5.0	330	0.1005	1.09		Woodland Kv= 5.0 fps					
	1 740	Total								
22.2	1,749	Total								

### Subcatchment 33S: Sub 33



# Summary for Subcatchment 34S: Sub 34

[47] Hint: Peak is 324% of capacity of segment #3

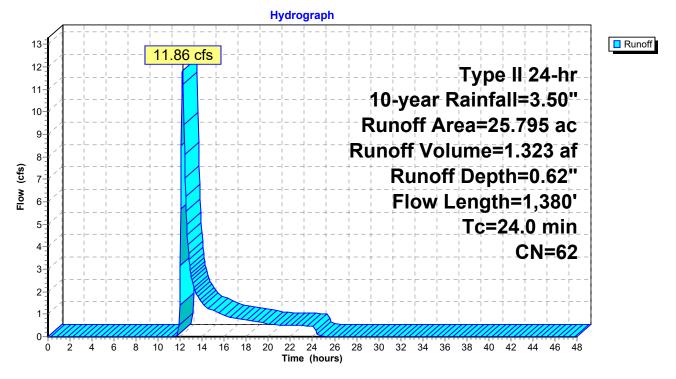
Runoff	=	11.86 cfs @ 12	2.22 hrs, V	′olume=	1.323 af,	Depth= 0.62"
Routed	l to Por	nd 34P : VAN EPF	PS RD CUL	VERT		-

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 10-year Rainfall=3.50"

 Area	(ac) C	N Dese	cription								
0.	189	48 Brus	h, Good, I	HSG B							
0.	572	96 Grav	Gravel surface, HSG D								
0.	299	98 Unco	onnected r	oofs, HSG	D						
16.	306	58 Mea	dow, non-	grazed, HS	G B						
3.	458	71 Mea	dow, non-	grazed, HS	GC						
3.	128	61 >759	% Grass c	over, Good	, HSG B						
1.	486	74 >759	% Grass c	over, Good	, HSG C						
 0.	357	<u>55 Woo</u>	ds, Good,	HSG B							
25.	795	62 Weig	ghted Avei	rage							
25.	496	98.8	4% Pervio	us Area							
0.	299	1.16	% Impervi	ous Area							
0.	299	100.	00% Uncc	nnected							
Тс	Length	Slope	Velocity	Capacity	Description						
 (min)	(feet)	(ft/ft)	(ft/sec)	(cfs)							
6.8	100	0.0675	0.24		Sheet Flow,						
					Grass: Short n= 0.150 P2= 2.50"						
15.5	914	0.0198	0.98		Shallow Concentrated Flow,						
					Short Grass Pasture Kv= 7.0 fps						
0.2	42	0.0119	2.99	3.66	Pipe Channel,						
					15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31'						
					n= 0.025 Corrugated metal						
1.5	324	0.0552	3.52		Shallow Concentrated Flow,						
					Grassed Waterway Kv= 15.0 fps						
24.0	1 380	Total									

24.0 1,380 Total

# Subcatchment 34S: Sub 34



3.433 af, Depth= 0.75"

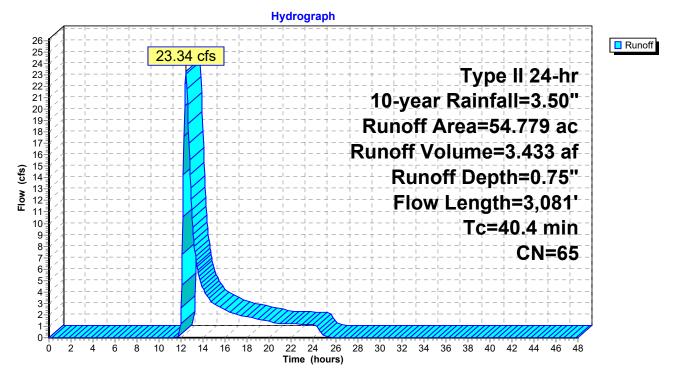
#### Summary for Subcatchment 35S: Sub 35

[47] Hint: Peak is 297% of capacity of segment #6

Runoff = 23.34 cfs @ 12.44 hrs, Volume= Routed to Link SP35 :

Area	(ac) C	N Desc	cription							
0.	105 4	8 Brus	Brush, Good, HSG B							
0.	.087 6	5 Brush, Good, HSG C								
	1.101 98 Unconnected roofs, HSG D									
				grazed, HS						
				grazed, HS						
				over, Good						
				over, Good	, HSG C					
			ds, Good,							
			ds, Good,							
-			el surface	,						
-			phted Aver							
	.678		9% Pervio							
	.101		% Impervi							
1.	.101	100.	00% Unco							
Tc	Length	Slope	Velocity	Capacity	Description					
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	Decemption					
8.1	100	0.0440	0.21		Sheet Flow,					
			•		Grass: Short n= 0.150 P2= 2.50"					
6.6	393	0.0204	1.00		Shallow Concentrated Flow,					
					Short Grass Pasture Kv= 7.0 fps					
12.3	1,170	0.0510	1.58		Shallow Concentrated Flow,					
					Short Grass Pasture Kv= 7.0 fps					
5.3	272	0.0150	0.86		Shallow Concentrated Flow,					
					Short Grass Pasture Kv= 7.0 fps					
5.1	435	0.0410	1.42		Shallow Concentrated Flow,					
0.0	744	0.4000	0.00	7.00	Short Grass Pasture Kv= 7.0 fps					
3.0	711	0.1030	3.93	7.86	Parabolic Channel, W=3.00' D=1.00' Area=2.0 sf Perim=3.7'					
					n = 0.080 Earth, long dense weeds					
40.4	2 0 0 4	Total								
40.4	3,081	Total								

### Subcatchment 35S: Sub 35



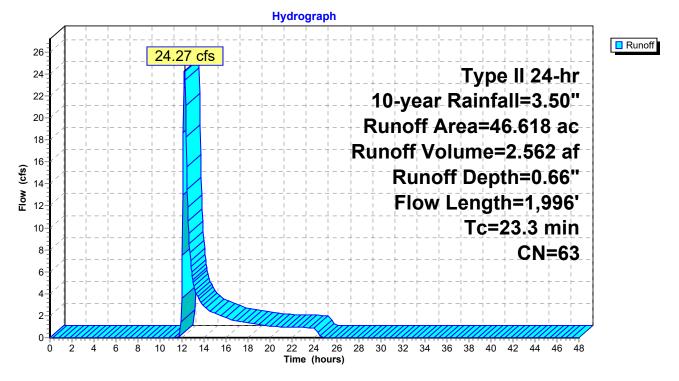
### Summary for Subcatchment 36S: Sub 36

[47] Hint: Peak is 410% of capacity of segment #3

Runoff = 24.27 cfs @ 12.21 hrs, Volume= 2.562 af, Depth= 0.66" Routed to Link SP36 :

Area	(ac) C	N Dese	cription									
0.	319 9	96 Grav	Gravel surface, HSG D									
3.	277 3	58 Mea	Meadow, non-grazed, HSG B									
21.	346	71 Mea	Meadow, non-grazed, HSG C									
21.	<u>676</u> 5	55 Woo	Woods, Good, HSG B									
46.	618 6	63 Weig	ghted Aver	age								
46.	618	100.	00% Pervi	ous Area								
Тс	Length	Slope	Velocity	Capacity	Description							
<u>(min)</u>	(feet)	(ft/ft)	(ft/sec)	(cfs)								
7.4	100	0.0550	0.23		Sheet Flow,							
					Grass: Short n= 0.150 P2= 2.50"							
11.7	1,036	0.0442	1.47		Shallow Concentrated Flow,							
					Short Grass Pasture Kv= 7.0 fps							
4.2	860	0.1400	3.38	5.91	Trap/Vee/Rect Channel Flow,							
					Bot.W=2.00' D=0.50' Z= 3.0 '/' Top.W=5.00'							
					n= 0.080 Earth, long dense weeds							
23.3	1,996	Total										

### Subcatchment 36S: Sub 36

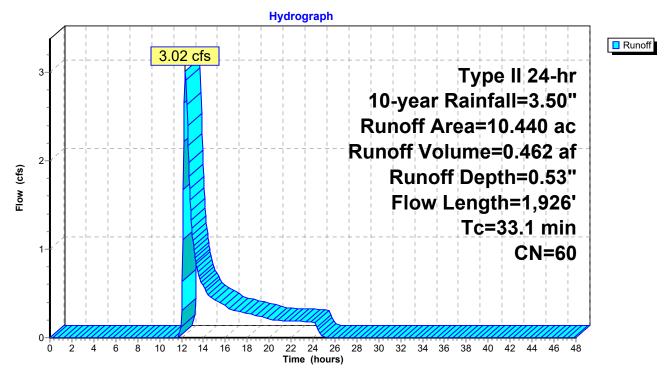


# Summary for Subcatchment 37S: Sub 37

Runoff = 3.02 cfs @ 12.36 hrs, Volume= 0.462 af, Depth= 0.53" Routed to Link SP37 :

	Area	(ac) C	N Dese	cription						
				Meadow, non-grazed, HSG B Woods, Good, HSG B						
*										
	10.	440 6	60 Weig	Weighted Average						
	-	834	-	0% Pervio						
	0.	606	5.80	% Impervi	ous Area					
	Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description				
	19.3	100	0.0050	0.09	(00)	Sheet Flow,				
	19.5	100	0.0000	0.03		Grass: Short $n= 0.150$ P2= 2.50"				
	10.6	1,005	0.0507	1.58		Shallow Concentrated Flow,				
		,				Short Grass Pasture Kv= 7.0 fps				
	1.0	90	0.0889	1.49		Shallow Concentrated Flow,				
						Woodland Kv= 5.0 fps				
	2.2	731	0.0570	5.59	20.95	Trap/Vee/Rect Channel Flow,				
						Bot.W=6.00' D=0.50' Z= 3.0 '/' Top.W=9.00'				
						n= 0.035 Earth, dense weeds				
	33.1	1,926	Total							

Subcatchment 37S: Sub 37

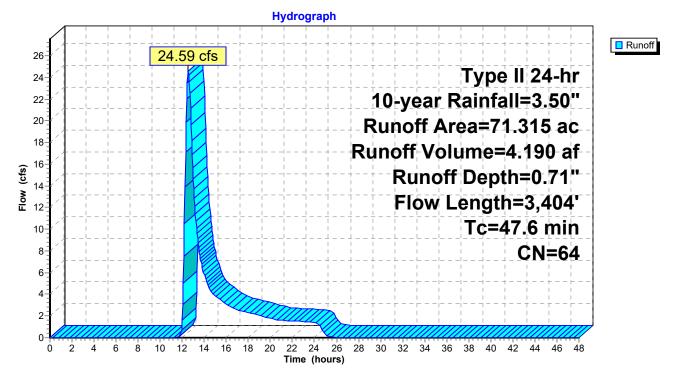


# Summary for Subcatchment 38S: Sub 38

Runoff = 24.59 cfs @ 12.55 hrs, Volume= 4.190 af, Depth= 0.71" Routed to Link SP38 :

Area	(ac) C	N Desc	cription									
0	.437 9	96 Grav	Gravel surface, HSG D									
0	.789 9	98 Unco	Jnconnected roofs, HSG D									
29	.694 క	58 Mea	Meadow, non-grazed, HSG B									
36	.187 7	71 Mea	dow, non-g	grazed, HS	GC							
3	.907 3	30 Woo	ds, Good,	HSG A								
0	.301 క	55 Woo	ds, Good,	HSG B								
71	.315 6	64 Weig	ghted Aver	age								
70	.526	98.8	9% Pervio	us Area								
0	.789	1.11	% Impervi	ous Area								
0	.789	100.	00% Unco	nnected								
_												
Tc	Length	Slope	Velocity	Capacity	Description							
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)								
7.7	100	0.0500	0.22		Sheet Flow,							
					Grass: Short n= 0.150 P2= 2.50"							
11.9	739	0.0220	1.04		Shallow Concentrated Flow,							
					Short Grass Pasture Kv= 7.0 fps							
6.6	753	0.0744	1.91		Shallow Concentrated Flow,							
					Short Grass Pasture Kv= 7.0 fps							
6.6 21.4	753 1,812	0.0744	1.91		Short Grass Pasture Kv= 7.0 fps Shallow Concentrated Flow,							
					Short Grass Pasture Kv= 7.0 fps							

### Subcatchment 38S: Sub 38

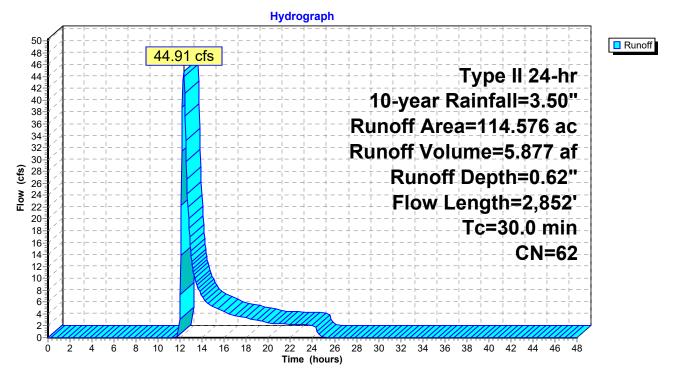


# Summary for Subcatchment 39S: Sub 39

Runoff = 44.91 cfs @ 12.31 hrs, Volume= 5.877 af, Depth= 0.62" Routed to Link SP39 :

Area	(ac) (	CN Des	cription								
2.	544	96 Gra	Gravel surface, HSG D								
0.	425	98 Unc	Jnconnected roofs, HSG D								
71.	899	58 Mea	adow, non-g	grazed, HS	G B						
				grazed, HS							
				grazed, HS	G D						
			er Surface	,							
			ods, Good,								
			ods, Good,								
			ods, Good,								
114.			ghted Aver								
114.			51% Pervio								
	557		9% Impervi								
0.	425	76.3	30% Uncon	nected							
Тс	Length	Slope	Velocity	Capacity	Description						
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	Description						
7.1	100		0.23	(010)	Sheet Flow,						
7.1	100	0.0000	0.20		Grass: Short $n= 0.150$ P2= 2.50"						
17.7	2,151	0.0840	2.03		Shallow Concentrated Flow,						
	2,101	0.0010	2.00		Short Grass Pasture Kv= 7.0 fps						
5.2	601	0.1490	1.93		Shallow Concentrated Flow,						
0.2					Woodland $Kv = 5.0$ fps						
30.0	2,852	Total			· · ·						

### Subcatchment 39S: Sub 39



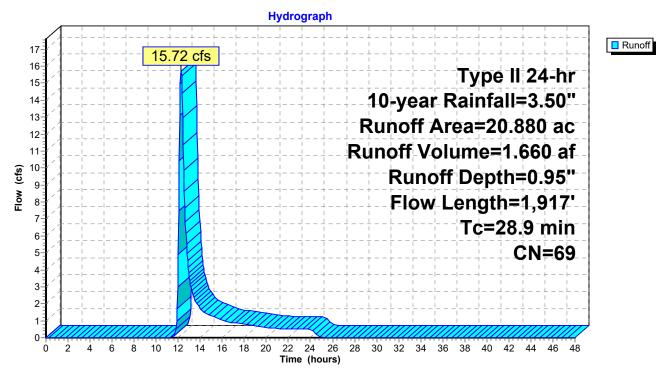
# Summary for Subcatchment 40S: Sub 40

Runoff = 15.72 cfs @ 12.26 hrs, Volume= 1 Routed to Reach 39R :

1.660 af, Depth= 0.95"

Area	(ac) C	N Desc	cription									
0.	.016	65 Brus	Brush, Good, HSG C									
0.	.235	96 Grav	Gravel surface, HSG D									
0.	.018 9	98 Unco	Unconnected roofs, HSG D									
6.	.944	58 Mea	Meadow, non-grazed, HSG B									
			Meadow, non-grazed, HSG C									
				grazed, HS								
				over, Good	, HSG B							
			er Surface									
			ds, Good,									
			ds, Good,									
			phted Aver									
	.222		6% Pervio									
	.658		% Impervi									
0.	.018	1.09	% Unconn	ected								
Tc	Length	Slope	Velocity	Capacity	Description							
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	Description							
7.3	100	0.0575	0.23	(010)	Sheet Flow,							
1.0	100	0.0070	0.20		Grass: Short n= 0.150 P2= 2.50"							
2.6	358	0.1089	2.31		Shallow Concentrated Flow,							
2.0	000	0.1000	2.01		Short Grass Pasture Kv= 7.0 fps							
0.4	38	0.1118	1.67		Shallow Concentrated Flow,							
-			-		Woodland $Kv = 5.0 \text{ fps}$							
9.8	1,118	0.0733	1.90		Shallow Concentrated Flow,							
					Short Grass Pasture Kv= 7.0 fps							
8.8	303	0.0132	0.57		Shallow Concentrated Flow,							
					Woodland Kv= 5.0 fps							
28.9	1,917	Total										

Subcatchment 40S: Sub 40

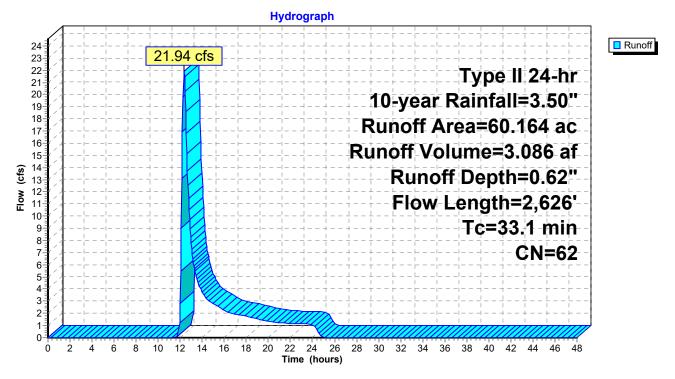


# Summary for Subcatchment 41S: Sub 41

Runoff = 21.94 cfs @ 12.35 hrs, Volume= 3.086 af, Depth= 0.62" Routed to Link SP41 :

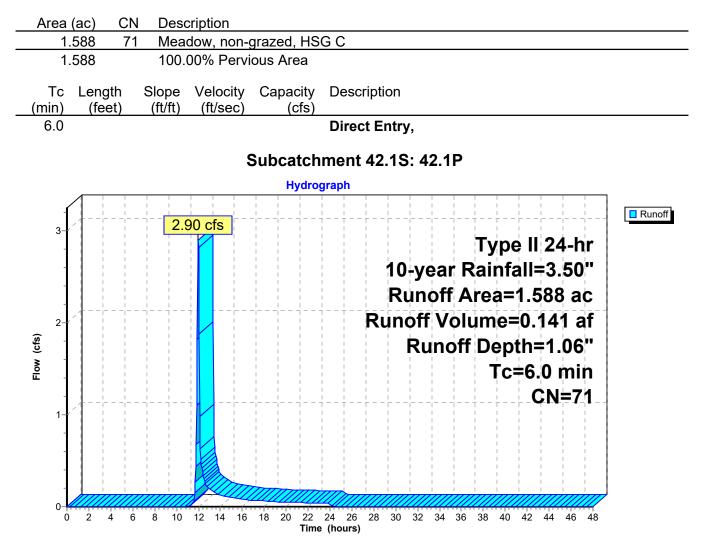
Area	(ac) C	N Dese	cription									
21.	.630	58 Mea	Meadow, non-grazed, HSG B									
8.	.822		Meadow, non-grazed, HSG C									
2.	.302		Meadow, non-grazed, HSG D									
			Woods, Good, HSG B									
			ds, Good,									
0.	278	<u>96 Grav</u>	el surface/	, HSG D								
60.	.164 (	62 Weig	ghted Aver	age								
60.	164	100.	00% Pervi	ous Area								
Tc	Length	Slope	Velocity	Capacity	Description							
<u>(min)</u>	(feet)	(ft/ft)	(ft/sec)	(cfs)								
13.4	100	0.0125	0.12		Sheet Flow,							
					Grass: Short n= 0.150 P2= 2.50"							
5.0	585	0.0765	1.94		Shallow Concentrated Flow,							
					Short Grass Pasture Kv= 7.0 fps							
7.8	652	0.0395	1.39		Shallow Concentrated Flow,							
					Short Grass Pasture Kv= 7.0 fps							
6.9	1,289	0.0436	3.13		Shallow Concentrated Flow,							
					Grassed Waterway Kv= 15.0 fps							
33.1	2,626	Total										

### Subcatchment 41S: Sub 41



#### Summary for Subcatchment 42.1S: 42.1P

Runoff = 2.90 cfs @ 11.98 hrs, Volume= 0.141 af, Depth= 1.06" Routed to Pond 42P : 42P



# Summary for Subcatchment 42.2S: 42.2P

Runoff = 4.62 cfs @ 11.99 hrs, Volume= 0.232 af, Depth= 0.85" Routed to Pond 42P : 42P

Area		CN		cription															
0.922 58 Meadow, non-grazed, HSG B 2.347 71 Meadow, non-grazed, HSG C																			
3.	.269 .269	67	′ Wei	ghted Ave 00% Perv	erage														
Tc (min)	Len (fe	gth eet)	Slope (ft/ft)	Velocity (ft/sec)		city cfs)	Desci	ripti	on										
6.0							Direc	t Ei	ntry	,									
					Subca	tch	ment	42	.2S	: 42	2.2	Ρ							
					н	ydrog	graph												
cts)				62 cfs					Ru inc	ine off	off V	R A DIL	air rea ım	nfa 1=3 e=(	II= 3.2 0.2	3. 69 232	l-h 50' ac 2 a 85'	n C f	Runoi
Flow (cfs)											   		I I	- I	1		nir		
2								     				       			С	N	=67	7	
- - 1_ - - -										 	 	 			-               	         			
0	2	4 6	8 10	12 14 10	5 18 20		24 26 (hours)	28	30	32	34	36	38	40	42	44	46	48	

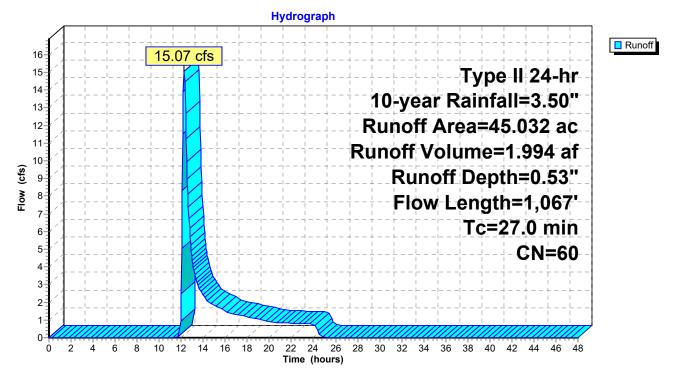
# Summary for Subcatchment 42S: Sub 42

Runoff = 15.07 cfs @ 12.27 hrs, Volume= 1.99 Routed to Link SP42 :

1.994 af, Depth= 0.53"

Area	(ac) C	N Desc	cription								
8.	8.572 58 Meadow, non-grazed, HSG B										
11.	283 7	'1 Mea	Meadow, non-grazed, HSG C								
23.	485 5		Woods, Good, HSG B								
	1.193 70 Woods, Good, HSG C										
0.	499 9	6 Grav	el surface	, HSG D							
45.	032 6	60 Weig	ghted Aver	age							
45.	032	100.	00% Pervi	ous Area							
_		-									
Tc	Length	Slope	Velocity	Capacity	Description						
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)							
13.4	100	0.0125	0.12		Sheet Flow,						
					Grass: Short n= 0.150 P2= 2.50"						
2.0	140	0.0270	1.15		Shallow Concentrated Flow,						
~ <del>-</del>	0.50				Short Grass Pasture Kv= 7.0 fps						
6.7	252	0.0080	0.63		Shallow Concentrated Flow,						
	400	0 0000	4.40		Short Grass Pasture Kv= 7.0 fps						
1.4	103	0.0290	1.19		Shallow Concentrated Flow,						
0.5	470	0 0000	0.04		Short Grass Pasture Kv= 7.0 fps						
3.5	472	0.2000	2.24		Shallow Concentrated Flow,						
		-			Woodland Kv= 5.0 fps						
27.0	1,067	Total									

### Subcatchment 42S: Sub 42



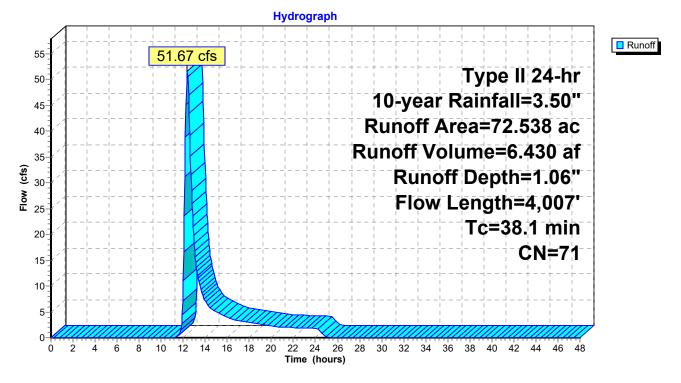
#### Summary for Subcatchment 48S: Sub 48

[47] Hint: Peak is 268% of capacity of segment #3

51.67 cfs @ 12.38 hrs, Volume= 6.430 af, Depth= 1.06" Runoff = Routed to Link SP48 :

Area	(ac)	CN Des	cription									
	6.557		Brush, Good, HSG B									
	.091		Brush, Good, HSG C									
	.459		Brush, Good, HSG D									
* C	.649	96 Grav	Gravel surface									
* 1	.258	98 Impe	ervious Ro	of and Pave	ement							
2	.103	58 Mea	dow, non-	grazed, HS	G B							
-	.750			grazed, HS								
	.236			grazed, HS								
	.333			over, Good								
	.615			over, Good								
	.563			over, Good	, HSG D							
-	0.543		er Surface	,								
	0.355		ds, Good,									
-	).418 ).608		ods, Good, ods, Good,									
			ghted Aver									
			2% Pervio									
-	.801		% Impervi									
	.001	2.70		0037400								
Тс	Length	Slope	Velocity	Capacity	Description							
(min)	(feet)		(ft/sec)	(cfs)	· · F · ·							
7.0	100	0.0625	0.24		Sheet Flow,							
					Grass: Short n= 0.150 P2= 2.50"							
22.2	1,935	0.0430	1.45		Shallow Concentrated Flow,							
					Short Grass Pasture Kv= 7.0 fps							
8.9	1,972	0.0230	3.68	19.31	Trap/Vee/Rect Channel Flow,							
					Bot.W=9.00' D=0.50' Z= 3.0 '/' Top.W=12.00'							
					n= 0.035 Earth, dense weeds							
38.1	4,007	Total										

## Subcatchment 48S: Sub 48



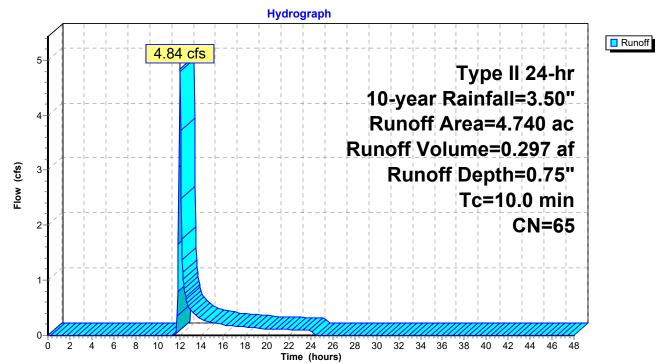
#### Summary for Subcatchment 49.1S: Sub 49.1

Runoff = 4.84 cfs @ 12.04 hrs, Volume= 0.297 af, Depth= 0.75" Routed to Pond 49.1P : 49.1P

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 10-year Rainfall=3.50"

	Area (	ac)	CN	Desc	cription								
	0.9	971	71	Mea	<i>l</i> leadow, non-grazed, HSG C								
	1.9	992	58	Mea	dow, non-g	razed, HS	SG B						
*	0.3	322	98	Impe	ervious								
	0.1	157	70	Woo	ds, Good,	HSG C							
	0.0	)95	65	Brus	h, Good, H	ISG C							
	0.1	171	48	Brus	h, Good, H	ISG B							
	0.8	353	61	>75%	6 Grass co	ver, Good,	d, HSG B						
	0.0	)79	74	>75%	6 Grass co	ver, Good,	d, HSG C						
*	0.1	100	96	Grav	rel								
	4.7	740	65	Weig	hted Aver	age							
	4.4	118		93.2	1% Pervio	us Area							
	0.3	322		6.79	% Impervio	ous Area							
	Тс	Lengt	th	Slope	Velocity	Capacity	Description						
_	(min)	(fee	et)	(ft/ft)	(ft/sec)	(cfs)							
	10.0						Direct Entry,						
							•						

## Subcatchment 49.1S: Sub 49.1



## Summary for Subcatchment 49.2S: 49.2S

Runoff = 6.07 cfs @ 11.98 hrs, Volume= 0.297 af, Depth= 1.01" Routed to Pond 49.2P : 49.2S

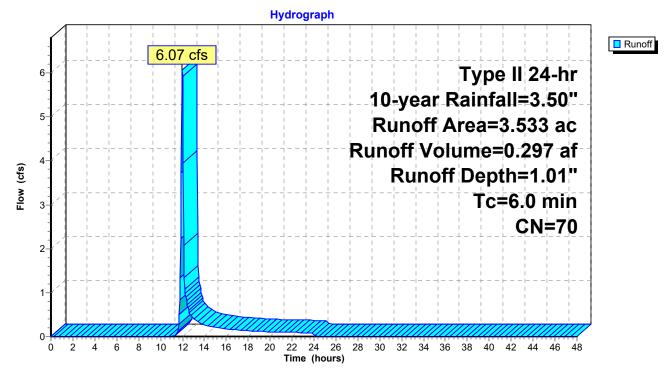
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 10-year Rainfall=3.50"

	Area	(ac)	CN	Desc	Description									
	0.	083	61	>75%	>75% Grass cover, Good, HSG B									
	0.	181	58	Mea	dow, non-g	grazed, HS	SG B							
	3.	264	71	Mea	dow, non-g	grazed, HS	SG C							
*	0.	005	98	Impe	ervious roo	f								
	3.	533	70	Weig	phted Aver	age								
	3.	528		99.8	6% Pervio	us Area								
	0.	005		0.14	% Impervio	ous Area								
	Tc	Leng	th	Slope	Velocity	Capacity	Description							
	(min)	(fee	et)	(ft/ft)	(ft/sec)	(cfs)								
	60						Direct Entry							



Direct Entry,

### Subcatchment 49.2S: 49.2S



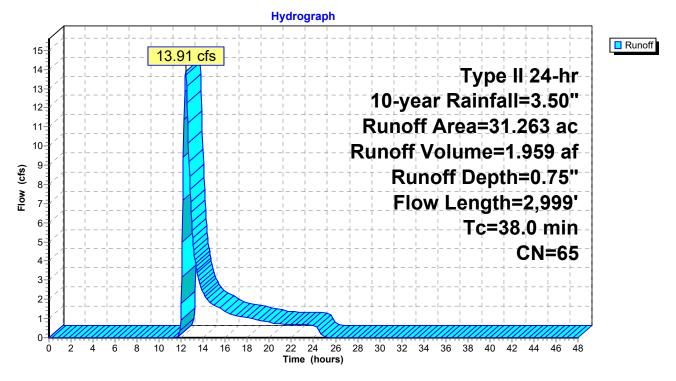
# Summary for Subcatchment 49S: Sub 49

Runoff = 13.91 cfs @ 12.40 hrs, Volume= Routed to Reach 42R : S-NSD-16 1.959 af, Depth= 0.75"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 10-year Rainfall=3.50"

	Area	(ac) (	CN Des	cription		
	1.	236	48 Brus	sh, Good, I	HSG B	
				sh, Good, I		
		025		sh, Good, I		
				vel surface	, HSG D	
*				ervious		
					grazed, HS	
					grazed, HS	
					grazed, HS over, Good	
					over, Good over, Good	
				er Surface	,	,1886
				ods, Good,		
				ods, Good,		
	0.	215	77 Woo	ods, Good,	HSG D	
	31.	263	65 Wei	ghted Avei	age	
		069		88% Pervio		
	0.	194	0.62	2% Impervi	ous Area	
	Тс	Length	Slope	Velocity	Capacity	Description
	(min)	(feet)		(ft/sec)	(cfs)	Decemption
	7.1	100		0.23	()	Sheet Flow,
						Grass: Short n= 0.150 P2= 2.50"
	1.5	240	0.1520	2.73		Shallow Concentrated Flow,
						Short Grass Pasture Kv= 7.0 fps
	3.4	534	0.1367	2.59		Shallow Concentrated Flow,
						Short Grass Pasture Kv= 7.0 fps
	1.8	168	0.0506	1.57		Shallow Concentrated Flow,
	8.2	561	0.0267	1.14		Short Grass Pasture Kv= 7.0 fps Shallow Concentrated Flow,
	0.2	501	0.0207	1.14		Short Grass Pasture Kv= 7.0 fps
	16.0	1,396	0.0434	1.46		Shallow Concentrated Flow,
		.,000	0.0.01			Short Grass Pasture Kv= 7.0 fps
	38.0	2,999	Total			
		,				

### Subcatchment 49S: Sub 49



### Summary for Subcatchment 50S: Sub 50

[47] Hint: Peak is 418% of capacity of segment #5

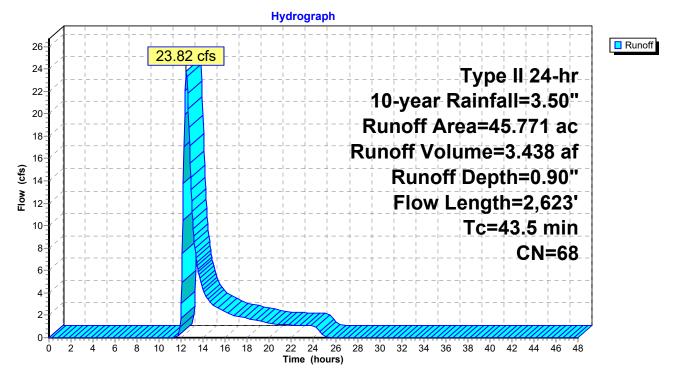
Runoff = 23.82 cfs @ 12.46 hrs, Volume= Routed to Link SP50 : 3.438 af, Depth= 0.90"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 10-year Rainfall=3.50"

Area	(ac) C	N Desc	cription							
0.	0.310 48 Brush, Good, HSG B									
3.453 65 Brush, Good, HSG C										
0.153 73 Brush, Good, HSG D										
0.163 98 Unconnected roofs, HSG D										
3.337 58 Meadow, non-grazed, HSG B										
				grazed, HS						
				grazed, HS	G D					
			er Surface							
-			ds, Good,							
			ds, Good,							
-			el surface	•						
			hted Aver	0						
	.199		5% Pervio							
	.572		% Impervi							
0.	.163	28.5	0% Uncon	nected						
Tc	Length	Slope	Velocity	Capacity	Description					
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	Decemption					
8.9	100	0.0350	0.19	(010)	Sheet Flow,					
0.0	100	0.0000	0.10		Grass: Short n= 0.150 P2= 2.50"					
7.4	815	0.0690	1.84		Shallow Concentrated Flow,					
					Short Grass Pasture Kv= 7.0 fps					
12.6	86	0.0760	0.11		Sheet Flow,					
					Woods: Light underbrush n= 0.400 P2= 2.50"					
9.7	510	0.0310	0.88		Shallow Concentrated Flow,					
					Woodland Kv= 5.0 fps					
4.9	1,112	0.0320	3.80	5.70	Trap/Vee/Rect Channel Flow,					
					Bot.W=2.00' D=0.50' Z= 2.0 '/' Top.W=4.00'					
					n= 0.035 Earth, dense weeds					
43.5	2.623	Total								

43.5 2,623 Total

## Subcatchment 50S: Sub 50



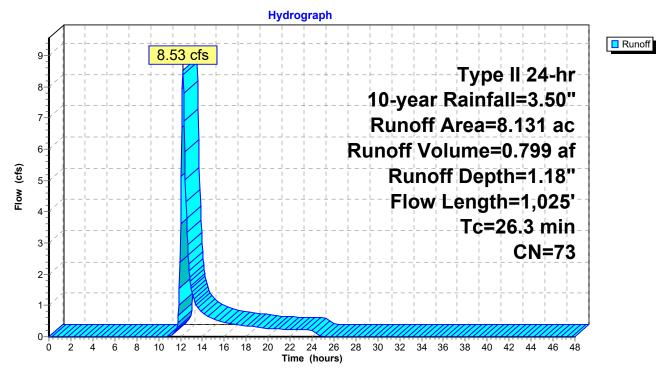
# Summary for Subcatchment 51.1S: 51.1S

Runoff = 8.53 cfs @ 12.22 hrs, Volume= 0.799 af, Depth= 1.18" Routed to Pond 51.1P : 51.1P

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 10-year Rainfall=3.50"

Area	(ac) C	N Desc	cription								
5.	714 7	71 Mea									
0.	.046 7	70 Woo	ds, Good,	HSG C							
0.	.397 7	74 >75%	% Grass co	over, Good	, HSG C						
-	0.096 65 Brush, Good, HSG C										
	0.109 73 Brush, Good, HSG D										
1.	769 7	78 Mea	dow, non-	grazed, HS	G D						
8.	.131 7	73 Weig	ghted Aver	age							
8.	.131	100.	00% Pervi	ous Area							
-		01		0							
Tc	Length	Slope	Velocity	Capacity	Description						
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)							
16.9	100	0.0070	0.10		Sheet Flow,						
					Grass: Short n= 0.150 P2= 2.50"						
5.4	334	0.0220	1.04		Shallow Concentrated Flow,						
					Short Grass Pasture Kv= 7.0 fps						
4.0	591	0.1250	2.47		Shallow Concentrated Flow,						
					Short Grass Pasture Kv= 7.0 fps						
26.3	1,025	Total									

Subcatchment 51.1S: 51.1S



# Summary for Subcatchment 51S: Sub 51

- [47] Hint: Peak is 236% of capacity of segment #6 [47] Hint: Peak is 236% of capacity of segment #8
- Runoff = 36.64 cfs @ 12.45 hrs, Volume= Routed to Link SP51 :

5.615 af, Depth= 0.71"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 10-year Rainfall=3.50"

Area (ac)	CN	Description
0.877	48	Brush, Good, HSG B
0.779	65	Brush, Good, HSG C
0.113	73	Brush, Good, HSG D
2.071	96	Gravel surface, HSG D
0.729	98	Unconnected roofs, HSG D
48.224	58	Meadow, non-grazed, HSG B
33.849	71	Meadow, non-grazed, HSG C
0.806	78	Meadow, non-grazed, HSG D
2.719	61	>75% Grass cover, Good, HSG B
0.732	74	>75% Grass cover, Good, HSG C
1.610	55	Woods, Good, HSG B
2.912	70	Woods, Good, HSG C
0.135	77	Woods, Good, HSG D
95.556	64	Weighted Average
94.827		99.24% Pervious Area
0.729		0.76% Impervious Area
0.729		100.00% Unconnected

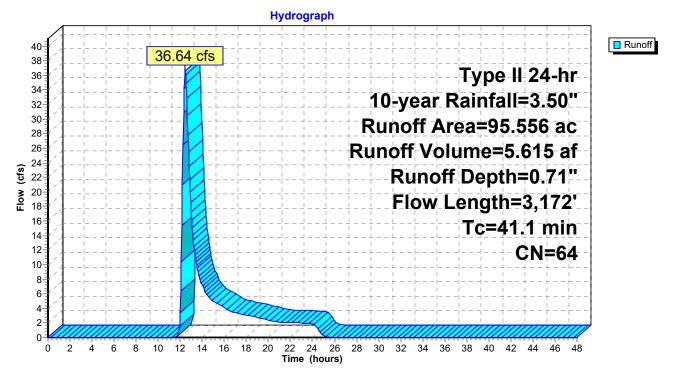
#### Mill Pt Post 2

Prepared by TRC Companies HydroCAD® 10.20-5a s/n 01402 © 2023 HydroCAD Software Solutions LLC

Тс	Length	Slope	Velocity	Capacity	Description
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
6.7	100	0.0700	0.25		Sheet Flow,
					Grass: Short n= 0.150 P2= 2.50"
0.7	108	0.1300	2.52		Shallow Concentrated Flow,
					Short Grass Pasture Kv= 7.0 fps
8.4	513	0.0210	1.01		Shallow Concentrated Flow,
					Short Grass Pasture Kv= 7.0 fps
9.3	1,142	0.0860	2.05		Shallow Concentrated Flow,
					Short Grass Pasture Kv= 7.0 fps
6.0	543	0.0460	1.50		Shallow Concentrated Flow,
					Short Grass Pasture Kv= 7.0 fps
0.0	34	0.0580	12.68	15.56	Pipe Channel,
					15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31'
					n= 0.013 Corrugated PE, smooth interior
2.4	162	0.0250	1.11		Shallow Concentrated Flow,
					Short Grass Pasture Kv= 7.0 fps
0.0	34	0.0580	12.68	15.56	Pipe Channel,
					15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31'
					n= 0.013 Corrugated PE, smooth interior
5.3	392	0.0310	1.23		Shallow Concentrated Flow,
					Short Grass Pasture Kv= 7.0 fps
2.3	144	0.0420	1.02		Shallow Concentrated Flow,
					Woodland Kv= 5.0 fps

41.1 3,172 Total

#### Subcatchment 51S: Sub 51



Type II 24-hr 10-year Rainfall=3.50" Printed 7/19/2024 LLC Page 199

### Summary for Subcatchment 52.1S: 52.1S

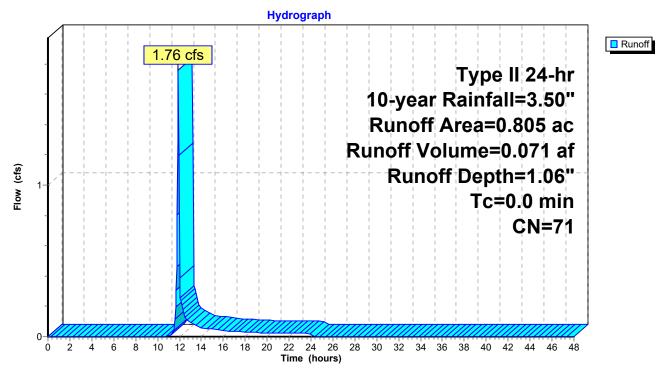
[46] Hint: Tc=0 (Instant runoff peak depends on dt)

Runoff = 1.76 cfs @ 11.90 hrs, Volume= 0.071 af, Depth= 1.06" Routed to Pond 52.1P : 52.1P

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 10-year Rainfall=3.50"

_	Area (ac)	CN	Description
	0.805	71	Meadow, non-grazed, HSG C
	0.805		100.00% Pervious Area

### Subcatchment 52.1S: 52.1S



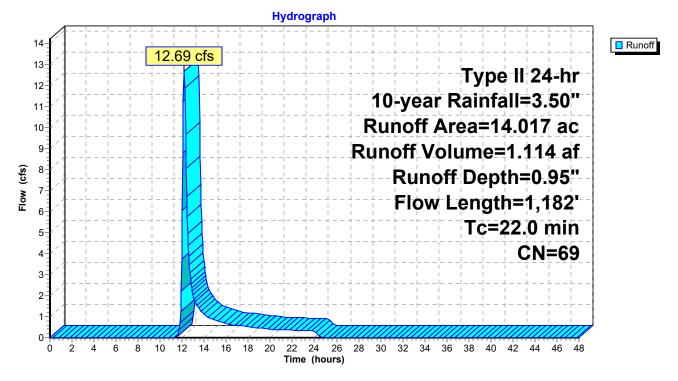
# Summary for Subcatchment 52S: Sub 52

Runoff = 12.69 cfs @ 12.17 hrs, Volume= 1.114 af, Depth= 0.95" Routed to Link SP52 :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 10-year Rainfall=3.50"

	Area	(ac) (	CN D	esc	cription						
	0.561 48 Brush, Good, HSG B										
	0.166 73 Brush, Good, HSG D										
	1.696 58 Meadow, non-grazed, HSG B										
	9.	328	71 N	lea	dow, non-g	grazed, HS	GC				
	0.	646	78 N	lea	dow, non-g	grazed, HS	G D				
	0.4	413	98 V	Vate	er Surface,	HSG D					
	0.	321	55 V	Voo	ds, Good,	HSG B					
	0.	736	70 V	Voo	ds, Good,	HSG C					
	0.	150	96 G	Grav	el surface	, HSG D					
	14.	017	69 W	Veiç	hted Aver	age					
	13.	604	9	7.0	5% Pervio	us Area					
	0.4	413	2	.95	% Impervio	ous Area					
	Тс	Length	Slop	ре	Velocity	Capacity	Description				
(r	min)	(feet)	(ft/	′ft)	(ft/sec)	(cfs)					
1	11.1	100	0.020	00	0.15		Sheet Flow,				
							Grass: Short n= 0.150 P2= 2.50"				
	8.1	993	0.08	50	2.04		Shallow Concentrated Flow,				
							Short Grass Pasture Kv= 7.0 fps				
	2.8	89	0.01	12	0.53		Shallow Concentrated Flow,				
							Woodland Kv= 5.0 fps				
2	22.0	1,182	Total								

## Subcatchment 52S: Sub 52



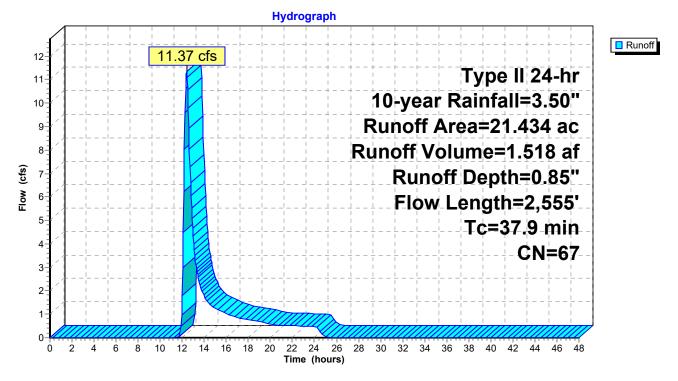
# Summary for Subcatchment 53S: Sub 53

Runoff = 11.37 cfs @ 12.39 hrs, Volume= 1.518 af, Depth= 0.85" Routed to Link SP53 :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 10-year Rainfall=3.50"

Area	(ac) C	N Desc	cription							
1.	1.579 48 Brush, Good, HSG B									
0.	0.985 65 Brush, Good, HSG C									
4.027 58 Meadow, non-grazed, HSG B										
				grazed, HS	GC					
			er Surface,							
0.250 70 Woods, Good, HSG C										
-		96 Grav	el surface	, HSG D						
			phted Aver							
	048		0% Pervio							
0.	386	1.80	% Impervi	ous Area						
Тс	Longth	Slope	Velocity	Conacity	Description					
(min)	Length (feet)	Slope (ft/ft)	(ft/sec)	Capacity (cfs)	Description					
14.6	100	0.0100	0.11	(013)	Sheet Flow,					
14.0	100	0.0100	0.11		Grass: Short $n= 0.150$ P2= 2.50"					
2.4	347	0.1210	2.43		Shallow Concentrated Flow,					
	• · ·				Short Grass Pasture Kv= 7.0 fps					
0.9	151	0.1656	2.85		Shallow Concentrated Flow,					
					Short Grass Pasture Kv= 7.0 fps					
19.3	1,511	0.0347	1.30		Shallow Concentrated Flow,					
					Short Grass Pasture Kv= 7.0 fps					
0.7	446	0.2690	11.02	16.53	Trap/Vee/Rect Channel Flow,					
					Bot.W=2.00' D=0.50' Z= 2.0 '/' Top.W=4.00'					
					n= 0.035 Earth, dense weeds					
37.9	2,555	Total								

## Subcatchment 53S: Sub 53



#### Summary for Subcatchment 54S: Sub 54

[47] Hint: Peak is 369% of capacity of segment #7

Runoff = 28.37 cfs @ 12.39 hrs, Volume= Routed to Link SP54 :

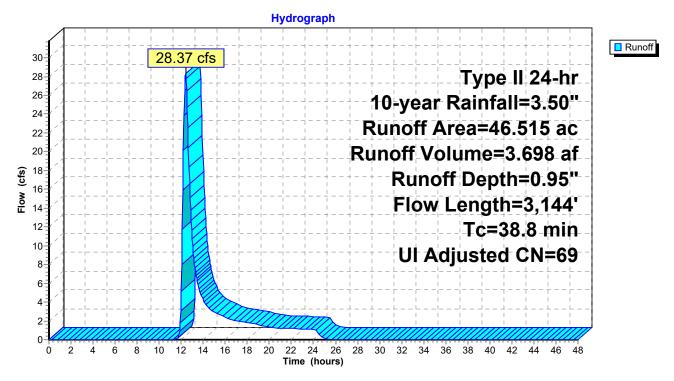
3.698 af, Depth= 0.95"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 10-year Rainfall=3.50"

<b>A</b> == = =	(22)	ام ۸	Decerie	tion				
Area		N Adj	Descrip					
		48	Brush, Good, HSG B					
		65	Brush, Good, HSG C Unconnected roofs, HSG D					
		98						
		58 71		v, non-graz	ed, HSG C			
		51			, Good, HSG B			
		74			, Good, HSG C			
		98		Surface, HS	, ,			
		55		Good, HS				
		96		surface, HS				
		70		Good, HSC				
-		70 69	,	· · · ·	, UI Adjusted			
	.893	0 03		Pervious A				
	.622		-					
	.566		7.79% Impervious Area 70.84% Unconnected					
<b>~</b>	.000		10.0470	Chiconneed				
Tc	Length	Slope	Velocity	Capacity	Description			
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)				
7.7	100	0.0500	0.22		Sheet Flow,			
			•		Grass: Short n= 0.150 P2= 2.50"			
4.0	375	0.0490	1.55		Shallow Concentrated Flow,			
					Short Grass Pasture Kv= 7.0 fps			
8.0	100	0.0450	0.21		Sheet Flow,			
					Grass: Short n= 0.150 P2= 2.50"			
3.0	498	0.0350	2.81		Shallow Concentrated Flow,			
					Grassed Waterway Kv= 15.0 fps			
2.8	166	0.0390	0.99		Shallow Concentrated Flow,			
					Woodland Kv= 5.0 fps			
1.9	321	0.0312	2.84		Shallow Concentrated Flow,			
					Unpaved Kv= 16.1 fps			
11.4	1,584	0.0230	2.31	7.69				
					W=5.00' D=1.00' Area=3.3 sf Perim=5.5'			
					n= 0.070 Sluggish weedy reaches w/pools			
20 Q	3 1//	Total						

38.8 3,144 Total





# Summary for Subcatchment 55S: Sub 55

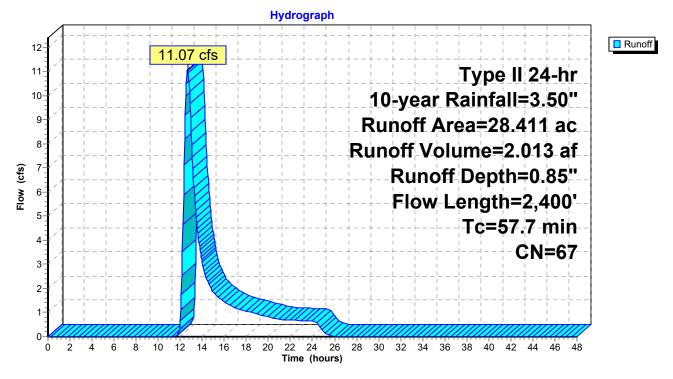
Runoff = 11.07 cfs @ 12.66 hrs, Volume= 2.01 Routed to Link SP55 :

2.013 af, Depth= 0.85"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 10-year Rainfall=3.50"

Area	(ac) C	N Desc	cription							
0.	0.418 48 Brush, Good, HSG B									
0.	0.321 65 Brush, Good, HSG C									
0.	0.278 98 Unconnected roofs, HSG D									
				grazed, HS						
				grazed, HS	GC					
			ds, Good,							
			ds, Good,							
			el surface	,						
-			ghted Aver							
	133		2% Pervio							
	278		% Impervi							
0.	278	100.	00% Unco	nnected						
-		<u></u>		<b>A B</b>						
Tc	Length	Slope	Velocity	Capacity	Description					
(min)	(feet)	<u>(ft/ft)</u>	(ft/sec)	(cfs)						
13.2	100	0.0130	0.13		Sheet Flow,					
0.0	000	0 0000	4.04		Grass: Short n= 0.150 P2= 2.50"					
3.0	330	0.0690	1.84		Shallow Concentrated Flow,					
9.4	778	0.0390	1.38		Short Grass Pasture Kv= 7.0 fps Shallow Concentrated Flow,					
9.4	110	0.0390	1.30		Short Grass Pasture Kv= 7.0 fps					
13.0	689	0.0160	0.89		Shallow Concentrated Flow,					
10.0	000	0.0100	0.00		Short Grass Pasture Kv= 7.0 fps					
4.0	278	0.0280	1.17		Shallow Concentrated Flow,					
	2.0	0.0200			Short Grass Pasture Kv= 7.0 fps					
9.0	20	0.0100	0.04		Sheet Flow,					
					Grass: Bermuda n= 0.410 P2= 2.50"					
4.9	80	0.1000	0.27		Sheet Flow,					
					Grass: Short n= 0.150 P2= 2.50"					
1.2	125	0.0640	1.77		Shallow Concentrated Flow,					
					Short Grass Pasture Kv= 7.0 fps					
57.7	2,400	Total								





### Summary for Subcatchment 56.1S: 56.1S

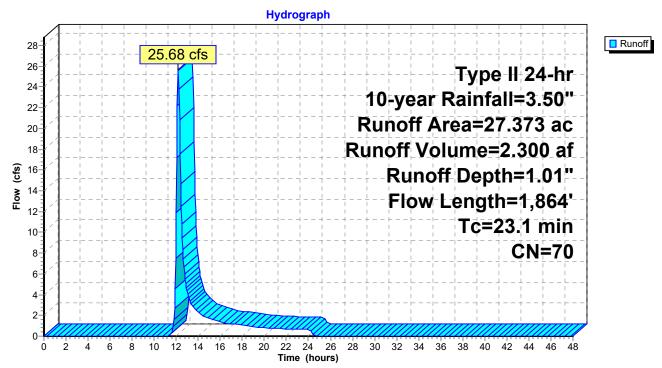
Runoff = 25.68 cfs @ 12.18 hrs, Volume= Routed to Pond 56.1P : 56.1P 2.300 af, Depth= 1.01"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 10-year Rainfall=3.50"

_	Area	(ac) C	N Dese	cription			
	3.	169 5	58 Mea	dow, non-g	grazed, HS	G B	
*	0.	806 9	96 Grav	/el			
23.398 71 Meadow, non-grazed, HSG C							
	27.	373 7	70 Weig	ghted Aver	age		
	27.	373	100.	00% Pervi	ous Area		
	Tc	Length	Slope	Velocity	Capacity	Description	
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)		
	9.4	100	0.0300	0.18		Sheet Flow,	
						Grass: Short n= 0.150 P2= 2.50"	
	7.7	1,108	0.1160	2.38		Shallow Concentrated Flow,	
						Short Grass Pasture Kv= 7.0 fps	
	6.0	656	0.0670	1.81		Shallow Concentrated Flow,	
_						Short Grass Pasture Kv= 7.0 fps	
	00.4	1 0 0 1	Tatal				

23.1 1,864 Total

### Subcatchment 56.1S: 56.1S



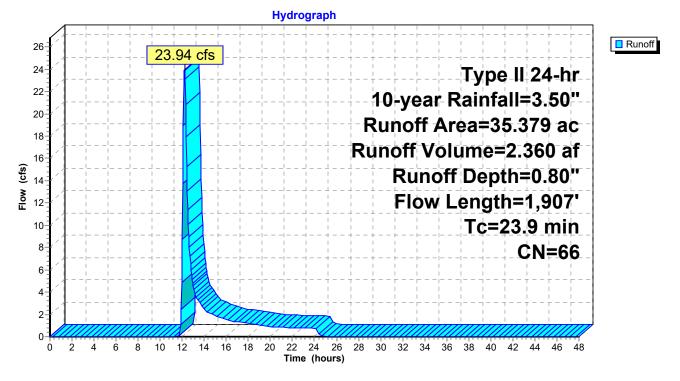
# Summary for Subcatchment 56S: Sub 56

Runoff = 23.94 cfs @ 12.21 hrs, Volume= 2.360 af, Depth= 0.80" Routed to Link SP56 :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 10-year Rainfall=3.50"

Area	(ac) C	N Desc	cription						
0.	895 4	8 Brus	h, Good, H						
1.	460 6	65 Brus							
10.196 58 Meadow, non-grazed, HSG B									
15.876 71 Meadow, non-grazed, HSG C									
1.244 55 Woods, Good, HSG B									
	5.708 70 Woods, Good, HSG C								
			phted Aver	U U					
35.	379	100.	00% Pervi	ous Area					
Та	l a sa aith	Clana	Valasity	Conceitur	Description				
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description				
8.2		0.0430		(015)	Shoot Flow				
0.2	100	0.0430	0.20		Sheet Flow, Grass: Short n= 0.150 P2= 2.50"				
1.6	139	0.0430	1.45		Shallow Concentrated Flow,				
1.0	100	0.0430	1.45		Short Grass Pasture Kv= 7.0 fps				
2.7	369	0.1030	2.25		Shallow Concentrated Flow,				
	000	0.1000	2.20		Short Grass Pasture Kv= 7.0 fps				
4.4	533	0.0820	2.00		Shallow Concentrated Flow,				
					Short Grass Pasture Kv= 7.0 fps				
0.9	206	0.2900	3.77		Shallow Concentrated Flow,				
					Short Grass Pasture Kv= 7.0 fps				
4.6	468	0.0580	1.69		Shallow Concentrated Flow,				
					Short Grass Pasture Kv= 7.0 fps				
1.5	92	0.0220	1.04		Shallow Concentrated Flow,				
					Short Grass Pasture Kv= 7.0 fps				
23.9	1,907	Total							

# Subcatchment 56S: Sub 56



# Summary for Reach 33R:

[79] Warning: Submerged Pond 34P Primary device # 1 OUTLET by 0.84'

 Inflow Area =
 25.795 ac, 1.16% Impervious, Inflow Depth =
 0.62" for 10-year event

 Inflow =
 7.80 cfs @
 12.42 hrs, Volume=
 1.323 af

 Outflow =
 7.28 cfs @
 12.87 hrs, Volume=
 1.323 af, Atten= 7%, Lag= 27.1 min

 Routed to Link SP34 :
 1

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Max. Velocity= 2.37 fps, Min. Travel Time= 13.2 min Avg. Velocity = 0.58 fps, Avg. Travel Time= 53.7 min

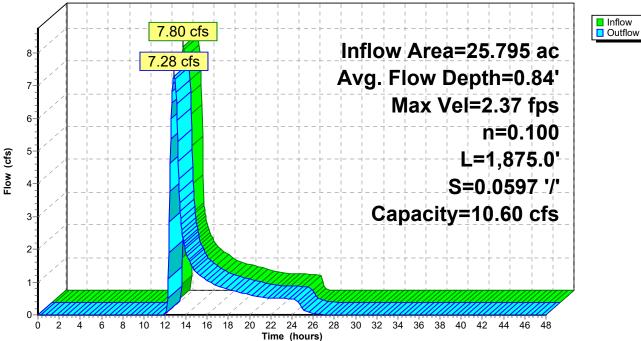
Peak Storage= 5,761 cf @ 12.65 hrs Average Depth at Peak Storage= 0.84' , Surface Width= 5.49' Bank-Full Depth= 1.00' Flow Area= 4.0 sf, Capacity= 10.60 cfs

6.00' x 1.00' deep Parabolic Channel, n= 0.100 Earth, dense brush, high stage Length= 1,875.0' Slope= 0.0597 '/' Inlet Invert= 578.00', Outlet Invert= 466.00'



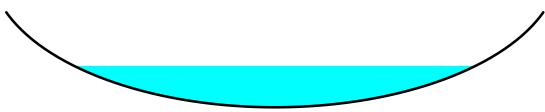
#### Reach 33R:

Hydrograph

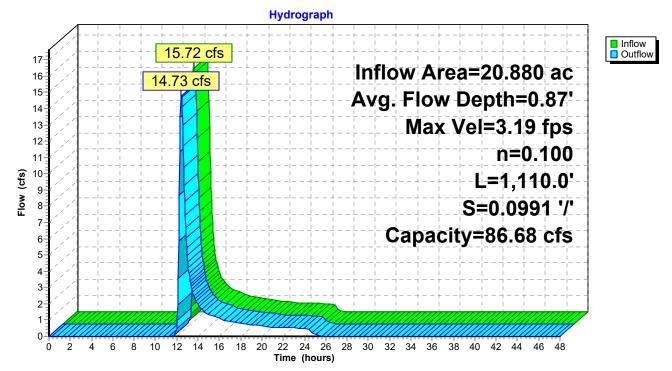


## Summary for Reach 39R:

Inflow Area = 20.880 ac. 7.94% Impervious, Inflow Depth = 0.95" for 10-year event Inflow 15.72 cfs @ 12.26 hrs, Volume= 1.660 af = 14.73 cfs @ 12.43 hrs, Volume= Outflow = 1.660 af, Atten= 6%, Lag= 10.4 min Routed to Link SP39 : Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Max. Velocity= 3.19 fps, Min. Travel Time= 5.8 min Avg. Velocity = 1.00 fps, Avg. Travel Time= 18.5 min Peak Storage= 5,125 cf @ 12.34 hrs Average Depth at Peak Storage= 0.87', Surface Width= 7.93' Bank-Full Depth= 2.00' Flow Area= 16.0 sf, Capacity= 86.68 cfs 12.00' x 2.00' deep Parabolic Channel, n= 0.100 Earth, dense brush, high stage Length= 1,110.0' Slope= 0.0991 '/' Inlet Invert= 526.00', Outlet Invert= 416.00'

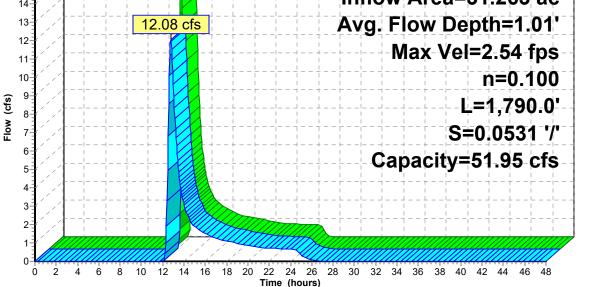


#### Reach 39R:



### Summary for Reach 42R: S-NSD-16

Inflow Area = 31.263 ac. 0.62% Impervious, Inflow Depth = 0.75" for 10-year event Inflow 13.91 cfs @ 12.40 hrs, Volume= 1.959 af = 12.08 cfs @ 12.76 hrs, Volume= Outflow = 1.959 af, Atten= 13%, Lag= 21.3 min Routed to Link SP42 : Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Max. Velocity= 2.54 fps, Min. Travel Time= 11.8 min Avg. Velocity = 0.70 fps, Avg. Travel Time= 42.6 min Peak Storage= 8,527 cf @ 12.56 hrs Average Depth at Peak Storage= 1.01', Surface Width= 7.10' Bank-Full Depth= 2.00' Flow Area= 13.3 sf, Capacity= 51.95 cfs 10.00' x 2.00' deep Parabolic Channel, n= 0.100 Earth, dense brush, high stage Length= 1,790.0' Slope= 0.0531 '/' Inlet Invert= 470.00', Outlet Invert= 375.00' Reach 42R: S-NSD-16 Hydrograph Inflow
Outflow 13.91 cfs 15 Inflow Area=31.263 ac 14 Avg. Flow Depth=1.01' 12.08 cfs 13 12 Max Vel=2.54 fps 11



## Summary for Pond 25.1P: 25.1P

Inflow Area = 3.422 ac, 0.00% Impervious, Inflow Depth = 1.01" for 10-year event Inflow = 4.59 cfs @ 12.06 hrs, Volume= 0.287 af 0.33 cfs @ 13.52 hrs, Volume= Outflow = 0.198 af, Atten= 93%, Lag= 87.8 min 0.33 cfs @ 13.52 hrs, Volume= Primary = 0.198 af Routed to Link SP25 : 0.00 cfs @ 0.00 hrs, Volume= 0.000 af Secondary = Routed to Link SP25 :

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 605.04' @ 13.52 hrs Surf.Area= 6,351 sf Storage= 6,104 cf

Plug-Flow detention time= 336.1 min calculated for 0.197 af (69% of inflow) Center-of-Mass det. time= 220.3 min (1,092.3 - 872.0)

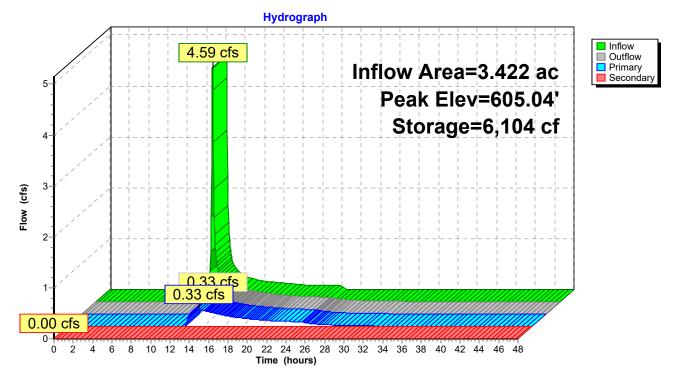
Volume	Invert	Avail Sto	rade Stor	prage Description				
#1	604.00'		<u> </u>	Istom Stage Data (Prismatic)Listed below (Recalc)				
#1	004.00	20,42		istom Stage Data (Prismatic)Listed Delow (Recaic)				
Elevatio	on Su	ırf.Area	Inc.Stor	ore Cum.Store				
(fee	et)	(sq-ft)	(cubic-feet	et) (cubic-feet)				
604.0	)0	5,355		0 0				
605.0		6,309	5,83	32 5,832				
606.0		7,289	6,79					
607.0		8,293	7,79					
<b>-</b> .	<b>D</b> ''							
Device	Routing	Invert	Outlet De					
#1	Primary	604.00'		ound Culvert				
				CPP, projecting, no headwall, Ke= 0.900				
				utlet Invert= 604.00' / 603.50' S= 0.0250 '/' Cc= 0.900				
				3 Corrugated PE, smooth interior, Flow Area= 0.79 sf				
#2	Device 1	604.67'		<b>t. Orifice/Grate</b> C= 0.600 Limited to weir flow at low heads				
#3	Device 1	606.50'	48.0" Hoi	oriz. Orifice/Grate C= 0.600				
				to weir flow at low heads				
#4	Secondary	606.50'		ng + 3.0 '/' SideZ x 4.0' breadth Broad-Crested Rectangular We				
			Head (fee	eet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00				
			2.50 3.00	0 3.50 4.00 4.50 5.00 5.50				
			Coef. (En	nglish) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66				
			2.68 2.72	72 2.73 2.76 2.79 2.88 3.07 3.32				
				rs HW=605.04' (Free Discharge)				
1=Cu	<b>T_1=Culvert</b> (Passes 0.33 cfs of 2.20 cfs potential flow)							

-2=Orifice/Grate (Orifice Controls 0.33 cfs @ 2.08 fps)

-3=Orifice/Grate (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=604.00' (Free Discharge) 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 25.1P: 25.1P



# Summary for Pond 27.1P: 27.1P

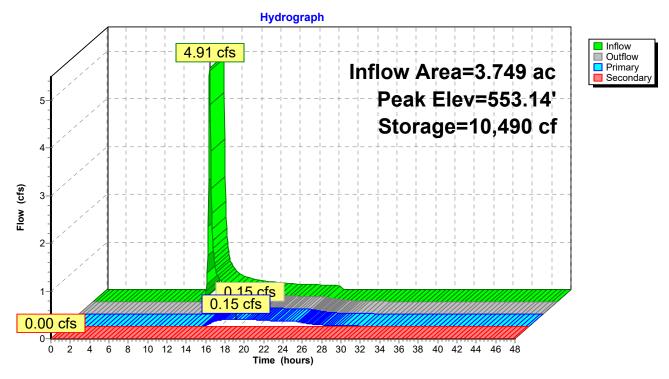
Inflow Area = 3.749 ac, 0.00% Impervious, Inflow Depth = 1.06" for 10-year event Inflow = 4.91 cfs @ 12.08 hrs, Volume= 0.332 af 0.15 cfs @ 17.70 hrs, Volume= Outflow = 0.119 af, Atten= 97%, Lag= 337.1 min 0.15 cfs @ 17.70 hrs, Volume= Primary = 0.119 af Routed to Link SP27 : 0.00 hrs, Volume= 0.000 af Secondary = 0.00 cfs @ Routed to Link SP27 :

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 553.14' @ 17.70 hrs Surf.Area= 4,235 sf Storage= 10,490 cf

Plug-Flow detention time= 527.5 min calculated for 0.119 af (36% of inflow) Center-of-Mass det. time= 379.6 min (1,250.4 - 870.8)

Volume	Invert	Avail.Sto	rage Storage	Description				
#1	550.00'	14,3	60 cf Custom	Stage Data (Pr	rismatic)Listed below (Recalc)			
				-				
Elevatio		rf.Area	Inc.Store	Cum.Store				
(fee	1	(sq-ft)	(cubic-feet)	(cubic-feet)				
550.0		2,458	0	0				
551.0		3,040	2,749	2,749				
552.0		3,560	3,300	6,049				
553.0		4,149	3,855	9,904				
554.0	00	4,763	4,456	14,360				
Device	Routing	Invert	Outlet Devices	6				
#1	Primary	550.00'	18.0" Round	Culvert				
	, <b>,</b>				headwall, Ke= 0.900			
					549.50' S= 0.0125 '/' Cc= 0.900			
			n= 0.013 Cor	rugated PE, sm	ooth interior, Flow Area= 1.77 sf			
#2	Device 1	552.84'	4.0" Vert. Ori	fice/Grate C=	0.600 Limited to weir flow at low heads			
#3	Device 1	553.50'		Orifice/Grate				
				r flow at low hea				
#4	Secondary	553.50'			I.0' breadth Broad-Crested Rectangular Weir			
					0.80 1.00 1.20 1.40 1.60 1.80 2.00			
				50 4.00 4.50 5				
			, <b>Q</b>	,	69 2.68 2.67 2.67 2.65 2.66 2.66			
			2.68 2.72 2.7	73 2.76 2.79 2	.88 3.07 3.32			
1=Ci	Primary OutFlow Max=0.15 cfs @ 17.70 hrs HW=553.14' (Free Discharge) 1=Culvert (Passes 0.15 cfs of 10.38 cfs potential flow) 2=Orifice/Grate (Orifice Controls 0.15 cfs @ 1.86 fps)							
	Orifice/Grat							

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=550.00' (Free Discharge) 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs) Pond 27.1P: 27.1P



## Summary for Pond 28.1P: 28.1P

Inflow Area = 2.160 ac, 0.00% Impervious, Inflow Depth = 1.06" for 10-year event 3.15 cfs @ 12.05 hrs, Volume= Inflow = 0.191 af 0.07 cfs @ 19.25 hrs, Volume= Outflow = 0.055 af, Atten= 98%, Lag= 432.1 min 0.07 cfs @ 19.25 hrs, Volume= Primary = 0.055 af Routed to Link SP28 : 0.00 cfs @ 0.00 hrs, Volume= Secondary = 0.000 af Routed to Link SP28 :

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 559.67' @ 19.25 hrs Surf.Area= 4,474 sf Storage= 6,649 cf

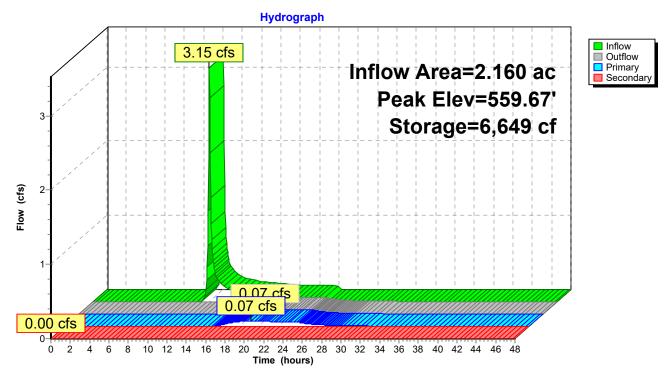
Plug-Flow detention time= 626.4 min calculated for 0.055 af (28% of inflow) Center-of-Mass det. time= 478.2 min (1,346.4 - 868.2)

Volume	Invert	Avail.Sto	rage Storag	age Description					
#1	558.00'			tom Stage Data (Prismatic)Listed below (Recalc)					
Elevatio	on Su	rf.Area	Inc.Store	Cum.Store					
(fee		(sq-ft)	(cubic-feet)						
558.0	00	3,511	0	0 0					
559.0	00	4,080	3,796	3,796					
560.0	00	4,671	4,376	8,171					
561.0	00	5,288	4,980	13,151					
Device	Routing	Invert	Outlet Devid	lices					
#1	Primary	558.00'	-	und Culvert					
$\pi$	i minary	556.00		CPP, projecting, no headwall, Ke= 0.900					
				et Invert= 558.00' / 557.75' S= 0.0114 '/' Cc= 0.900					
				Corrugated PE, smooth interior, Flow Area= 0.79 sf					
#2	Device 1	559.50'		<b>Orifice/Grate</b> C= 0.600 Limited to weir flow at low heads					
#3	Device 1	560.50'		z. Orifice/Grate C= 0.600					
			Limited to w	weir flow at low heads					
#4	Secondary	560.50'	10.0' long	+ 3.0 '/' SideZ x 4.0' breadth Broad-Crested Rectangular	Weir				
				i) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00					
				3.50 4.00 4.50 5.00 5.50					
				llish) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66					
			2.68 2.72	2.73 2.76 2.79 2.88 3.07 3.32					
Drimon		ov-0.07 of a	@ 10.25 hra	HW=550.67! (Free Discharge)					
				HW=559.67' (Free Discharge)					
	T—1=Culvert (Passes 0.07 cfs of 3.23 cfs potential flow) ☐—2=Orifice/Grate (Orifice Controls 0.07 cfs @ 1.39 fps)								

-3=Orifice/Grate (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=558.00' (Free Discharge) 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 28.1P: 28.1P



# Summary for Pond 30.1P: 30.1P

Inflow Area = 4.003 ac, 0.00% Impervious, Inflow Depth = 1.06" for 10-year event Inflow = 3.40 cfs @ 12.27 hrs, Volume= 0.355 af 0.21 cfs @ 16.07 hrs, Volume= Outflow = 0.167 af, Atten= 94%, Lag= 228.3 min 0.02 cfs @ 16.07 hrs, Volume= Discarded = 0.046 af 0.20 cfs @ 16.07 hrs, Volume= Primary = 0.121 af Routed to Link SP30 : Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af Routed to Link SP30 :

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 461.21' @ 16.07 hrs Surf.Area= 5,285 sf Storage= 10,254 cf

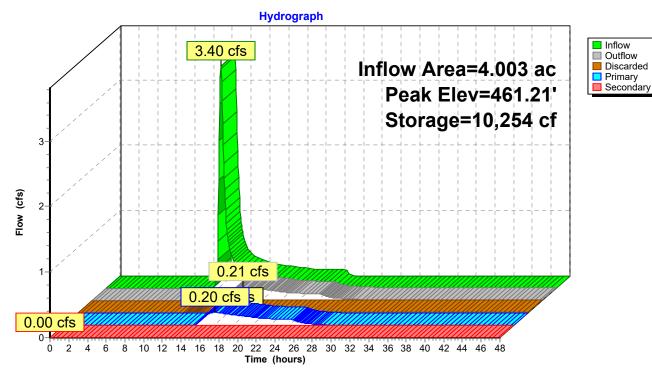
Plug-Flow detention time= 591.6 min calculated for 0.167 af (47% of inflow) Center-of-Mass det. time= 447.9 min (1,332.6 - 884.7)

Volume	Invert	Avail.Sto	rage Storage	Description
#1	459.00'	20,70	02 cf Custom	n Stage Data (Prismatic)Listed below (Recalc)
Flovetic		urf Aroo	Ino Store	Cum Store
Elevatio (fee		rf.Area	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
`		<u>(sq-ft)</u>		<u>_</u>
459.0		3,996	0	0
460.0		4,562	4,279	4,279
461.0		5,153	4,858	9,137
462.0		5,770	5,462	14,598
463.0	00	6,437	6,104	20,702
Davias	Deviting	1		
Device	Routing	Invert	•	
#1	Primary	459.00'	24.0" Round	
				P, projecting, no headwall, Ke= 0.900
				Invert= 459.00' / 458.50' S= 0.0208 '/' Cc= 0.900
				rrugated PE, smooth interior, Flow Area= 3.14 sf
#2	Device 1	461.00'	12.0" Vert. O	Orifice/Grate C= 0.600
			Limited to we	ir flow at low heads
#3	Device 1	462.50'	48.0" Horiz. (	Orifice/Grate C= 0.600
			Limited to we	ir flow at low heads
#4	Secondary	462.50'	10.0' long +	3.0 '/' SideZ x 4.0' breadth Broad-Crested Rectangular Weir
			Head (feet) C	0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00
			2.50 3.00 3.	50 4.00 4.50 5.00 5.50
			Coef. (English	h) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66
			2.68 2.72 2.	73 2.76 2.79 2.88 3.07 3.32
#5	Discarded	459.00'	0.129 in/hr E	xfiltration over Surface area

**Discarded OutFlow** Max=0.02 cfs @ 16.07 hrs HW=461.21' (Free Discharge) **5=Exfiltration** (Exfiltration Controls 0.02 cfs)

Primary OutFlow Max=0.19 cfs @ 16.07 hrs HW=461.21' (Free Discharge) 1=Culvert (Passes 0.19 cfs of 13.16 cfs potential flow) 2=Orifice/Grate (Orifice Controls 0.19 cfs @ 1.58 fps) 3=Orifice/Grate ( Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=459.00' (Free Discharge) 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)



Pond 30.1P: 30.1P

## Summary for Pond 31.1P: 31.1P

Inflow Area = 0.925 ac, 0.00% Impervious, Inflow Depth = 1.01" for 10-year event Inflow 1.34 cfs @ 12.03 hrs. Volume= 0.078 af = 0.02 cfs @ 24.09 hrs, Volume= Outflow = 0.051 af, Atten= 99%, Lag= 723.8 min 0.02 cfs @ 24.09 hrs, Volume= Discarded = 0.051 af 0.00 hrs, Volume= Primary 0.00 cfs @ 0.000 af = Routed to Link SP34 : Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af Routed to Link SP34 :

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 510.66' @ 24.09 hrs Surf.Area= 4,172 sf Storage= 2,621 cf

Plug-Flow detention time= 1,040.8 min calculated for 0.051 af (65% of inflow) Center-of-Mass det. time= 916.4 min (1,786.4 - 870.0)

Volume	Invert	Avail.Sto	rage Storage [	Description	
#1	510.00'	14,18	B7 cf Custom	Stage Data (Prismatic)Listed below (Recalc)	
Flovetia	- C.		In a Ctara	Curre Store	
Elevatio (fee		ırf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	
510.0	1	<u>3,748</u>	0	0	
511.0		4,388	4,068	4,068	
512.0	0	5,053	4,721	8,789	
513.0	0	5,744	5,399	14,187	
Device	Routing	Invert	Outlet Devices	S	
#1	Primary	510.00'	12.0" Round	Culvert	
				P, projecting, no headwall, Ke= 0.900	
				nvert= 510.00' / 509.50' S= 0.0100 '/' Cc= 0.900	
#2	Device 1	512.50'		rugated PE, smooth interior, Flow Area= 0.79 sf Drifice/Grate C= 0.600	
$\pi \mathbf{Z}$	Device	012.00		r flow at low heads	
#3	Secondary	512.50'	10.0' long + 3	3.0 '/' SideZ x 4.0' breadth Broad-Crested Rectangular W	Veir
				.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00	
				50 4.00 4.50 5.00 5.50	
				n) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66 73 2.76 2.79 2.88 3.07 3.32	
#4	Discarded	510.00'		xfiltration over Surface area	

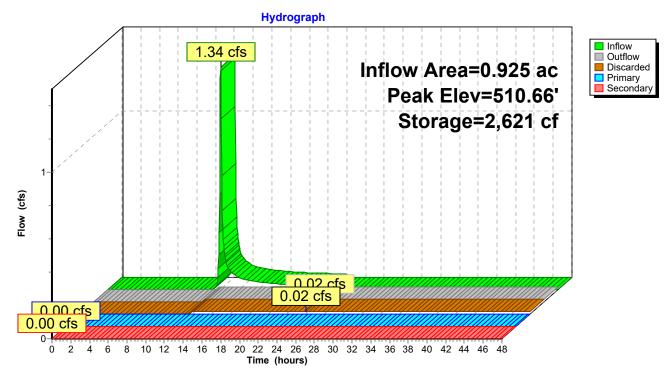
**Discarded OutFlow** Max=0.02 cfs @ 24.09 hrs HW=510.66' (Free Discharge) **4=Exfiltration** (Exfiltration Controls 0.02 cfs)

**Primary OutFlow** Max=0.00 cfs @ 0.00 hrs HW=510.00' (Free Discharge)

**1=Culvert** (Controls 0.00 cfs)

**2=Orifice/Grate** (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=510.00' (Free Discharge) -3=Broad-Crested Rectangular Weir (Controls 0.00 cfs) Pond 31.1P: 31.1P



## Summary for Pond 32.1P: 32.1P

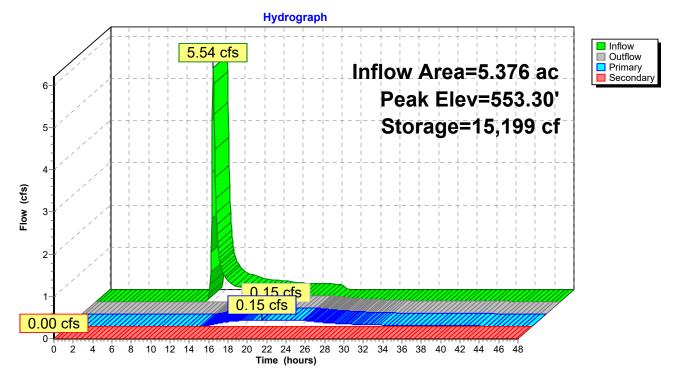
Inflow Area = 5.376 ac, 0.00% Impervious, Inflow Depth = 1.01" for 10-year event Inflow = 5.54 cfs @ 12.15 hrs, Volume= 0.452 af 0.15 cfs @ 20.10 hrs, Volume= Outflow = 0.173 af, Atten= 97%, Lag= 477.3 min 0.15 cfs @ 20.10 hrs, Volume= Primary = 0.173 af Routed to Link SP34 : 0.00 hrs, Volume= 0.000 af Secondary = 0.00 cfs @ Routed to Link SP34 :

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 553.30' @ 20.10 hrs Surf.Area= 12,428 sf Storage= 15,199 cf

Plug-Flow detention time= 708.1 min calculated for 0.173 af (38% of inflow) Center-of-Mass det. time= 559.7 min (1,438.7 - 879.0)

Volume	Invert	Avail.Sto	rage Storage	Description	
#1	552.00'	52,9	89 cf Custom	Stage Data (Pr	<b>ismatic)</b> Listed below (Recalc)
Elevatio		urf.Area	Inc.Store	Cum.Store	
(fee	1	(sq-ft)	(cubic-feet)	(cubic-feet)	
552.0		10,968	0	0	
553.0		12,086	11,527	11,527	
554.0		13,228	12,657	24,184	
555.0		14,396	13,812	37,996	
556.0	0	15,589	14,993	52,989	
Device	Routing	Invert	Outlet Devices	3	
#1	Primary	552.00'	12.0" Round	Culvert	
	,, <b>,</b>				headwall, Ke= 0.900
					551.75' S= 0.0100 '/' Cc= 0.900
			n= 0.013 Cori	rugated PE, sm	ooth interior, Flow Area= 0.79 sf
#2	Device 1	553.00'			0.600 Limited to weir flow at low heads
#3	Device 1	555.50'		Orifice/Grate	
				r flow at low hea	
#4	Secondary	555.50'			.0' breadth Broad-Crested Rectangular Weir
					0.80 1.00 1.20 1.40 1.60 1.80 2.00
				50 4.00 4.50 5	
				1) 2.38 2.54 2. 73 2.76 2.79 2	69 2.68 2.67 2.67 2.65 2.66 2.66
			2.00 2.12 2.1	3 2.10 2.19 2	.00 3.07 3.32
<sup>1</sup> −1=Cu	lvert (Passe	es 0.15 cfs of	20.10 hrs HV 2.67 cfs potentia	al flow)	e Discharge)
		te (Orifice Co te (Controls)	ntrols 0.15 cfs @ 0.00 cfs)	29 1.86 fps)	

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=552.00' (Free Discharge) 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs) Pond 32.1P: 32.1P



## Summary for Pond 33.1P: 33.1P

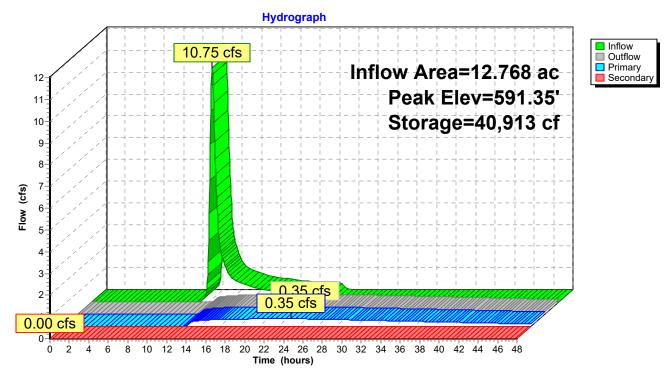
Inflow Area = 12.768 ac, 1.41% Impervious, Inflow Depth = 1.18" for 10-year event Inflow = 10.75 cfs @ 12.34 hrs, Volume= 1.255 af 0.35 cfs @ 23.37 hrs, Volume= Outflow = 0.758 af, Atten= 97%, Lag= 661.7 min 0.35 cfs @ 23.37 hrs, Volume= Primary = 0.758 af Routed to Link SP34 : 0.00 hrs, Volume= 0.000 af Secondary = 0.00 cfs @ Routed to Link SP34 :

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 591.35' @ 23.37 hrs Surf.Area= 31,400 sf Storage= 40,913 cf

Plug-Flow detention time= 913.4 min calculated for 0.758 af (60% of inflow) Center-of-Mass det. time= 785.5 min (1,669.8 - 884.3)

Volume	Invert	Avail.Sto	rage Storage	e Description	
#1	590.00'	130,2	85 cf Custon	n Stage Data (Pi	rismatic)Listed below (Recalc)
Elevatio (fee		ırf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	
590.0	1	29,006	0	0	
591.0	-	30,767	29,887	29,887	
592.0		32,552	31,660	61,546	
593.0	00	34,363	33,458	95,004	
594.0	00	36,199	35,281	130,285	
Device	Routing	Invert	Outlet Device	es	
#1	Primary	590.00'	12.0" Round		
			Inlet / Outlet	Invert= 590.00' /	headwall, Ke= 0.900 589.75' S= 0.0083 '/' Cc= 0.900 ooth interior, Flow Area= 0.79 sf
#2	Device 1	590.50'			0.600 Limited to weir flow at low heads
#3	Device 1	593.50'		Orifice/Grate C eir flow at low hea	
#4	Secondary	593.50'	<b>10.0' long +</b> Head (feet) ( 2.50 3.00 3. Coef. (Englis	<b>3.0 '/' SideZ x 4</b> 0.20 0.40 0.60 .50 4.00 4.50 5	I.0' breadth Broad-Crested Rectangular Weir           0.80         1.00         1.20         1.40         1.60         1.80         2.00           .00         5.50         5.68         2.67         2.65         2.66         2.66
<sup>1</sup> −1=Cu −2=	Ivert (Passe Orifice/Grat	es 0.35 cfs of	2.76 cfs poten ntrols 0.35 cfs		e Discharge)
<u> </u>		M			

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=590.00' (Free Discharge) 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs) Pond 33.1P: 33.1P



## Summary for Pond 34P: VAN EPPS RD CULVERT

Inflow Area = 25.795 ac. 1.16% Impervious, Inflow Depth = 0.62" for 10-year event Inflow 11.86 cfs @ 12.22 hrs, Volume= 1.323 af = 7.80 cfs @ 12.42 hrs, Volume= Outflow = 1.323 af, Atten= 34%, Lag= 11.7 min 7.80 cfs @ 12.42 hrs, Volume= Primary = 1.323 af Routed to Reach 33R : 0.00 hrs, Volume= Secondary = 0.00 cfs @ 0.000 af Routed to Reach 33R :

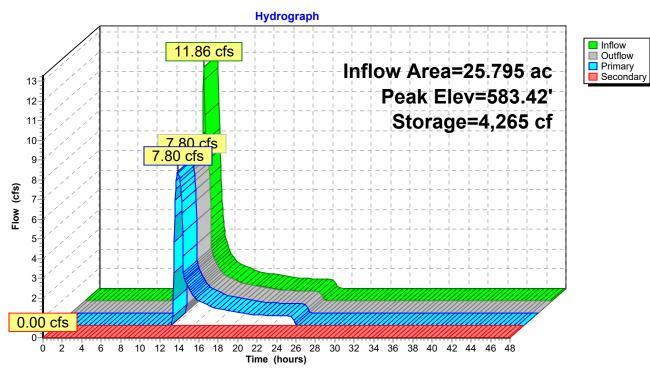
Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 583.42' @ 12.42 hrs Surf.Area= 4,616 sf Storage= 4,265 cf

Plug-Flow detention time= 2.5 min calculated for 1.322 af (100% of inflow) Center-of-Mass det. time= 2.5 min (916.4 - 913.9)

Invert	Avail.S	torage	Storage Description	on		
580.00'	32	,769 cf	Custom Stage Da	ata (Irregular)Listed	d below (Recalc)	
Si	urf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)	
	1 935 6,900 12,860 18,260	5.0 220.0 505.0 515.0 645.0	0 644 6,917 9,727 15,481	0 644 7,561 17,288 32,769	1 3,857 20,316 21,274 33,289	
outing	Inve	rt Outl	et Devices			
rimary	580.00					
econdary	585.00	Inlet n= 0 )' <b>15.0</b> Hea	/ Outlet Invert= 580 0.013 Corrugated P ' long + 3.0 '/' Side d (feet) 0.20 0.40	).00' / 578.00' S= ( E, smooth interior, e <b>Z x 25.0' breadth</b> 0.60 0.80 1.00 1.	0.0253 '/' Cc= 0.900 Flow Area= 1.23 sf Broad-Crested Rec 20 1.40 1.60	
	580.00' Su outing rimary	580.00'       32         Surf.Area       (sq-ft)         1       935         6,900       12,860         18,260       18,260         outing       Invertimary         rimary       580.00	580.00'         32,769 cf           Surf.Area         Perim. (sq-ft)         (feet)           1         5.0           935         220.0           6,900         505.0           12,860         515.0           18,260         645.0           couting         Invert         Outl           rimary         580.00'         15.0           L= 7         Inlet         n= 0           econdary         585.00'         15.0	580.00'         32,769 cf         Custom Stage Da           Surf.Area         Perim.         Inc.Store           (sq-ft)         (feet)         (cubic-feet)           1         5.0         0           935         220.0         644           6,900         505.0         6,917           12,860         515.0         9,727           18,260         645.0         15,481           outing         Invert         Outlet Devices           rimary         580.00'         15.0"         Round Culvert           L= 79.0'         CPP, projectir         Inlet / Outlet Invert= 580           n= 0.013         Corrugated P           econdary         585.00'         15.0'         Iong + 3.0 '/'	580.00'         32,769 cf         Custom Stage Data (Irregular)Lister           Surf.Area         Perim.         Inc.Store         Cum.Store           (sq-ft)         (feet)         (cubic-feet)         (cubic-feet)           1         5.0         0         0           935         220.0         644         644           6,900         505.0         6,917         7,561           12,860         515.0         9,727         17,288           18,260         645.0         15,481         32,769           outing         Invert         Outlet Devices         1           rimary         580.00'         15.0'' Round Culvert         L= 79.0'           L= 79.0'         CPP, projecting, no headwall, K         Inlet / Outlet Invert= 580.00' / 578.00'         S=           n= 0.013         Corrugated PE, smooth interior,         n= 0.013         Corrugated PE, smooth interior,           econdary         585.00'         15.0' long + 3.0 '/' SideZ x 25.0' breadth         Head (feet)         0.20         0.40         0.60         0.80         1.00         1	580.00'         32,769 cf         Custom Stage Data (Irregular)Listed below (Recalc)           Surf.Area         Perim.         Inc.Store         Cum.Store         Wet.Area           (sq-ft)         (feet)         (cubic-feet)         (cubic-feet)         (sq-ft)           1         5.0         0         0         1           935         220.0         644         644         3,857           6,900         505.0         6,917         7,561         20,316           12,860         515.0         9,727         17,288         21,274           18,260         645.0         15,481         32,769         33,289           outing         Invert         Outlet Devices         1         20,01'         Creation of the state of

Primary OutFlow Max=7.80 cfs @ 12.42 hrs HW=583.42' (Free Discharge) -1=Culvert (Inlet Controls 7.80 cfs @ 6.35 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=580.00' (Free Discharge) 2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)



#### Pond 34P: VAN EPPS RD CULVERT

## Summary for Pond 42P: 42P

Inflow Area = 4.857 ac, 0.00% Impervious, Inflow Depth = 0.92" for 10-year event Inflow 7.51 cfs @ 11.98 hrs. Volume= 0.372 af = 0.00 hrs, Volume= Outflow = 0.00 cfs @ 0.000 af, Atten= 100%, Lag= 0.0 min 0.00 hrs, Volume= Primary = 0.00 cfs @ 0.000 af Routed to Link SP42 : Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af Routed to Link SP42 :

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 459.42' @ 24.40 hrs Surf.Area= 12,277 sf Storage= 16,219 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow) Center-of-Mass det. time= (not calculated: no outflow)

Volume	Invert	Avail.Sto	orage	Storage Description	l		
#1	458.00'	37,2	253 cf	Custom Stage Data	a (Irregular)Listed	below (Recalc)	
Elevatio (fee		urf.Area  F (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)	
458.0 459.0 460.0 461.0	)0 )0 )0	10,519 11,752 13,010	610.0 622.6 635.2 714.6	0 11,130 12,376 13,747	0 11,130 23,505 37,253	10,519 11,900 13,309 21,865	
Device	Routing	Invert	Outle	et Devices			
#1	Primary	458.00'	L= 3 Inlet	<b>" Round Culvert</b> 2.0' CPP, projecting / Outlet Invert= 458.0 .013 Corrugated PE	00' / 456.75' S= 0	.0391 '/' Cc= 0.900	
#2	Device 1	459.78'				to weir flow at low heads	
#3	Device 1	460.50'		" Horiz. Orifice/Grat ed to weir flow at low			
#4	Secondary	460.50'	<b>10.0</b> Head 2.50 Coef	l long + 3.0 '/' Sidez d (feet) 0.20 0.40 0 3.00 3.50 4.00 4.5	<b>Z x 4.0' breadth B</b> .60 0.80 1.00 1.2 50 5.00 5.50 4 2.69 2.68 2.67	road-Crested Rectangular 0 1.40 1.60 1.80 2.00 2.67 2.65 2.66 2.66	r Weir
Primary	Primary OutFlow Max=0.00 cfs @ 0.00 hrs. HW=458.00' (Free Discharge)						

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=458.00' (Free Discharge)

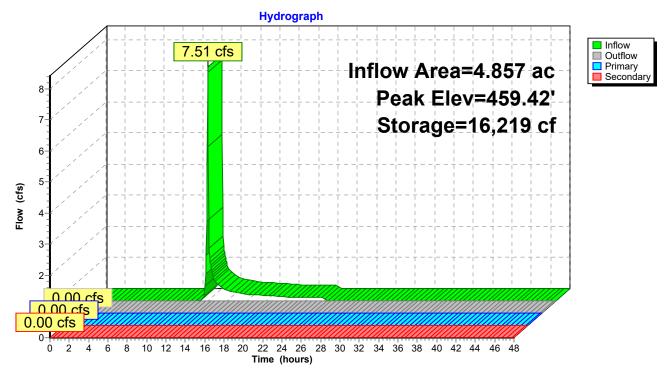
-1=Culvert (Controls 0.00 cfs)

-2=Orifice/Grate (Controls 0.00 cfs)

-2=Orifice/Grate (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=458.00' (Free Discharge) 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 42P: 42P



## Summary for Pond 49.1P: 49.1P

Inflow Area = 4.740 ac. 6.79% Impervious, Inflow Depth = 0.75" for 10-year event Inflow 4.84 cfs @ 12.04 hrs. Volume= 0.297 af = 0.00 cfs @ 0.00 hrs, Volume= Outflow = 0.000 af, Atten= 100%, Lag= 0.0 min 0.00 hrs, Volume= Primary = 0.00 cfs @ 0.000 af Routed to Link SP42 : Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af Routed to Link SP42 :

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 533.82' @ 24.60 hrs Surf.Area= 7,915 sf Storage= 12,939 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow) Center-of-Mass det. time= (not calculated: no outflow)

Volume	Invert	Avail.Sto	rage Storage	e Description
#1	532.00'	32,64	42 cf Custom	n Stage Data (Prismatic)Listed below (Recalc)
Elevatio		urf.Area	Inc.Store	Cum.Store
(fee	et)	(sq-ft)	(cubic-feet)	(cubic-feet)
532.0	00	6,368	0	0
533.0	00	7,185	6,777	6,777
534.0	00	8,079	7,632	14,409
535.0	00	9,092	8,586	22,994
536.0	00	10,204	9,648	32,642
Device	Routing	Invert	Outlet Device	es
#1	Primary	532.00'	24.0" Round	d Culvert
				'P, projecting, no headwall, Ke= 0.900
				Invert= 532.00' / 531.75' S= 0.0100 '/' Cc= 0.900
				rrugated PE, smooth interior, Flow Area= 3.14 sf
#2	Device 1	535.83'		<b>ifice/Grate</b> C= 0.600 Limited to weir flow at low heads
#3	Device 1	535.50'		Orifice/Grate C= 0.600
				eir flow at low heads
#4	Secondary	535.50'		3.0 '/' SideZ x 4.0' breadth Broad-Crested Rectangular Weir
			· · ·	0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00
				.50 4.00 4.50 5.00 5.50
				h) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66
			2.68 2.72 2.	.73 2.76 2.79 2.88 3.07 3.32

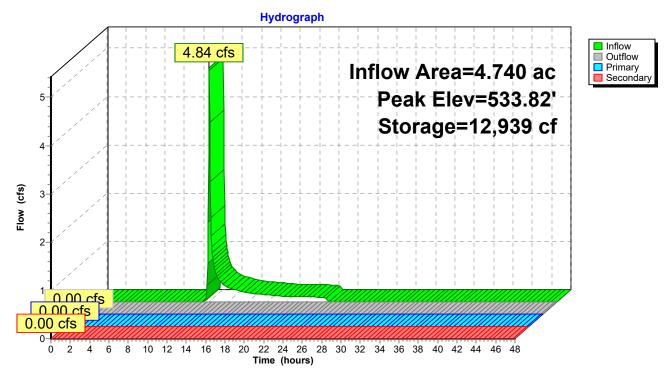
Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=532.00' (Free Discharge)

-1=Culvert (Controls 0.00 cfs)

-2=Orifice/Grate (Controls 0.00 cfs)

**3=Orifice/Grate** (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=532.00' (Free Discharge) 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs) Pond 49.1P: 49.1P



## Summary for Pond 49.2P: 49.2S

0.14% Impervious, Inflow Depth = 1.01" for 10-year event Inflow Area = 3.533 ac, Inflow = 6.07 cfs @ 11.98 hrs, Volume= 0.297 af 0.43 cfs @ 12.95 hrs, Volume= Outflow = 0.221 af, Atten= 93%, Lag= 57.9 min 0.43 cfs @ 12.95 hrs, Volume= 0.221 af Primary = Routed to Link SP42 : 0.00 cfs @ 0.00 hrs, Volume= 0.000 af Secondary = Routed to Link SP42 :

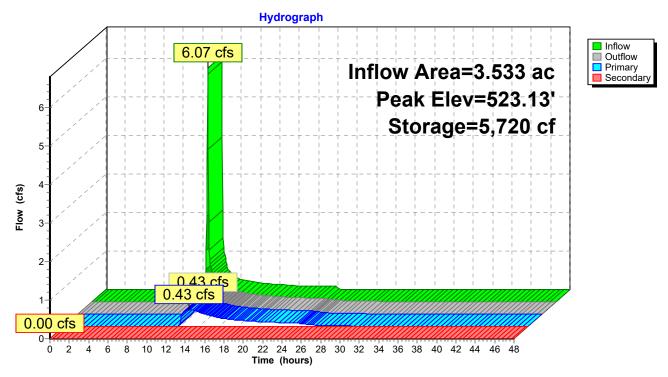
Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 523.13' @ 12.95 hrs Surf.Area= 5,623 sf Storage= 5,720 cf

Plug-Flow detention time= 286.9 min calculated for 0.221 af (75% of inflow) Center-of-Mass det. time= 183.0 min (1,049.0 - 866.0)

Volume	Invert	Avail.Sto	rage Storage	Description		
#1	522.00'	11,00	01 cf Custom	Stage Data (Prismatic)Listed below (Recalc)		
Elevatio		rf.Area	Inc.Store	Cum.Store		
(fee	1	(sq-ft)	(cubic-feet)	(cubic-feet)		
522.0		4,515	0	0		
523.0		5,494	5,005	5,005		
524.0	00	6,498	5,996	11,001		
Device	Routing	Invert	Outlet Devices			
#1	Primary	522.00'	12.0" Round	Culvert		
	2		L= 25.0' CPP	, projecting, no headwall, Ke= 0.900		
				vert= 522.00' / 521.75' S= 0.0100 '/' Cc= 0.900		
				ugated PE, smooth interior, Flow Area= 0.79 sf		
#2	Device 1	522.67'		ice/Grate C= 0.600 Limited to weir flow at low heads		
#3	Device 1	523.50'		ifice/Grate C= 0.600		
				flow at low heads		
#4	Secondary	523.50'		8.0 '/' SideZ x 4.0' breadth Broad-Crested Rectangular Weir		
				20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00		
				0 4.00 4.50 5.00 5.50 ) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66		
			, <b>U</b>	3 2.76 2.79 2.88 3.07 3.32		
			2.00 2.12 2.1	5 2.10 2.19 2.00 5.01 5.52		
Primary	<b>OutFlow</b> Ma	ax=0.44 cfs (	@ 12.95 hrs HW	/=523.13' (Free Discharge)		
			2.37 cfs potentia			
			ntrols 0.44 cfs @			
	Orifice/Grat					
Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=522.00' (Free Discharge)						

-4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 49.2P: 49.2S



## Summary for Pond 51.1P: 51.1P

Inflow Area = 8.131 ac, 0.00% Impervious, Inflow Depth = 1.18" for 10-year event 8.53 cfs @ 12.22 hrs, Volume= Inflow = 0.799 af 0.23 cfs @ 22.45 hrs, Volume= Outflow = 0.179 af, Atten= 97%, Lag= 614.0 min 0.23 cfs @ 22.45 hrs, Volume= Primary = 0.179 af Routed to Link SP51 : 0.00 cfs @ 0.00 hrs, Volume= 0.000 af Secondary = Routed to Link SP51 :

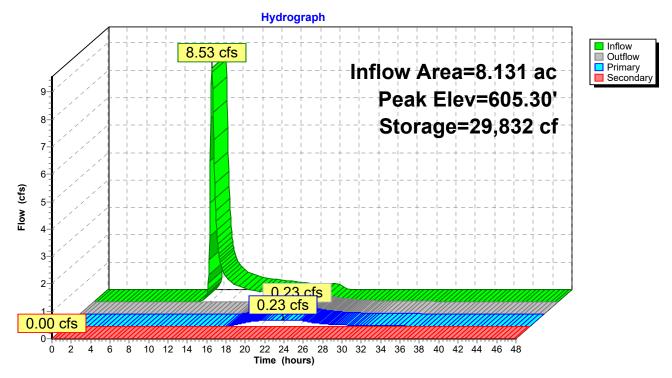
Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 605.30' @ 22.45 hrs Surf.Area= 10,574 sf Storage= 29,832 cf

Plug-Flow detention time= 719.9 min calculated for 0.179 af (22% of inflow) Center-of-Mass det. time= 569.4 min (1,444.5 - 875.2)

Volume	Invert	Avail.Sto	orade Storad	ge Description	
#1	602.00'		<u> </u>	om Stage Data (Prismatic)Listed below (Recalc)	
Elevatio	on Si	urf.Area	Inc.Store	Cum.Store	
(fee	et)	(sq-ft)	(cubic-feet)	(cubic-feet)	
602.0	00	7,555	0	0	
603.0	00	8,441	7,998	7,998	
604.0	00	9,351	8,896		
605.0	-	10,287	9,819	26,713	
606.0		11,248	10,768	37,481	
607.0	00	12,234	11,741	49,222	
Device	Routing	Invert	Outlet Devic	ices	
#1	Primary	600.00'	12.0" Rour	Ind Culvert	
	2			CPP, projecting, no headwall, Ke= 0.900	
				et Invert= 600.00' / 598.00' S= 0.0500 '/' Cc= 0.900	
			n= 0.013 C	Corrugated PE, smooth interior, Flow Area= 0.79 sf	
#2	Device 1	605.00'		<b>Orifice/Grate</b> C= 0.600 Limited to weir flow at low heads	
#3	Device 1	606.50'		z. Orifice/Grate C= 0.600	
#4	Secondary	606.50'		weir flow at low heads	Nair
#4	Secondary	000.50		+ 3.0 '/' SideZ x 4.0' breadth Broad-Crested Rectangular V ) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00	veir
				3.50 4.00 4.50 5.00 5.50	
				lish) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66	
				2.73 2.76 2.79 2.88 3.07 3.32	
				HW=605.30' (Free Discharge)	
			6.54 cfs pote		
				fs @ 1.86 fps)	
<u> </u>	Orifice/Gra	te (Controls	0.00 CTS)		

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=602.00' (Free Discharge) 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 51.1P: 51.1P



## Summary for Pond 52.1P: 52.1P

Inflow Area = 0.805 ac, 0.00% Impervious, Inflow Depth = 1.06" for 10-year event Inflow = 1.76 cfs @ 11.90 hrs. Volume= 0.071 af 0.00 cfs @ 0.00 hrs, Volume= Outflow = 0.000 af, Atten= 100%, Lag= 0.0 min 0.00 hrs, Volume= Primary = 0.00 cfs @ 0.000 af Routed to Link SP52 : 0.00 hrs, Volume= Secondary = 0.00 cfs @ 0.000 af Routed to Link SP52 :

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 648.77' @ 24.05 hrs Surf.Area= 4,324 sf Storage= 3,108 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow) Center-of-Mass det. time= (not calculated: no outflow)

Volume	Invert	Avail.Sto	rage Storage Description	
#1	648.00'	14,79	00 cf Custom Stage Data (Prismatic)Listed below (Recalc)	
Elevatio	n Su	ırf.Area	Inc.Store Cum.Store	
(fee		(sq-ft)	(cubic-feet) (cubic-feet)	
648.0	00	3,699	0 0	
649.0	00	4,506	4,103 4,103	
650.0	00	5,337	4,922 9,024	
651.0	00	6,194	5,766 14,790	
Device	Routing	Invert	Outlet Devices	
#1	Primary	648.00'	12.0" Round Culvert	
			L= 20.0' CPP, projecting, no headwall, Ke= 0.900	
			Inlet / Outlet Invert= 648.00' / 647.50' S= 0.0250 '/' Cc= 0.900	
			n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf	
#2	Device 1	649.50'	<b>6.0" Vert. Orifice/Grate</b> C= 0.600 Limited to weir flow at low heads	
#3	Device 1	650.50'	<b>48.0" Horiz. Orifice/Grate</b> C= 0.600	
	<b>•</b> •	050 501	Limited to weir flow at low heads	
#4	Secondary	650.50'	10.0' long + 3.0 '/' SideZ x 4.0' breadth Broad-Crested Rectangular V	Wei
			Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00	
			2.50 3.00 3.50 4.00 4.50 5.00 5.50	
			Coef. (English) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66	
			2.68 2.72 2.73 2.76 2.79 2.88 3.07 3.32	
		av=0.00 afa (	$\sim 0.00 \text{ brs}$ $HW/=648.00'$ (Free Discharge)	

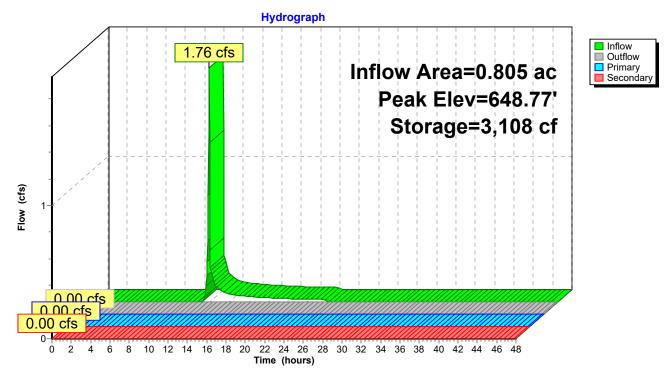
Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=648.00' (Free Discharge)

-1=Culvert (Controls 0.00 cfs)

2=Orifice/Grate (Controls 0.00 cfs) 3=Orifice/Grate (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=648.00' (Free Discharge) 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 52.1P: 52.1P



## Summary for Pond 56.1P: 56.1P

Inflow Area = 27.373 ac, 0.00% Impervious, Inflow Depth = 1.01" for 10-year event Inflow 25.68 cfs @ 12.18 hrs, Volume= 2.300 af = 1.30 cfs @ 16.26 hrs, Volume= Outflow = 1.892 af, Atten= 95%, Lag= 244.7 min 1.30 cfs @ 16.26 hrs, Volume= Primary = 1.892 af Routed to Link SP56 : 0.00 hrs, Volume= Secondary = 0.00 cfs @ 0.000 af Routed to Link SP56 :

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 417.13' @ 16.26 hrs Surf.Area= 21,621 sf Storage= 57,652 cf

Plug-Flow detention time= 543.0 min calculated for 1.892 af (82% of inflow) Center-of-Mass det. time= 462.2 min (1,344.1 - 881.9)

Volume	Invert	Avail.Sto	rage Storage	e Description	
#1	414.00'		<u> </u>	n Stage Data (Prismatic)Listed below (Recalc)	
_					
Elevatio		urf.Area	Inc.Store	Cum.Store	
(fee	1	(sq-ft)	(cubic-feet)	(cubic-feet)	
414.0	-	15,198	0	0	
415.0	-	17,220	16,209	16,209	
416.0		19,266	18,243	34,452	
417.0		21,338	20,302	54,754	
418.0	-	23,435	22,387	77,141	
419.0		25,558	24,497	101,637	
420.0	0	27,705	26,632	128,269	
Device	Routing	Invert	Outlet Device	es	
#1	Primary	414.00'	12.0" Round	d Culvert X 2.00	
			L= 70.0' CPI	PP, projecting, no headwall, Ke= 0.900	
			Inlet / Outlet I	Invert= 414.00' / 413.50' S= 0.0071 '/' Cc= 0.900	
			n= 0.013 Cor	prrugated PE, smooth interior, Flow Area= 0.79 sf	
#2	Device 1	415.00'	6.0" Vert. Ori	rifice/Grate C= 0.600 Limited to weir flow at low head	ls
#3	Device 1	419.50'	48.0" Horiz. (	<b>Orifice/Grate X 2.00</b> C= 0.600	
			Limited to we	eir flow at low heads	
#4	Secondary	419.50'	10.0' long +	· 3.0 '/' SideZ x 4.0' breadth Broad-Crested Rectangu	ılar Weir
				0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00	ł
				.50 4.00 4.50 5.00 5.50	
				sh) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66	
			2.68 2.72 2.	.73 2.76 2.79 2.88 3.07 3.32	

Primary OutFlow Max=1.30 cfs @ 16.26 hrs HW=417.13' (Free Discharge)

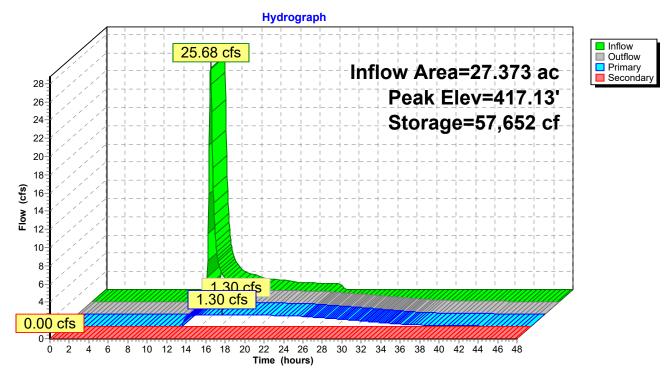
**1=Culvert** (Passes 1.30 cfs of 9.69 cfs potential flow)

-2=Orifice/Grate (Orifice Controls 1.30 cfs @ 6.61 fps)

-3=Orifice/Grate (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=414.00' (Free Discharge) 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

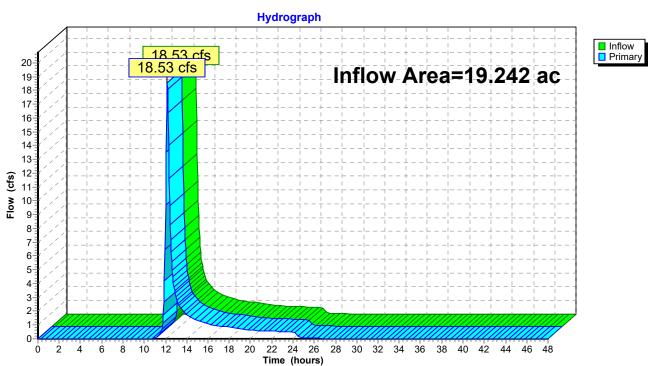
Pond 56.1P: 56.1P



# Summary for Link SP25:

Inflow Area	a =	19.242 ac,	0.51% Impervious,	Inflow Depth =	1.09"	for 10-year event
Inflow	=	18.53 cfs @	12.17 hrs, Volume	= 1.753	af	
Primary	=	18.53 cfs @	12.17 hrs, Volume	= 1.753	af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

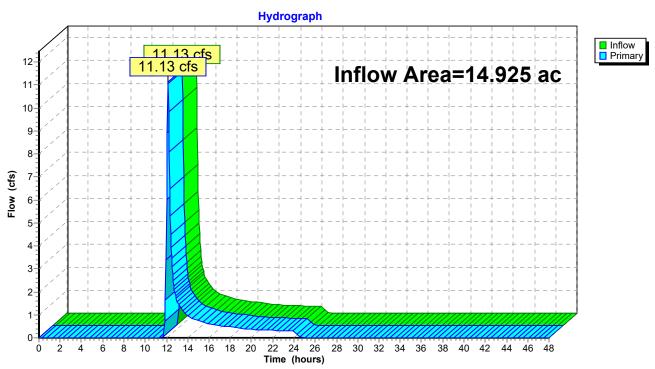


#### Link SP25:

# Summary for Link SP26:

Inflow Area	=	14.925 ac,	5.39% Impervious,	Inflow Depth =	0.75"	for 10-year event
Inflow =	=	11.13 cfs @	12.13 hrs, Volume=	= 0.935 a	af	
Primary =	=	11.13 cfs @	12.13 hrs, Volume=	= 0.935 a	af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

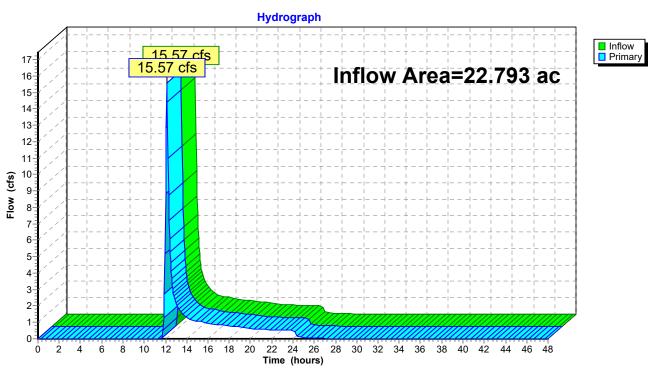


#### Link SP26:

# Summary for Link SP27:

Inflow Area	a =	22.793 ac,	1.95% Impervious, Inflow	/ Depth = 0.73"	for 10-year event
Inflow	=	15.57 cfs @	12.13 hrs, Volume=	1.389 af	
Primary	=	15.57 cfs @	12.13 hrs, Volume=	1.389 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

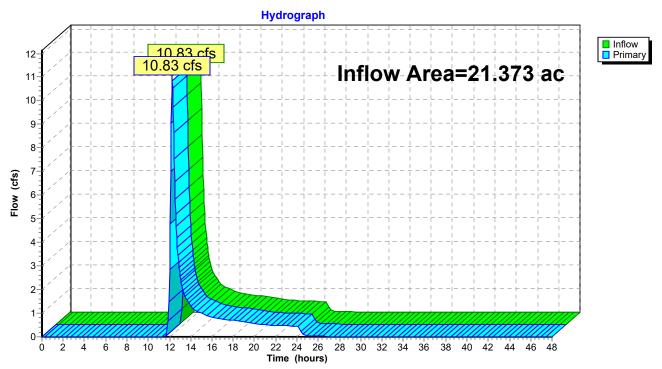


#### Link SP27:

# Summary for Link SP28:

Inflow Area =	21.373 ac,	0.53% Impervious, Infl	ow Depth = $0.71$ "	for 10-year event
Inflow =	10.83 cfs @	12.25 hrs, Volume=	1.259 af	
Primary =	10.83 cfs @	12.25 hrs, Volume=	1.259 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

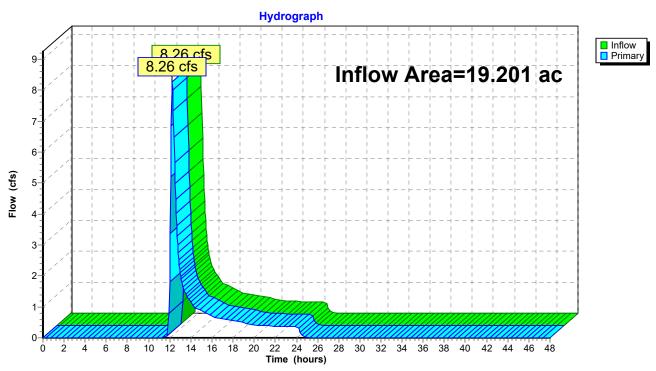


## Link SP28:

# Summary for Link SP29:

Inflow Area	=	19.201 ac,	1.25% Impervious, Inflow	/ Depth = 0.62"	for 10-year event
Inflow	=	8.26 cfs @	12.25 hrs, Volume=	0.985 af	-
Primary	=	8.26 cfs @	12.25 hrs, Volume=	0.985 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

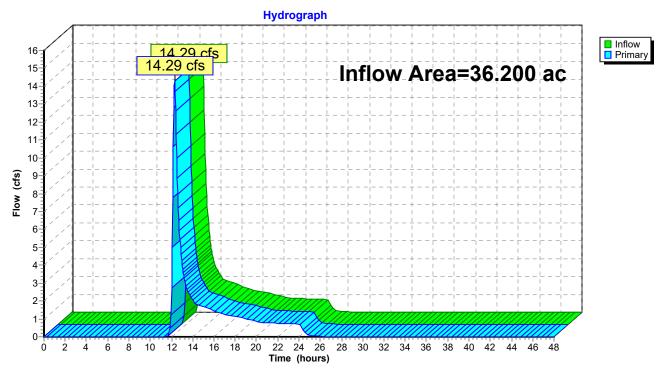


#### Link SP29:

# Summary for Link SP30:

Inflow Area =	36.200 ac,	1.23% Impervious, Inflow E	Depth = 0.63"	for 10-year event
Inflow =	14.29 cfs @	12.29 hrs, Volume=	1.891 af	
Primary =	14.29 cfs @	12.29 hrs, Volume=	1.891 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

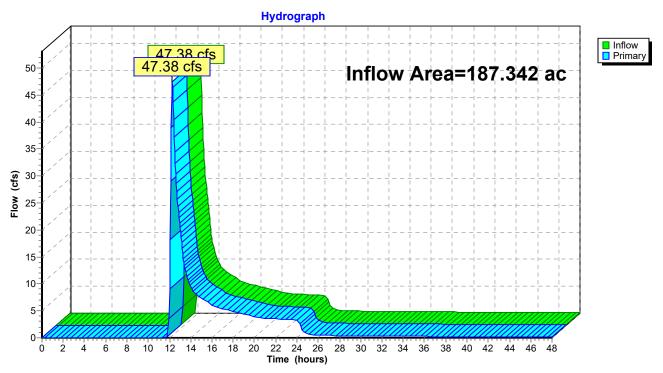


#### Link SP30:

# Summary for Link SP34:

Inflow Area	a =	187.342 ac,	1.98% Impervious, Inflow	Depth > 0.54"	for 10-year event
Inflow	=	47.38 cfs @	12.26 hrs, Volume=	8.401 af	-
Primary	=	47.38 cfs @	12.26 hrs, Volume=	8.401 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

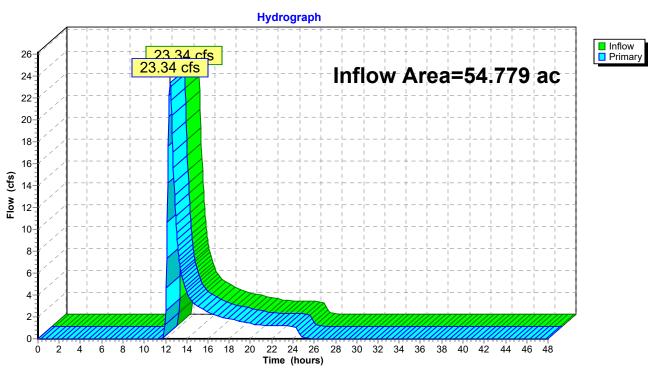


#### Link SP34:

# Summary for Link SP35:

Inflow Area	=	54.779 ac,	2.01% Impervious,	Inflow Depth =	0.75"	for 10-year event
Inflow	=	23.34 cfs @	12.44 hrs, Volume	= 3.433	af	
Primary	=	23.34 cfs @	12.44 hrs, Volume	= 3.433	af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

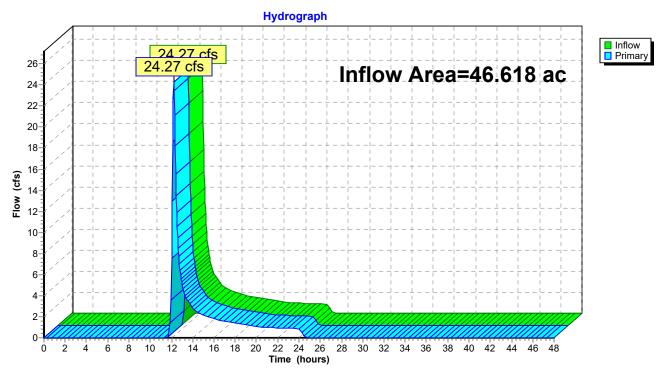


#### Link SP35:

# Summary for Link SP36:

Inflow Area =	46.618 ac,	0.00% Impervious, I	Inflow Depth = 0.66"	for 10-year event
Inflow =	24.27 cfs @	12.21 hrs, Volume=	2.562 af	
Primary =	24.27 cfs @	12.21 hrs, Volume=	= 2.562 af, Att	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs



#### Link SP36:

# Summary for Link SP37:

Inflow Area =	10.440 ac,	5.80% Impervious, Inflow D	epth = 0.53"	for 10-year event
Inflow =	3.02 cfs @	12.36 hrs, Volume=	0.462 af	
Primary =	3.02 cfs @	12.36 hrs, Volume=	0.462 af, Att	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

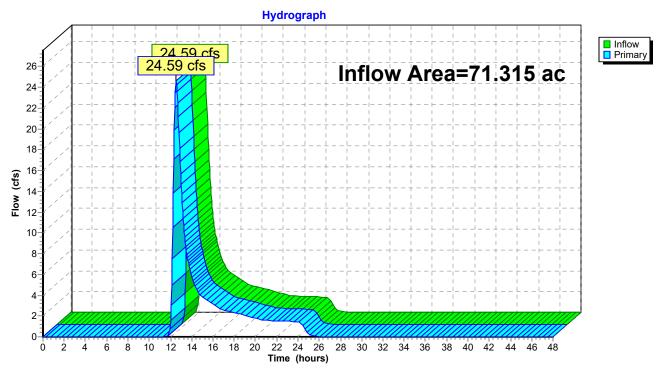
# (y) of the state o

#### Link SP37:

# Summary for Link SP38:

Inflow Area	a =	71.315 ac,	1.11% Impervious, Inflow	Depth = 0.71"	for 10-year event
Inflow	=	24.59 cfs @	12.55 hrs, Volume=	4.190 af	
Primary	=	24.59 cfs @	12.55 hrs, Volume=	4.190 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

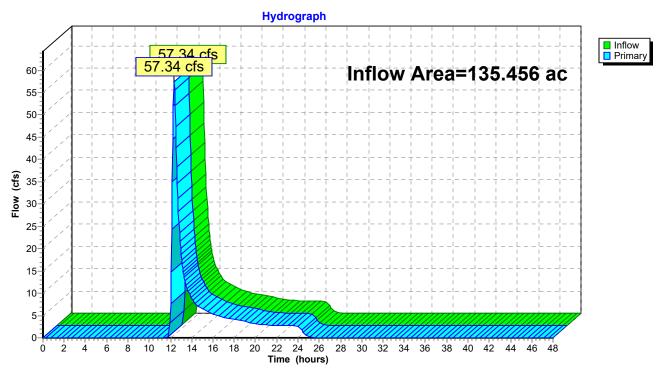


#### Link SP38:

# Summary for Link SP39:

Inflow Area	a =	135.456 ac,	1.64% Impervious, Inflow	Depth = 0.67"	for 10-year event
Inflow	=	57.34 cfs @	12.34 hrs, Volume=	7.536 af	-
Primary	=	57.34 cfs @	12.34 hrs, Volume=	7.536 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

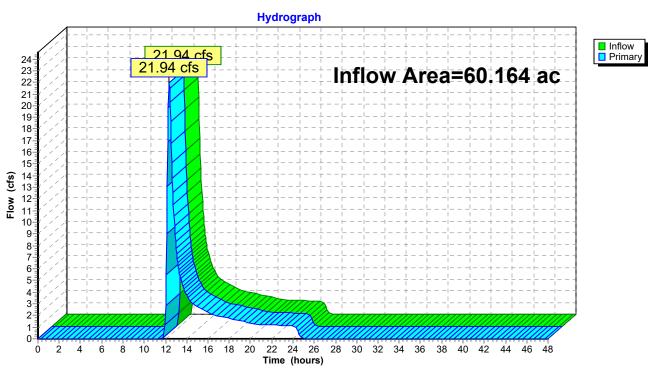


#### Link SP39:

# Summary for Link SP41:

Inflow Area	a =	60.164 ac,	0.00% Impervious,	Inflow Depth =	0.62" for 10-year event
Inflow	=	21.94 cfs @	12.35 hrs, Volume	= 3.086 a	af
Primary	=	21.94 cfs @	12.35 hrs, Volume	= 3.086 a	af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

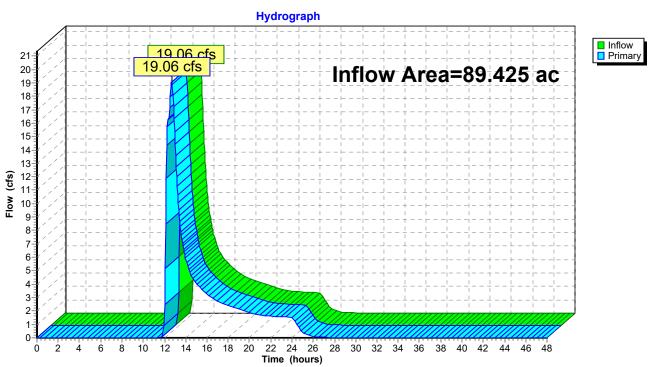


#### Link SP41:

# Summary for Link SP42:

Inflow Area	a =	89.425 ac,	0.58% Impervious, Inflo	ow Depth = 0.56"	for 10-year event
Inflow	=	19.06 cfs @	12.68 hrs, Volume=	4.175 af	
Primary	=	19.06 cfs @	12.68 hrs, Volume=	4.175 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

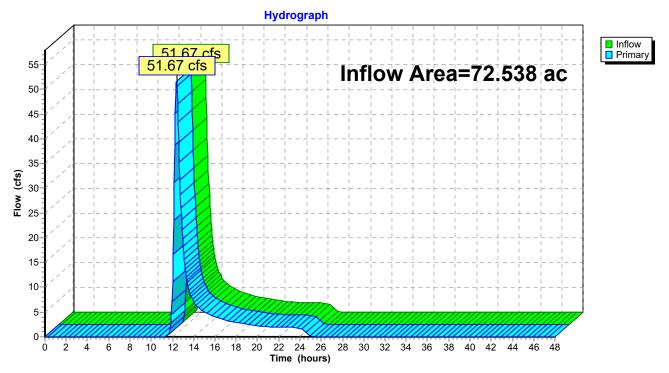


#### Link SP42:

# Summary for Link SP48:

Inflow Area	a =	72.538 ac,	2.48% Impervious, Inflo	w Depth = 1.06"	for 10-year event
Inflow	=	51.67 cfs @	12.38 hrs, Volume=	6.430 af	
Primary	=	51.67 cfs @	12.38 hrs, Volume=	6.430 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

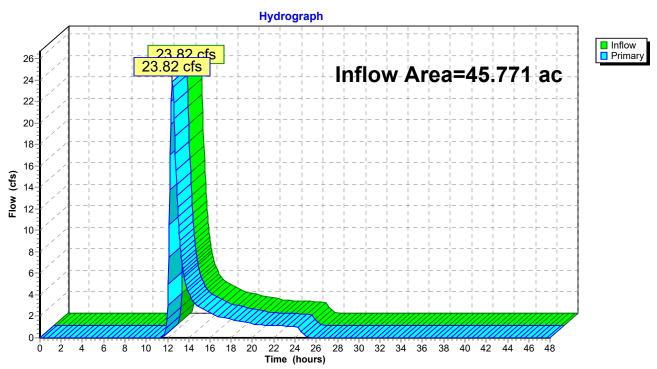


#### Link SP48:

# Summary for Link SP50:

Inflow Area	a =	45.771 ac,	1.25% Impervious, Inflow	v Depth = 0.90"	for 10-year event
Inflow	=	23.82 cfs @	12.46 hrs, Volume=	3.438 af	
Primary	=	23.82 cfs @	12.46 hrs, Volume=	3.438 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

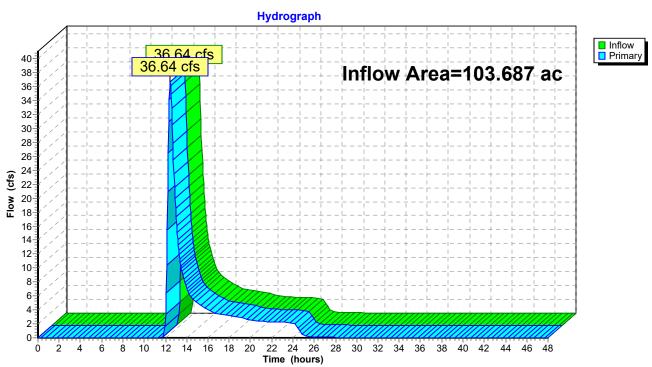


#### Link SP50:

# Summary for Link SP51:

Inflow Area	a =	103.687 ac,	0.70% Impervious,	Inflow Depth >	0.67"	for 10-year event
Inflow	=	36.64 cfs @	12.45 hrs, Volume	= 5.793	af	
Primary	=	36.64 cfs @	12.45 hrs, Volume	= 5.793	af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

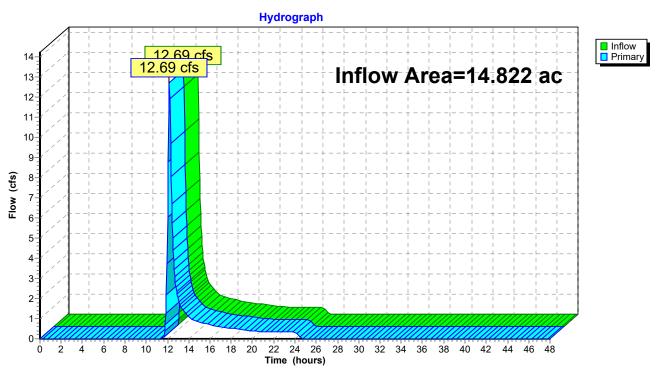


#### Link SP51:

# Summary for Link SP52:

Inflow Area	a =	14.822 ac,	2.79% Impervious,	Inflow Depth = 0	.90" for 10-year event
Inflow	=	12.69 cfs @	12.17 hrs, Volume=	= 1.114 af	
Primary	=	12.69 cfs @	12.17 hrs, Volume=	= 1.114 af	, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

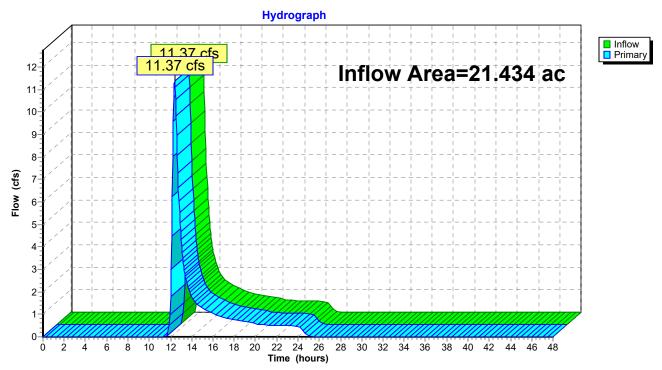


#### Link SP52:

# Summary for Link SP53:

Inflow Area =	21.434 ac,	1.80% Impervious, Inflo	w Depth = 0.85"	for 10-year event
Inflow =	11.37 cfs @	12.39 hrs, Volume=	1.518 af	-
Primary =	11.37 cfs @	12.39 hrs, Volume=	1.518 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

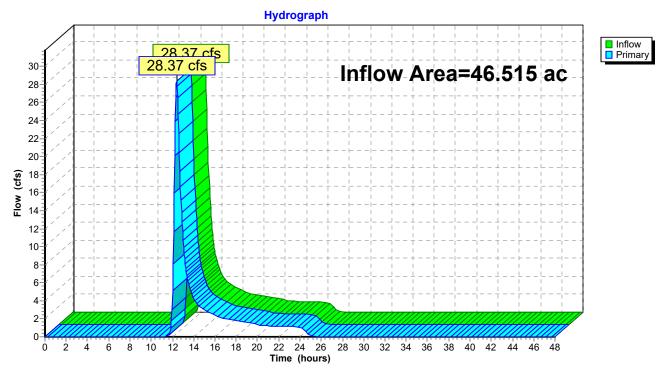


## Link SP53:

# Summary for Link SP54:

Inflow Area =	46.515 ac,	7.79% Impervious, Infl	ow Depth = 0.95"	for 10-year event
Inflow =	28.37 cfs @	12.39 hrs, Volume=	3.698 af	
Primary =	28.37 cfs @	12.39 hrs, Volume=	3.698 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

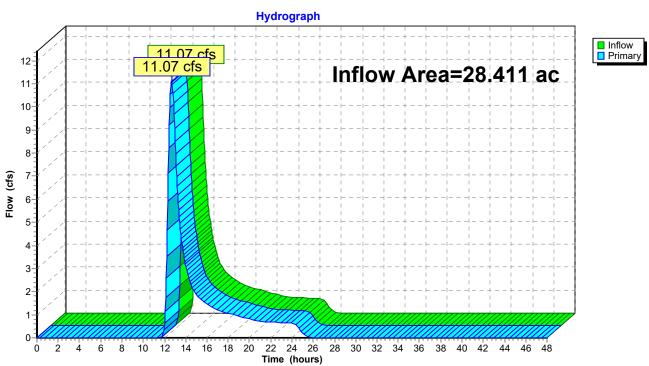


## Link SP54:

# Summary for Link SP55:

Inflow Area	=	28.411 ac,	0.98% Impervious, Inflow	v Depth = 0.85"	for 10-year event
Inflow	=	11.07 cfs @	12.66 hrs, Volume=	2.013 af	
Primary	=	11.07 cfs @	12.66 hrs, Volume=	2.013 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

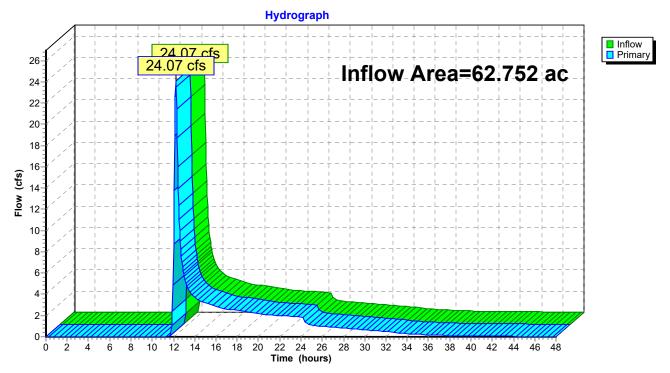


#### Link SP55:

# Summary for Link SP56:

Inflow Area	ı =	62.752 ac,	0.00% Impervious,	Inflow Depth >	0.81"	for 10-year event
Inflow	=	24.07 cfs @	12.21 hrs, Volume	= 4.252	af	
Primary	=	24.07 cfs @	12.21 hrs, Volume	= 4.252	af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs



## Link SP56:

Mill Pt Post 2	Туре
Prepared by TRC Companies	
HvdroCAD® 10.20-5a s/n 01402 © 2023 HvdroCAD Softw	are Solutions LLC

Time span=0.00-48.00 hrs, dt=0.05 hrs, 961 points Runoff by SCS TR-20 method, UH=SCS, Weighted-CN Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 25.1S: Sub 25.1	Runoff Area=3.422 ac 0.00% Impervious Runoff Depth=2.58" Flow Length=564' Tc=12.4 min CN=70 Runoff=12.38 cfs 0.737 af
Subcatchment 25S: Sub 25	Runoff Area=15.820 ac 0.63% Impervious Runoff Depth=2.86" Flow Length=1,104' Tc=22.2 min CN=73 Runoff=47.04 cfs 3.768 af
Subcatchment 26S: Sub 26	Runoff Area=14.925 ac 5.39% Impervious Runoff Depth=2.15" Flow Length=1,324' Tc=18.0 min CN=65 Runoff=36.72 cfs 2.674 af
Subcatchment 27.1S: Sub 27.1	Runoff Area=3.749 ac 0.00% Impervious Runoff Depth=2.67" Flow Length=831' Tc=14.7 min CN=71 Runoff=12.98 cfs 0.836 af
Subcatchment 27S: Sub 27	Runoff Area=19.044 ac 2.34% Impervious Runoff Depth=2.23" Flow Length=1,602' Tc=17.8 min CN=66 Runoff=49.27 cfs 3.547 af
Subcatchment 28.1S: Sub 28.1	Runoff Area=2.160 ac 0.00% Impervious Runoff Depth=2.67" Flow Length=409' Tc=11.9 min CN=71 Runoff=8.23 cfs 0.481 af
Subcatchment 28S: Sub 28 Flow Lengt	Runoff Area=19.213 ac 0.59% Impervious Runoff Depth=2.15" h=1,727' Tc=27.4 min UI Adjusted CN=65 Runoff=36.44 cfs 3.442 af
Subcatchment 29S: Sub 29	Runoff Area=19.201 ac 1.25% Impervious Runoff Depth=1.90" Flow Length=1,656' Tc=26.3 min CN=62 Runoff=32.39 cfs 3.042 af
Subcatchment 30.1S: Sub 30.1	Runoff Area=4.003 ac 0.00% Impervious Runoff Depth=2.67" Flow Length=1,131' Tc=29.7 min CN=71 Runoff=9.22 cfs 0.892 af
Subcatchment 30S: Sub 30	Runoff Area=32.197 ac 1.38% Impervious Runoff Depth=1.98" Flow Length=2,349' Tc=29.2 min CN=63 Runoff=53.19 cfs 5.321 af
Subcatchment 31.1S: Sub 31.1	Runoff Area=0.925 ac 0.00% Impervious Runoff Depth=2.58" Flow Length=267' Tc=10.3 min CN=70 Runoff=3.58 cfs 0.199 af
Subcatchment 31S: Sub 31	Runoff Area=24.402 ac 0.00% Impervious Runoff Depth=1.90" Flow Length=2,354' Tc=30.5 min CN=62 Runoff=37.24 cfs 3.866 af
Subcatchment 32.1S: 32.1S	Runoff Area=5.376 ac 0.00% Impervious Runoff Depth=2.58" Flow Length=867' Tc=20.0 min CN=70 Runoff=15.23 cfs 1.158 af
Subcatchment 32S: Sub 32	Runoff Area=39.541 ac 7.07% Impervious Runoff Depth=1.98" Flow Length=2,402' Tc=27.3 min CN=63 Runoff=68.19 cfs 6.534 af
Subcatchment 33.1S: 33.1S	Runoff Area=12.768 ac 1.41% Impervious Runoff Depth=2.86" Flow Length=1,561' Tc=36.2 min CN=73 Runoff=27.66 cfs 3.041 af
Subcatchment 33S: Sub 33	Runoff Area=78.535 ac 0.56% Impervious Runoff Depth=1.51" Flow Length=1,749' Tc=22.2 min CN=57 Runoff=110.77 cfs 9.874 af

# Mill Pt Post 2

Prepared by TRC Companies HydroCAD® 10.20-5a s/n 01402 © 2023 HydroCAD Software Solutions LLC

 Type II 24-hr
 100-year Rainfall=5.72"

 Printed
 7/19/2024

 ns LLC
 Page 266

Subcatchment 34S: Sub 34	Runoff Area=25.795 ac 1.16% Impervious Runoff Depth=1.90" Flow Length=1,380' Tc=24.0 min CN=62 Runoff=46.09 cfs 4.087 af
Subcatchment 35S: Sub 35	Runoff Area=54.779 ac 2.01% Impervious Runoff Depth=2.15" Flow Length=3,081' Tc=40.4 min CN=65 Runoff=79.38 cfs 9.814 af
Subcatchment 36S: Sub 36	Runoff Area=46.618 ac 0.00% Impervious Runoff Depth=1.98" Flow Length=1,996' Tc=23.3 min CN=63 Runoff=89.16 cfs 7.704 af
Subcatchment 37S: Sub 37	Runoff Area=10.440 ac 5.80% Impervious Runoff Depth=1.74" Flow Length=1,926' Tc=33.1 min CN=60 Runoff=13.48 cfs 1.515 af
Subcatchment 38S: Sub 38	Runoff Area=71.315 ac 1.11% Impervious Runoff Depth=2.07" Flow Length=3,404' Tc=47.6 min CN=64 Runoff=87.58 cfs 12.278 af
Subcatchment 39S: Sub 39	Runoff Area=114.576 ac 0.49% Impervious Runoff Depth=1.90" Flow Length=2,852' Tc=30.0 min CN=62 Runoff=176.76 cfs 18.153 af
Subcatchment 40S: Sub 40	Runoff Area=20.880 ac 7.94% Impervious Runoff Depth=2.50" Flow Length=1,917' Tc=28.9 min CN=69 Runoff=45.31 cfs 4.343 af
Subcatchment 41S: Sub 41	Runoff Area=60.164 ac 0.00% Impervious Runoff Depth=1.90" Flow Length=2,626' Tc=33.1 min CN=62 Runoff=86.70 cfs 9.532 af
Subcatchment 42.1S: 42.1P	Runoff Area=1.588 ac 0.00% Impervious Runoff Depth=2.67" Tc=6.0 min CN=71 Runoff=7.32 cfs 0.354 af
Subcatchment 42.2S: 42.2P	Runoff Area=3.269 ac 0.00% Impervious Runoff Depth=2.32" Tc=6.0 min CN=67 Runoff=13.21 cfs 0.632 af
Subcatchment 42S: Sub 42	Runoff Area=45.032 ac 0.00% Impervious Runoff Depth=1.74" Flow Length=1,067' Tc=27.0 min CN=60 Runoff=66.79 cfs 6.533 af
Subcatchment 48S: Sub 48	Runoff Area=72.538 ac 2.48% Impervious Runoff Depth=2.67" Flow Length=4,007' Tc=38.1 min CN=71 Runoff=140.87 cfs 16.169 af
Subcatchment 49.1S: Sub 49.1	Runoff Area=4.740 ac 6.79% Impervious Runoff Depth=2.15" Tc=10.0 min CN=65 Runoff=15.27 cfs 0.849 af
Subcatchment 49.2S: 49.2S	Runoff Area=3.533 ac 0.14% Impervious Runoff Depth=2.58" Tc=6.0 min CN=70 Runoff=15.75 cfs 0.761 af
Subcatchment 49S: Sub 49	Runoff Area=31.263 ac 0.62% Impervious Runoff Depth=2.15" Flow Length=2,999' Tc=38.0 min CN=65 Runoff=47.43 cfs 5.601 af
Subcatchment 50S: Sub 50	Runoff Area=45.771 ac 1.25% Impervious Runoff Depth=2.41" Flow Length=2,623' Tc=43.5 min CN=68 Runoff=72.03 cfs 9.184 af
Subcatchment 51.1S: 51.1S	Runoff Area=8.131 ac 0.00% Impervious Runoff Depth=2.86" Flow Length=1,025' Tc=26.3 min CN=73 Runoff=21.79 cfs 1.936 af
Subcatchment 51S: Sub 51	Runoff Area=95.556 ac 0.76% Impervious Runoff Depth=2.07" Flow Length=3,172' Tc=41.1 min CN=64 Runoff=130.61 cfs 16.451 af

Mill Pt Post 2

Prepared by TRC Companies HydroCAD® 10.20-5a s/n 01402 © 2023 HydroCAD Software Solutions LLC

 Type II 24-hr
 100-year Rainfall=5.72"

 Printed
 7/19/2024

 ns LLC
 Page 267

Subcatchment 52.1S: 52	.1S Runoff Area=0.805 ac 0.00% Impervious Runoff Depth=2.67" Tc=0.0 min CN=71 Runoff=4.43 cfs 0.179 af
Subcatchment 52S: Sub	<b>52</b> Runoff Area=14.017 ac 2.95% Impervious Runoff Depth=2.50" Flow Length=1,182' Tc=22.0 min CN=69 Runoff=36.22 cfs 2.915 af
Subcatchment 53S: Sub	<b>53</b> Runoff Area=21.434 ac 1.80% Impervious Runoff Depth=2.32" Flow Length=2,555' Tc=37.9 min CN=67 Runoff=35.62 cfs 4.145 af
Subcatchment 54S: Sub	54Runoff Area=46.515 ac7.79% ImperviousRunoff Depth=2.50"Flow Length=3,144'Tc=38.8 minUI Adjusted CN=69Runoff=82.69 cfs9.674 af
Subcatchment 55S: Sub	<b>55</b> Runoff Area=28.411 ac 0.98% Impervious Runoff Depth=2.32" Flow Length=2,400' Tc=57.7 min CN=67 Runoff=34.81 cfs 5.495 af
Subcatchment 56.1S: 56	.1S Runoff Area=27.373 ac 0.00% Impervious Runoff Depth=2.58" Flow Length=1,864' Tc=23.1 min CN=70 Runoff=71.32 cfs 5.896 af
Subcatchment 56S: Sub	<b>56</b> Runoff Area=35.379 ac 0.00% Impervious Runoff Depth=2.23" Flow Length=1,907' Tc=23.9 min CN=66 Runoff=76.56 cfs 6.589 af
Reach 33R:	Avg. Flow Depth=1.83' Max Vel=3.25 fps Inflow=36.67 cfs 4.087 af n=0.100 L=1,875.0' S=0.0597 '/' Capacity=10.60 cfs Outflow=29.05 cfs 4.087 af
Reach 39R:	Avg. Flow Depth=1.45' Max Vel=4.43 fps Inflow=45.31 cfs 4.343 af n=0.100 L=1,110.0' S=0.0991 '/' Capacity=86.68 cfs Outflow=43.63 cfs 4.343 af
Reach 42R: S-NSD-16	Avg. Flow Depth=1.85' Max Vel=3.71 fps Inflow=47.43 cfs 5.601 af n=0.100 L=1,790.0' S=0.0531 '/' Capacity=51.95 cfs Outflow=44.01 cfs 5.601 af
Pond 25.1P: 25.1P	Peak Elev=606.40' Storage=15,600 cf Inflow=12.38 cfs 0.737 af Primary=1.15 cfs 0.647 af Secondary=0.00 cfs 0.000 af Outflow=1.15 cfs 0.647 af
Pond 27.1P: 27.1P	Peak Elev=553.76' Storage=13,224 cf Inflow=12.98 cfs 0.836 af Primary=5.73 cfs 0.512 af Secondary=3.36 cfs 0.110 af Outflow=9.10 cfs 0.622 af
Pond 28.1P: 28.1P	Peak Elev=560.53' Storage=10,718 cf Inflow=8.23 cfs 0.481 af Primary=0.79 cfs 0.341 af Secondary=0.11 cfs 0.003 af Outflow=0.90 cfs 0.344 af
<b>Pond 30.1P: 30.1P</b> Discarded=0.02 cfs 0.048 af	Peak Elev=462.21' Storage=15,801 cf Inflow=9.22 cfs 0.892 af Primary=3.18 cfs 0.655 af Secondary=0.00 cfs 0.000 af Outflow=3.20 cfs 0.704 af
<b>Pond 31.1P: 31.1P</b> Discarded=0.02 cfs 0.061 af	Peak Elev=511.79' Storage=7,727 cf Inflow=3.58 cfs 0.199 af Primary=0.00 cfs 0.000 af Secondary=0.00 cfs 0.000 af Outflow=0.02 cfs 0.061 af
Pond 32.1P: 32.1P	Peak Elev=554.66' Storage=33,162 cf Inflow=15.23 cfs 1.158 af Primary=0.51 cfs 0.867 af Secondary=0.00 cfs 0.000 af Outflow=0.51 cfs 0.867 af
Pond 33.1P: 33.1P	Peak Elev=593.26' Storage=103,992 cf Inflow=27.66 cfs 3.041 af Primary=0.68 cfs 1.752 af Secondary=0.00 cfs 0.000 af Outflow=0.68 cfs 1.752 af

<b>Mill Pt Post 2</b> Prepared by TRC Cc HydroCAD® 10.20-5a s	Type II 24-hr100-year Rainfall=5.72"ompaniesPrinted 7/19/2024/n 01402 © 2023 HydroCAD Software Solutions LLCPage 268
Pond 34P: VAN EPPS	RD CULVERT         Peak Elev=585.70'         Storage=27,574 cf         Inflow=46.09 cfs         4.087 af           Primary=10.51 cfs         3.304 af         Secondary=26.16 cfs         0.783 af         Outflow=36.67 cfs         4.087 af
Pond 42P: 42P	Peak Elev=460.51' Storage=30,397 cf Inflow=20.60 cfs 0.986 af Primary=0.40 cfs 0.482 af Secondary=0.05 cfs 0.010 af Outflow=0.45 cfs 0.492 af
Pond 49.1P: 49.1P	Peak Elev=535.53' Storage=28,001 cf Inflow=15.27 cfs 0.849 af Primary=0.27 cfs 0.135 af Secondary=0.16 cfs 0.079 af Outflow=0.43 cfs 0.214 af
Pond 49.2P: 49.2S	Peak Elev=523.95' Storage=10,673 cf Inflow=15.75 cfs 0.761 af Primary=2.74 cfs 0.502 af Secondary=8.63 cfs 0.183 af Outflow=11.36 cfs 0.685 af
Pond 51.1P: 51.1P	Peak Elev=606.63' Storage=44,776 cf Inflow=21.79 cfs 1.936 af Primary=3.09 cfs 1.232 af Secondary=1.18 cfs 0.082 af Outflow=4.27 cfs 1.314 af
Pond 52.1P: 52.1P	Peak Elev=649.62' Storage=7,046 cf Inflow=4.43 cfs 0.179 af Primary=0.04 cfs 0.030 af Secondary=0.00 cfs 0.000 af Outflow=0.04 cfs 0.030 af
Pond 56.1P: 56.1P	Peak Elev=419.79' Storage=122,515 cf Inflow=71.32 cfs 5.896 af Primary=13.35 cfs 5.090 af Secondary=4.14 cfs 0.343 af Outflow=17.48 cfs 5.433 af
Link SP25:	Inflow=48.01 cfs 4.415 af Primary=48.01 cfs 4.415 af
Link SP26:	Inflow=36.72 cfs 2.674 af Primary=36.72 cfs 2.674 af
Link SP27:	Inflow=51.73 cfs 4.169 af Primary=51.73 cfs 4.169 af
Link SP28:	Inflow=36.93 cfs 3.787 af Primary=36.93 cfs 3.787 af
Link SP29:	Inflow=32.39 cfs 3.042 af Primary=32.39 cfs 3.042 af
Link SP30:	Inflow=53.26 cfs 5.976 af Primary=53.26 cfs 5.976 af
Link SP34:	Inflow=217.12 cfs 26.981 af Primary=217.12 cfs 26.981 af
Link SP35:	Inflow=79.38 cfs 9.814 af Primary=79.38 cfs 9.814 af
Link SP36:	Inflow=89.16 cfs 7.704 af Primary=89.16 cfs 7.704 af
Link SP37:	Inflow=13.48 cfs 1.515 af Primary=13.48 cfs 1.515 af
Link SP38:	Inflow=87.58 cfs 12.278 af Primary=87.58 cfs 12.278 af

Hydrocad® 10.20-5a s/n 01402 © 2023 Hydrocad Software Solutions LLC	Page 269
	Later 045 04 sta 00 400 st
Link SP39:	Inflow=215.84 cfs 22.496 af Primary=215.84 cfs 22.496 af
Link SP41:	Inflow=86.70 cfs 9.532 af
	Primary=86.70 cfs 9.532 af
Link SP42:	Inflow=84.26 cfs 13.525 af Primary=84.26 cfs 13.525 af
Link SP48:	Inflow=140.87 cfs 16.169 af
	Primary=140.87 cfs 16.169 af
Link SP50:	Inflow=72.03 cfs 9.184 af Primary=72.03 cfs 9.184 af
Link SP51:	Inflow=131.32 cfs 17.766 af
	Primary=131.32 cfs 17.766 af
Link SP52:	Inflow=36.22 cfs  2.945 af Primary=36.22 cfs  2.945 af
Link SP53:	Inflow=35.62 cfs 4.145 af
LIIIK SF53.	Primary=35.62 cfs 4.145 af
Link SP54:	Inflow=82.69 cfs 9.674 af
	Primary=82.69 cfs 9.674 af
Link SP55:	Inflow=34.81 cfs 5.495 af Primary=34.81 cfs 5.495 af
Link SP56:	Inflow=77.99 cfs 12.022 af
	Primary=77.99 cfs 12.022 af
Tatal Dum off America 4 405 000 and Dum off Maluma = 040 000 af	Assessed Developments - 0.40

Total Runoff Area = 1,185.203 acRunoff Volume = 210.203 afAverage Runoff Depth = 2.13"98.41% Pervious = 1,166.310 ac1.59% Impervious = 18.893 ac

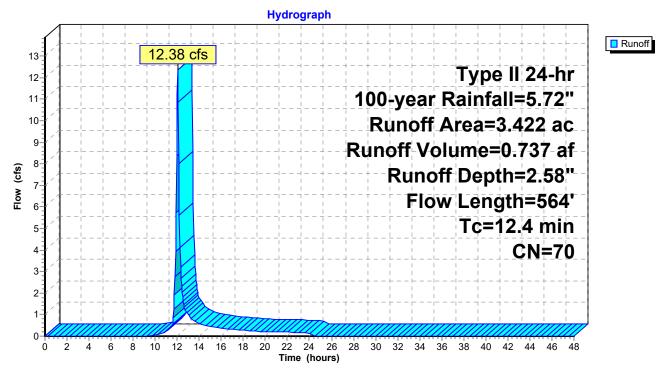
#### Summary for Subcatchment 25.1S: Sub 25.1

Runoff = 12.38 cfs @ 12.05 hrs, Volume= 0.737 af, Depth= 2.58" Routed to Pond 25.1P : 25.1P

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 100-year Rainfall=5.72"

 Area	(ac) C	N Desc	cription		
2.622 71 Meadow, non-grazed, HSG C 0.225 96 Gravel surface, HSG C					
 0.	<u>575 5</u>	58 Mea	dow, non-g	grazed, HS	G B
3.	422 7	'0 Weig	ghted Aver	age	
3.	422	100.	00% Pervi	ous Area	
Тс	Length	Slope	Velocity	Capacity	Description
 (min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
5.6	100	0.1080	0.30		Sheet Flow,
					Grass: Short n= 0.150 P2= 2.50"
0.5	35	0.0270	1.15		Shallow Concentrated Flow,
					Short Grass Pasture Kv= 7.0 fps
6.3	429	0.0260	1.13		Shallow Concentrated Flow,
					Short Grass Pasture Kv= 7.0 fps
 12.4	564	Total			· · · · · · · · · · · · · · · · · · ·

## Subcatchment 25.1S: Sub 25.1



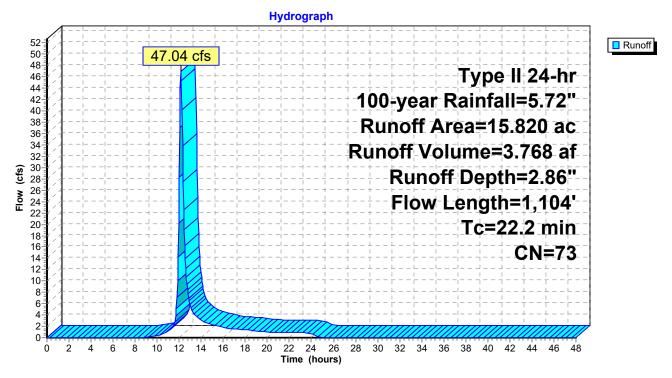
# Summary for Subcatchment 25S: Sub 25

Runoff = 47.04 cfs @ 12.16 hrs, Volume= Routed to Link SP25 : 3.768 af, Depth= 2.86"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 100-year Rainfall=5.72"

Area	(ac) C	N Des	cription						
0.	050	48 Brus	Brush, Good, HSG B						
0.	279	65 Brus	sh, Good, H	HSG C					
0.	181	73 Brus	sh, Good, H	ISG D					
0.	099	98 Unc	onnected r	oofs, HSG	D				
0.	210	58 Mea	dow, non-	grazed, HS	IG B				
10.	133	71 Mea	dow, non-	grazed, HS	IG C				
3.	694	78 Mea	dow, non-	grazed, HS	IG D				
0.	455	74 >75	% Grass co	over, Good	, HSG C				
0.	497	80 >75	% Grass co	over, Good	, HSG D				
0.	020	70 Woo	ods, Good,	HSG C					
0.	202	96 Gra	vel surface	, HSG D					
15.	820	73 Wei	ghted Aver	age					
15.	721	99.3	7% Pervio	us Area					
0.	099	0.63	% Impervi	ous Area					
0.	099	100	.00% Unco	nnected					
Тс	Length	Slope	Velocity	Capacity	Description				
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)					
8.2	100	0.0430	0.20		Sheet Flow,				
					Grass: Short n= 0.150 P2= 2.50"				
11.3	717	0.0230	1.06		Shallow Concentrated Flow,				
					Short Grass Pasture Kv= 7.0 fps				
2.7	287		1.76		Direct Entry, CF				
22.2	1,104	Total							

## Subcatchment 25S: Sub 25



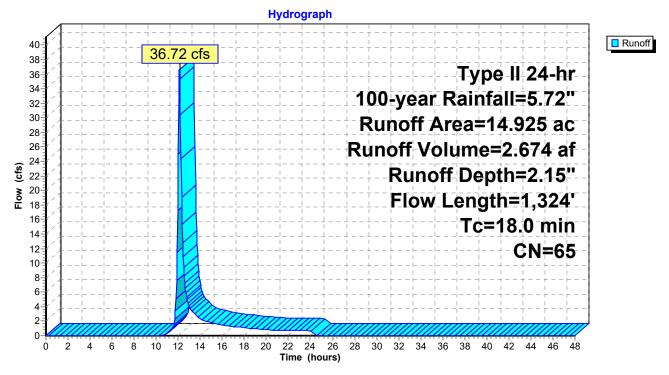
# Summary for Subcatchment 26S: Sub 26

Runoff = 36.72 cfs @ 12.11 hrs, Volume= Routed to Link SP26 : 2.674 af, Depth= 2.15"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 100-year Rainfall=5.72"

	Area	(ac) C	N Des	cription		
	0.	114	48 Brus	sh, Good, H	ISG B	
	0.	057	96 Grav	/el surface	, HSG D	
*	0.	804	98 Impe	ervious		
			58 Mea	dow, non-	grazed, HS	GB
	2.	989	71 Mea	dow, non-	grazed, HS	GC
	2.	988			over, Good	
					over, Good	,
	0.	212	78 Mea	dow, non-	grazed, HS	G D
	14.	925	65 Weig	ghted Aver	age	
	14.	121	94.6	1% Pervio	us Area	
	0.	804	5.39	% Impervi	ous Area	
	_				_	
	Tc	Length	Slope	Velocity	Capacity	Description
	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
	9.7	100	0.0280	0.17		Sheet Flow,
						Grass: Short n= 0.150 P2= 2.50"
	2.2	340	0.1340	2.56		Shallow Concentrated Flow,
						Short Grass Pasture Kv= 7.0 fps
	2.7	259	0.0540	1.63		Shallow Concentrated Flow,
						Short Grass Pasture Kv= 7.0 fps
	3.4	625		3.06		Direct Entry, CF
	18.0	1,324	Total			





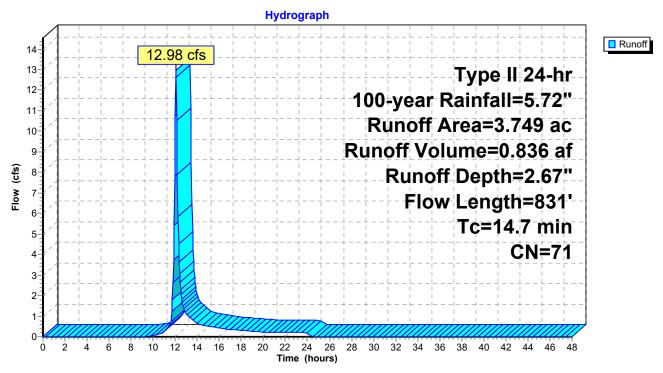
## Summary for Subcatchment 27.1S: Sub 27.1

Runoff = 12.98 cfs @ 12.07 hrs, Volume= Routed to Pond 27.1P : 27.1P 0.836 af, Depth= 2.67"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 100-year Rainfall=5.72"

	Area (ac) CN		N Dese	cription		
					grazed, HS grazed, HS	
* 0.279 96 Gravel						
_	3.	749 7	71 Weig	ghted Aver	age	
	3.	749	100.	00% Pervi	ous Area	
	Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
	6.7	100	0.0700	0.25		Sheet Flow,
						Grass: Short n= 0.150 P2= 2.50"
	3.1	391	0.0900	2.10		Shallow Concentrated Flow,
	3.2	175	0.0170	0.91		Short Grass Pasture Kv= 7.0 fps Shallow Concentrated Flow,
	1.7	165	0.0530	1.61		Short Grass Pasture Kv= 7.0 fps <b>Shallow Concentrated Flow,</b> Short Grass Pasture Kv= 7.0 fps
_	14.7	831	Total			

## Subcatchment 27.1S: Sub 27.1



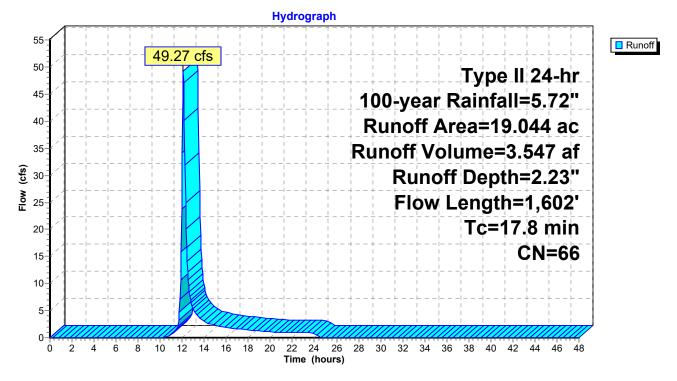
# Summary for Subcatchment 27S: Sub 27

Runoff = 49.27 cfs @ 12.11 hrs, Volume= 3.547 af, Depth= 2.23" Routed to Link SP27 :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 100-year Rainfall=5.72"

Area	(ac) C	N Des	cription					
0.254 96 Gravel surface, HSG D								
0.064 98 Unconnected roofs, HSG D								
8.719 58 Meadow, non-grazed, HSG B								
7.839 71 Meadow, non-grazed, HSG C								
0.	231			over, Good				
				over, Good				
				over, Good	, HSG D			
0.	381	98 Wat	er Surface	, HSG D				
			ghted Aver					
	599		6% Pervio					
	445		% Impervi					
0.	064	14.3	8% Uncon	nected				
-		0		0				
Tc	Length	Slope	Velocity	Capacity	Description			
<u>(min)</u>	(feet)	(ft/ft)	(ft/sec)	(cfs)				
6.9	100	0.0650	0.24		Sheet Flow,			
					Grass: Short n= 0.150 P2= 2.50"			
7.4	832	0.0720	1.88		Shallow Concentrated Flow,			
o -			0.40		Short Grass Pasture Kv= 7.0 fps			
3.5	670		3.19		Direct Entry, CF			
17.8	1,602	Total						

Subcatchment 27S: Sub 27



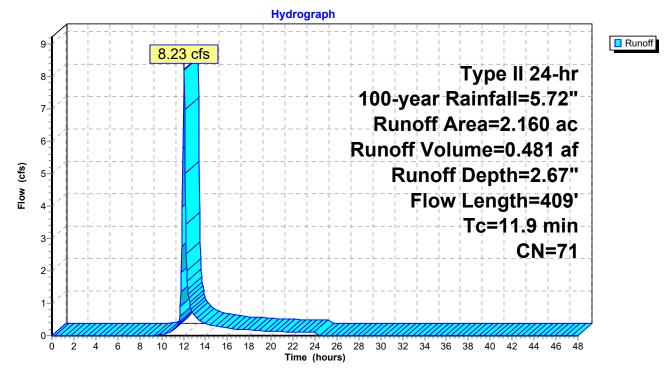
#### Summary for Subcatchment 28.1S: Sub 28.1

Runoff = 8.23 cfs @ 12.04 hrs, Volume= Routed to Pond 28.1P : 28.1P 0.481 af, Depth= 2.67"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 100-year Rainfall=5.72"

	Area	(ac)	CN D	escription					
*	0.	051	96 G	ravel					
	0.	068	58 N	eadow, non	-grazed, HS	G B			
	2.041 71 Meadow, non-grazed, HSG C								
_	2.160 71 Weighted Average								
	2.	160	1	00.00% Perv	/ious Area				
	Tc	Length	Slop	be Velocity	Capacity	Description			
	(min)	(feet)	(ft/	ft) (ft/sec)	(cfs)				
	8.2	100	0.042	20 0.20		Sheet Flow,			
						Grass: Short n= 0.150 P2= 2.50"			
	3.7	309	0.040	0 1.40		Shallow Concentrated Flow,			
						Short Grass Pasture Kv= 7.0 fps			
_	11.9	409	Tota						

# Subcatchment 28.1S: Sub 28.1



## Summary for Subcatchment 28S: Sub 28

[47] Hint: Peak is 558% of capacity of segment #3

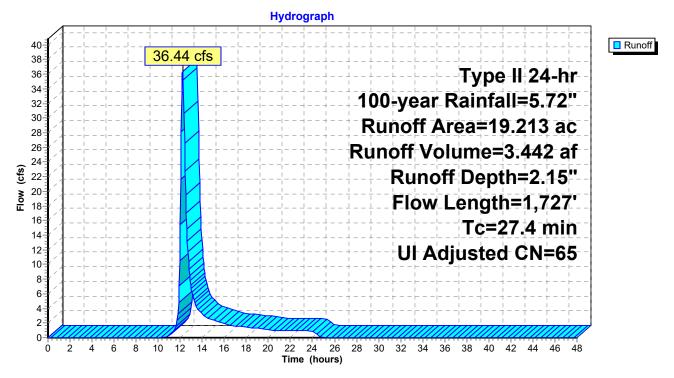
Runoff = 36.44 cfs @ 12.23 hrs, Volume= Routed to Link SP28 : 3.442 af, Depth= 2.15"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 100-year Rainfall=5.72"

_	Area	(ac)	CN Ac	lj Descrip	tion				
	0.	547	96	Gravel	Gravel surface, HSG D				
	0.	114	98	Unconn	Unconnected roofs, HSG D				
	8.	804	58	Meadov	v, non-graz	ed, HSG B			
	7.	984	71	Meadov	v, non-graz	ed, HSG C			
	0.	902	61			, Good, HSG B			
_	0.	862	74	>75% 0	Grass cover	, Good, HSG C			
	19.	213	66 6	5 Weighte	ed Average	, UI Adjusted			
	19.	099		99.41%	Pervious A	Area			
	0.	114		0.59% l	0.59% Impervious Area				
	0.	114		100.009	100.00% Unconnected				
	-		0		<b>o</b>				
	Tc	Lengt			Capacity	Description			
_	(min)	(feet	· · · ·		(cfs)				
	16.9	100	0.0070	0.10		Sheet Flow,			
						Grass: Short n= 0.150 P2= 2.50"			
	7.4	819	0.0700	) 1.85		Shallow Concentrated Flow,			
						Short Grass Pasture Kv= 7.0 fps			
	3.1	808	3 0.0420	) 4.36	6.53	• •			
						Bot.W=2.00' D=0.50' Z= 2.0 '/' Top.W=4.00'			
_		4 70				n= 0.035 Earth, dense weeds			

27.4 1,727 Total

## Subcatchment 28S: Sub 28



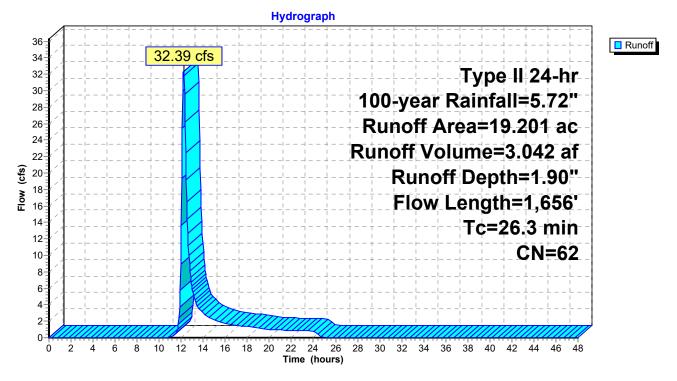
# Summary for Subcatchment 29S: Sub 29

Runoff = 32.39 cfs @ 12.22 hrs, Volume= 3.042 af, Depth= 1.90" Routed to Link SP29 :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 100-year Rainfall=5.72"

Area	(ac) (	CN Des	cription						
0	.326	96 Gra	vel surface	, HSG D					
0	.240	98 Unc	onnected r	oofs, HSG	D				
14	.674		Meadow, non-grazed, HSG B						
3	.955		Meadow, non-grazed, HSG C						
0	.006	<u>55 Woo</u>	ods, Good,	HSG B					
19	19.201 62 Weighted Average								
18	.961		75% Pervio						
-	.240		5% Impervi						
0	.240	100	.00% Unco	nnected					
т.	المربع مرافات	01	Mala alta	0	Description				
Tc	Length		Velocity	Capacity	Description				
<u>(min)</u>	(feet)		(ft/sec)	(cfs)					
8.9	100	0.0350	0.19		Sheet Flow,				
40 E	4 400	0.0460	1 50		Grass: Short n= 0.150 P2= 2.50"				
16.5	1,490	0.0460	1.50		Shallow Concentrated Flow,				
0.0	66		1 00		Short Grass Pasture Kv= 7.0 fps				
0.9	66		1.22		Direct Entry, CF				
26.3	1,656	Total							

## Subcatchment 29S: Sub 29



## Summary for Subcatchment 30.1S: Sub 30.1

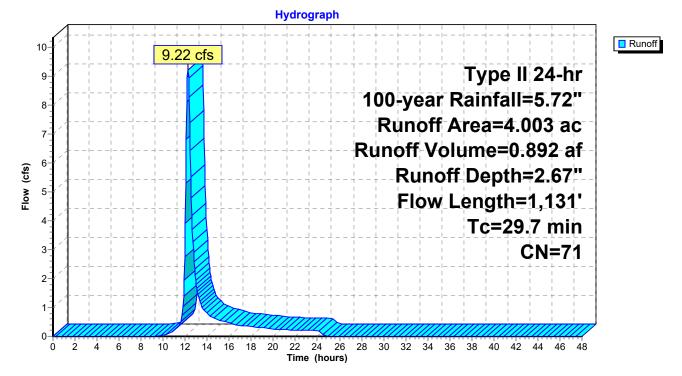
Runoff = 9.22 cfs @ 12.25 hrs, Volume= 0 Routed to Pond 30.1P : 30.1P

0.892 af, Depth= 2.67"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 100-year Rainfall=5.72"

Area	(ac) C	N Dese	cription							
4	4.003 71 Meadow, non-grazed, HSG C									
4.003 100.00% Pervious Area										
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description					
15.3	100	0.0090	0.11	· · · ·	Sheet Flow,					
14.4	1,031	0.0290	1.19		Grass: Short n= 0.150 P2= 2.50" <b>Shallow Concentrated Flow,</b> Short Grass Pasture Kv= 7.0 fps					
29.7	1,131	Total								

#### Subcatchment 30.1S: Sub 30.1



## Summary for Subcatchment 30S: Sub 30

[47] Hint: Peak is 865% of capacity of segment #6

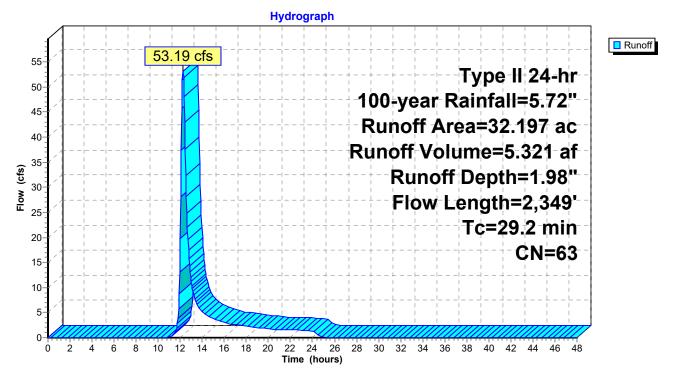
53.19 cfs @ 12.25 hrs, Volume= 5.321 af, Depth= 1.98" Runoff = Routed to Link SP30 :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 100-year Rainfall=5.72"

_	Area	(ac) C	N Desc	cription						
	0.	214 4	18 Brus	h, Good, H	ISG B					
	0.	283 6	65 Brus	h, Good, H	ISG C					
	1.	013 9	96 Grav	el surface	, HSG D					
	0.	445 9	98 Unco	onnected r	oofs, HSG	D				
	-	-		Meadow, non-grazed, HSG B						
					grazed, HS					
				>75% Grass cover, Good, HSG B						
				>75% Grass cover, Good, HSG C						
				ds, Good,						
_				ds, Good,						
		-		ghted Aver	0					
		752		2% Pervio						
		445		% Impervi						
	0.	445	100.	00% Unco	nnected					
	Тс	Length	Slope	Volocity	Capacity	Description				
	(min)	(feet)	Slope (ft/ft)	Velocity (ft/sec)	(cfs)	Description				
_	11.1	100	0.0200	0.15	(013)	Sheet Flow,				
	11.1	100	0.0200	0.15		Grass: Short $n = 0.150$ P2= 2.50"				
	3.4	228	0.0260	1.13						
	5.4	220	0.0200	1.13		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps				
	0.6	171	0.1050	4.86		Shallow Concentrated Flow,				
	0.0	171	0.1000	4.00		Grassed Waterway Kv= 15.0 fps				
	2.8	279	0.0570	1.67		Shallow Concentrated Flow,				
	2.0	213	0.0070	1.07		Short Grass Pasture Kv= 7.0 fps				
	6.5	554	0.0410	1.42		Shallow Concentrated Flow,				
	0.0	004	0.0410	1T <b>Z</b>		Short Grass Pasture Kv= 7.0 fps				
	4.8	1,017	0.0290	3.52	6.15	Trap/Vee/Rect Channel Flow,				
		1,011	0.0200	0.02	0.10	Bot.W=2.00' D=0.50' Z= 3.0 '/' Top.W=5.00'				
						n=0.035 Earth, dense weeds				
-	00.0	0.040	Tatal							

29.2 2,349 Total

# Subcatchment 30S: Sub 30



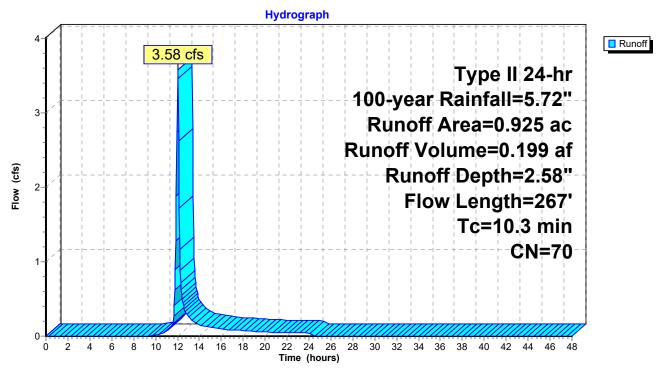
## Summary for Subcatchment 31.1S: Sub 31.1

Runoff = 3.58 cfs @ 12.02 hrs, Volume= 0.199 af, Depth= 2.58" Routed to Pond 31.1P : 31.1P

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 100-year Rainfall=5.72"

Area	(ac) C	N Desc	cription		
-				grazed, HS grazed, HS	
0.		'0 Weig	ghted Aver 00% Pervi	age	
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.1	100	0.0330	0.18		Sheet Flow,
0.9	90	0.0522	1.60		Grass: Short n= 0.150 P2= 2.50" <b>Shallow Concentrated Flow,</b> Short Grass Pasture Kv= 7.0 fps
0.3	77	0.0130	4.02	20.10	<b>Trap/Vee/Rect Channel Flow,</b> Bot.W=2.00' D=1.00' Z= 3.0 '/' Top.W=8.00'
					n= 0.030 Earth, grassed & winding
10.3	267	Total			

## Subcatchment 31.1S: Sub 31.1



## Summary for Subcatchment 31S: Sub 31

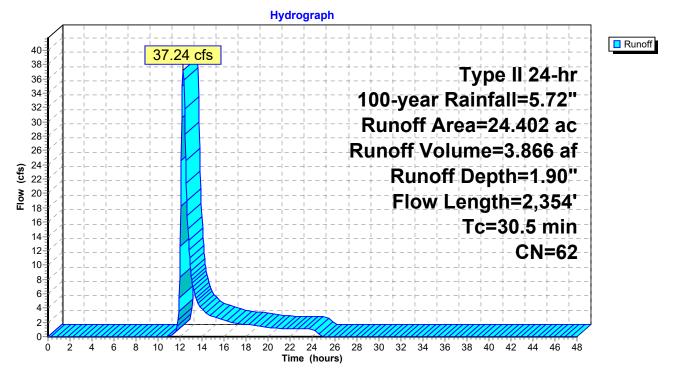
[47] Hint: Peak is 890% of capacity of segment #3

Runoff = 37.24 cfs @ 12.27 hrs, Volume= 3.866 af, Depth= 1.90" Routed to Link SP34 :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 100-year Rainfall=5.72"

Area	(ac) C	N Desc	cription					
0.	.029 4	l8 Brus	h, Good, H	ISG B				
14	.311 5			grazed, HS				
6	.600 7		Meadow, non-grazed, HSG C					
			Woods, Good, HSG B					
			Noods, Good, HSG C					
0.548 96 Gravel surface, HSG D								
			phted Aver	0				
24.	.402	100.	00% Pervi	ous Area				
Тс	Length	Slope	Velocity	Capacity	Description			
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	Description			
8.2	100	0.0420	0.20	(013)	Sheet Flow,			
0.2	100	0.0420	0.20		Grass: Short $n= 0.150$ P2= 2.50"			
18.9	1,401	0.0310	1.23		Shallow Concentrated Flow,			
	.,				Short Grass Pasture Kv= 7.0 fps			
3.4	853	0.0938	4.18	4.18	•			
					W=3.00' D=0.50' Área=1.0 sf Perim=3.2'			
					n= 0.050 Mountain streams w/large boulders			
30.5	2,354	Total						

# Subcatchment 31S: Sub 31



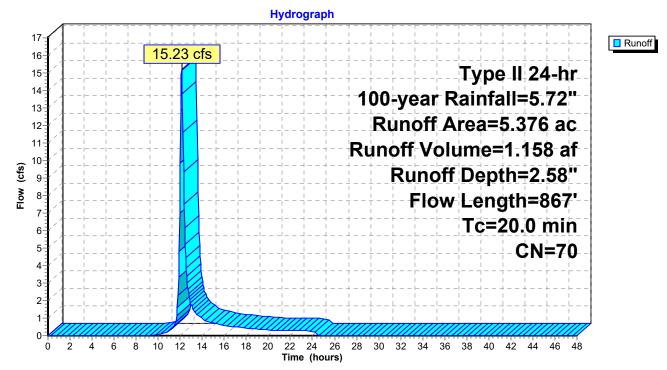
#### Summary for Subcatchment 32.1S: 32.1S

Runoff = 15.23 cfs @ 12.13 hrs, Volume= Routed to Pond 32.1P : 32.1P 1.158 af, Depth= 2.58"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 100-year Rainfall=5.72"

	Area	(ac)	CN	Desc	ription				
*	0.	166	96	Grav	el				
0.888 58 Meadow, non-grazed, HSG B							G B		
	4.	322	71	Mea	dow, non-g	grazed, HS	GC		
	5.376 70 Weighted Average								
5.376 100.00% Pervious Area									
	Тс	Length	n Sl	lope	Velocity	Capacity	Description		
_	(min)	(feet	) (	ft/ft)	(ft/sec)	(cfs)			
	8.0	100	0.0	450	0.21		Sheet Flow,		
							Grass: Short n= 0.150 P2= 2.50"		
	12.0	767	0.0	230	1.06		Shallow Concentrated Flow,		
							Short Grass Pasture Kv= 7.0 fps		
	20.0	867	′ Tot	tal					

# Subcatchment 32.1S: 32.1S



## Summary for Subcatchment 32S: Sub 32

[47] Hint: Peak is 1294% of capacity of segment #7

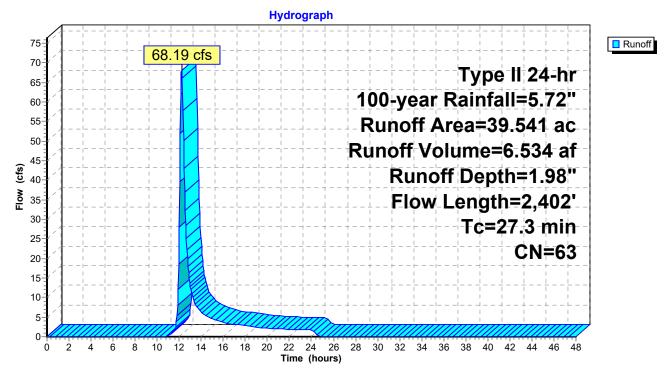
Runoff = 68.19 cfs @ 12.23 hrs, Volume= Routed to Link SP34 : 6.534 af, Depth= 1.98"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 100-year Rainfall=5.72"

Area	(ac) C	N Desc	cription							
0.	124 4	8 Brus	h, Good, H	ISG B						
25.	962 5	68 Mea	dow, non-g	grazed, HS	G B					
4.	4.042 71 Meadow, non-grazed, HSG C									
2.796 98 Water Surface, HSG D										
5.751 55 Woods, Good, HSG B										
-			el surface	, HSG D						
	39.541 63 Weighted Average									
	745		3% Pervio							
2.	796	7.07	% Impervi	ous Area						
-				0						
Tc	Length	Slope	Velocity	Capacity	Description					
(min)	(feet)	<u>(ft/ft)</u>	(ft/sec)	(cfs)	<b></b>					
9.7	100	0.0280	0.17		Sheet Flow,					
0.0	400	0 0000	4 0 4		Grass: Short n= 0.150 P2= 2.50"					
2.6	160	0.0220	1.04		Shallow Concentrated Flow,					
3.6	495	0.1050	2.27		Short Grass Pasture Kv= 7.0 fps					
5.0	495	0.1000	2.21		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps					
1.5	74	0.0270	0.82		Shallow Concentrated Flow,					
1.0	17	0.0270	0.02		Woodland Kv= 5.0 fps					
1.9	99	0.0300	0.87		Shallow Concentrated Flow,					
					Woodland Kv= 5.0 fps					
6.5	550	0.0800	1.41		Shallow Concentrated Flow,					
					Woodland Kv= 5.0 fps					
1.5	924	0.0910	10.13	5.27	Trap/Vee/Rect Channel Flow,					
					Bot.W=2.00' D=0.20' Z= 3.0 '/' Top.W=3.20'					
					n= 0.013 Corrugated PE, smooth interior					
27.3	2 402	Total								

27.3 2,402 Total





# Summary for Subcatchment 33.1S: 33.1S

[47] Hint: Peak is 1364% of capacity of segment #3

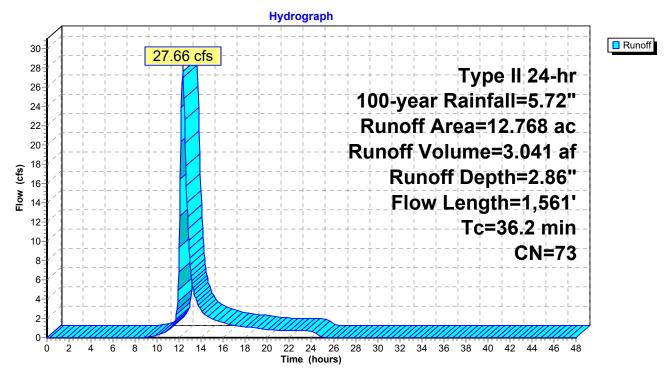
27.66 cfs @ 12.33 hrs, Volume= Runoff = Routed to Pond 33.1P : 33.1P

3.041 af, Depth= 2.86"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 100-year Rainfall=5.72"

_	Area	(ac) (	CN Des	cription			
*	0.	536	96 Gra	Gravel			
	0.787 58 Meadow, non-grazed, HSG			adow, non-g	grazed, HS	GB	
2.948 78 Meadow, non-grazed, HSG D				G D			
*	* 0.180 98 Impervious						
	8.285 71 Meadow, non-grazed, HSG C				GC		
_	0.032 48 Brush, Good, HSG B						
	12.768 73			ghted Aver			
		588		98.59% Pervious Area			
	0.180 1.41			1% Impervi	ous Area		
	-		~		<b>A B</b>		
	Tc	Length			Capacity	Description	
_	(min)	(feet)	. ,	(ft/sec)	(cfs)		
	15.3	100	0.0090	0.11		Sheet Flow,	
				- <b>-</b> -		Grass: Short n= 0.150 P2= 2.50"	
	15.9	669	0.0100	0.70		Shallow Concentrated Flow,	
	0.5	000	0.0450	4.00	0.00	Short Grass Pasture Kv= 7.0 fps	
	2.5	638	0.0150	4.23	2.03	Trap/Vee/Rect Channel Flow,	
						Bot.W=2.00' D=0.20' Z= 2.0 '/' Top.W=2.80'	
	2.5	161	0.0210	1.01		n= 0.013 Corrugated PE, smooth interior	
	2.0	154	0.0210	1.01		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps	
		4 504	Tatal				
	36.2	1,561	Total				

Subcatchment 33.1S: 33.1S



# Summary for Subcatchment 33S: Sub 33

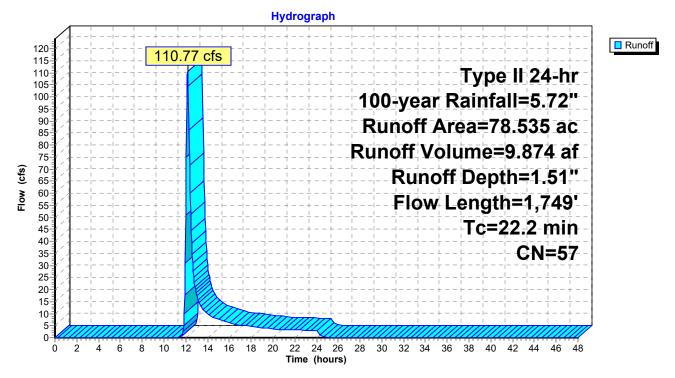
Runoff = 110.77 cfs @ 12.17 hrs, Volume= 9.8 Routed to Link SP34 :

9.874 af, Depth= 1.51"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 100-year Rainfall=5.72"

Area	(ac) C	N Dese	Description				
0.383 48 Brush, Good, HSG B				ISG B			
0.083 96 Gravel surface, HSG D							
0.438 98 Unconnected roofs, HSG I							
45.013 58 Meadow, non-grazed, HS							
			Meadow, non-grazed, HSG C				
0.171 78 Meadow, non-grazed, H							
3.827 61 >75% Grass cover, Good, HSG E					, HSG B		
27.985 55 Woods, Good, HSG B							
0.282 70 Woods, Good, HSG C							
78.535 57 Weighted Average							
	.097		99.44% Pervious Area				
	.438		0.56% Impervious Area				
0.	.438	100.	100.00% Unconnected				
т.	1 4	01	V/-1!+	0	Description		
Tc	Length	Slope	Velocity	Capacity	Description		
<u>(min)</u>	(feet)	<u>(ft/ft)</u>	(ft/sec)	(cfs)			
8.9	100	0.0350	0.19		Sheet Flow,		
<b>5</b> 0	700	0 4 0 4 0	0.00		Grass: Short n= 0.150 P2= 2.50"		
5.8	780	0.1010	2.22		Shallow Concentrated Flow,		
2.0	504	0 4050	2.20		Short Grass Pasture Kv= 7.0 fps		
3.9	531	0.1059	2.28		Shallow Concentrated Flow,		
3.6	338	0.1005	1.59		Short Grass Pasture Kv= 7.0 fps Shallow Concentrated Flow,		
5.0	330	0.1005	1.09		Woodland Kv= 5.0 fps		
	1 740	Total					
22.2	1,749	Total					

## Subcatchment 33S: Sub 33



Depth= 1.90"

# Summary for Subcatchment 34S: Sub 34

[47] Hint: Peak is 1258% of capacity of segment #3

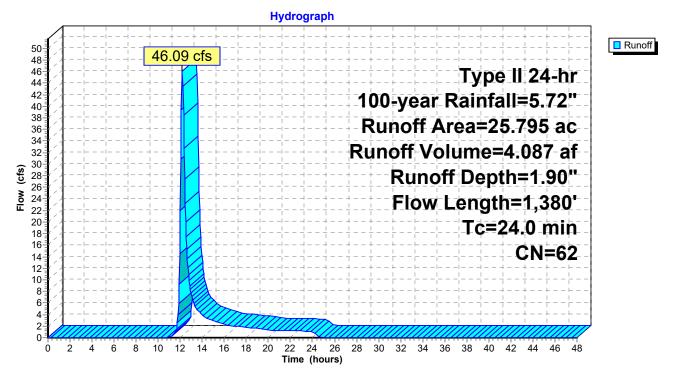
Runoff	=	46.09 cfs @	12.19 hrs, Volume=	4.087 af,		
Routed to Pond 34P : VAN EPPS RD CULVERT						

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 100-year Rainfall=5.72"

	Area	(ac) (	CN Desc	cription			
0.189 48 Brush, Good, HSG B				h, Good, I	HSG B		
0.572 96 Gravel surfa				/el surface	, HSG D		
0.299 98 Unconnected ro				onnected r	oofs, HSG	D	
16.306 58 Meadov				dow, non-	grazed, HS	GB	
3.458 71 Meadow, nor							
3.128 61 >75% Grass cover, Goo							
1.486 74 >75% Grass cover, Good, HSG C				, HSG C			
	0.	357	<u>55 Woo</u>	ds, Good,	HSG B		
	25.	795		ghted Avei			
	25.	496	98.8	98.84% Pervious Area			
	0.299		1.16	1.16% Impervious Area			
	0.299		100.	00% Uncc	nnected		
	_		-				
	Tc	Length	•	Velocity	Capacity	Description	
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)		
	6.8	100	0.0675	0.24		Sheet Flow,	
						Grass: Short n= 0.150 P2= 2.50"	
	15.5	914	0.0198	0.98		Shallow Concentrated Flow,	
						Short Grass Pasture Kv= 7.0 fps	
	0.2	42	0.0119	2.99	3.66		
						15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31'	
	4 5	004	0.0550	0.50		n= 0.025 Corrugated metal	
	1.5	324	0.0552	3.52		Shallow Concentrated Flow,	
						Grassed Waterway Kv= 15.0 fps	
	24.0	1 380	Total				

24.0 1,380 Total

# Subcatchment 34S: Sub 34



#### Summary for Subcatchment 35S: Sub 35

[47] Hint: Peak is 1010% of capacity of segment #6

Runoff = 79.38 cfs @ 12.39 hrs, Volume= Routed to Link SP35 :

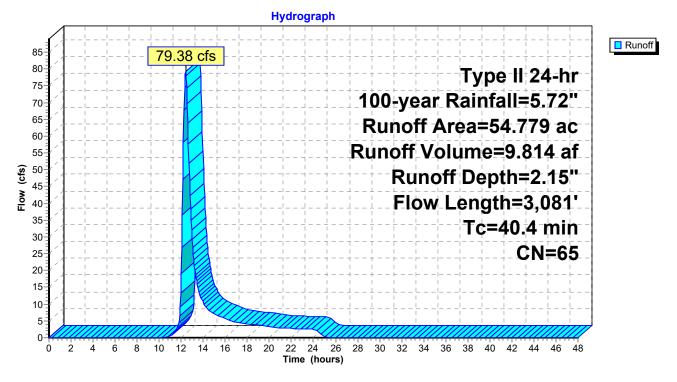
9.814 af, Depth= 2.15"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 100-year Rainfall=5.72"

Area	(ac) C	N Desc	cription						
0.	.105 4	48 Brus	h, Good, H	ISG B					
0.	.087 6	65 Brus	h, Good, H	ISG C					
1.	.101 🖇			oofs, HSG					
				grazed, HS					
			Meadow, non-grazed, HSG C						
-				over, Good,					
				over, Good,	, HSG C				
			ds, Good,						
			ds, Good,						
-			el surface	/					
			ghted Aver						
	.678		9% Pervio						
	.101		% Impervi						
1	.101	100.	00% Unco	nnected					
Тс	Length	Slope	Velocity	Capacity	Description				
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	Decemption				
8.1	100	0.0440	0.21		Sheet Flow,				
••••			•		Grass: Short n= 0.150 P2= 2.50"				
6.6	393	0.0204	1.00		Shallow Concentrated Flow,				
					Short Grass Pasture Kv= 7.0 fps				
12.3	1,170	0.0510	1.58		Shallow Concentrated Flow,				
					Short Grass Pasture Kv= 7.0 fps				
5.3	272	0.0150	0.86		Shallow Concentrated Flow,				
					Short Grass Pasture Kv= 7.0 fps				
5.1	435	0.0410	1.42		Shallow Concentrated Flow,				
					Short Grass Pasture Kv= 7.0 fps				
3.0	711	0.1030	3.93	7.86					
					W=3.00' D=1.00' Area=2.0 sf Perim=3.7'				
					n= 0.080 Earth, long dense weeds				
40.4	0 0 0 4	T							

40.4 3,081 Total

# Subcatchment 35S: Sub 35



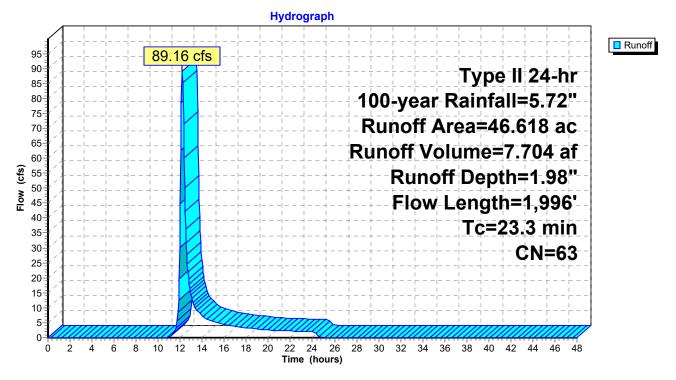
# Summary for Subcatchment 36S: Sub 36

[47] Hint: Peak is 1508% of capacity of segment #3

Runoff = 89.16 cfs @ 12.18 hrs, Volume= 7.704 af, Depth= 1.98" Routed to Link SP36 :

Area	(ac) C	N Dese	cription						
0.	0.319 96 Gravel surface, HSG D								
3.	277 3	58 Mea	Meadow, non-grazed, HSG B						
21.	346	71 Mea	Meadow, non-grazed, HSG C						
21.	<u>676</u> 5	55 Woo	ds, Good,	HSG B					
46.	618 6	63 Weig	ghted Aver	age					
46.	618	100.	00% Pervi	ous Area					
Tc	Length	Slope	Velocity	Capacity	Description				
<u>(min)</u>	(feet)	(ft/ft)	(ft/sec)	(cfs)					
7.4	100	0.0550	0.23		Sheet Flow,				
					Grass: Short n= 0.150 P2= 2.50"				
11.7	1,036	0.0442	1.47		Shallow Concentrated Flow,				
					Short Grass Pasture Kv= 7.0 fps				
4.2	860	0.1400	3.38	5.91	Trap/Vee/Rect Channel Flow,				
					Bot.W=2.00' D=0.50' Z= 3.0 '/' Top.W=5.00'				
					n= 0.080 Earth, long dense weeds				
23.3	1,996	Total							

# Subcatchment 36S: Sub 36

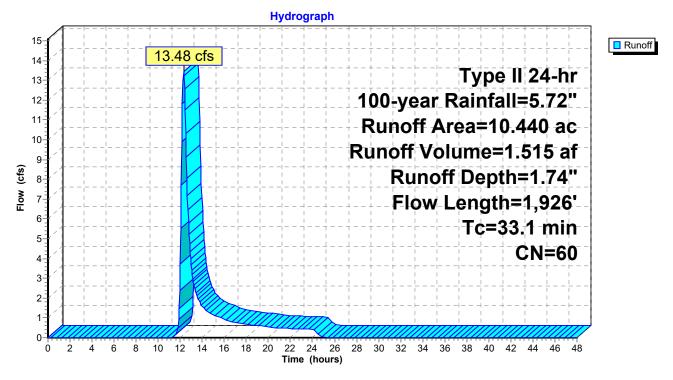


# Summary for Subcatchment 37S: Sub 37

Runoff = 13.48 cfs @ 12.31 hrs, Volume= 1.515 af, Depth= 1.74" Routed to Link SP37 :

	Area (ac) CN			Description						
	8.	161 ៖			grazed, HS	G B				
1.673 55 Woods, Good, HSG B										
*	0.	606 9	98 Impe	ervious						
	10.	440 6	60 Weig	phted Aver	age					
	9.	834	94.2	94.20% Pervious Area						
	0.	606	5.80	5.80% Impervious Area						
	Тс	Length	Slope	Velocity	Capacity	Description				
	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	· · · · · · · · · · · · · · · · · · ·				
	19.3	100	0.0050	0.09		Sheet Flow,				
						Grass: Short n= 0.150 P2= 2.50"				
	10.6	1,005	0.0507	1.58		Shallow Concentrated Flow,				
						Short Grass Pasture Kv= 7.0 fps				
	1.0	90	0.0889	1.49		Shallow Concentrated Flow,				
						Woodland Kv= 5.0 fps				
	2.2	731	0.0570	5.59	20.95	Trap/Vee/Rect Channel Flow,				
						Bot.W=6.00' D=0.50' Z= 3.0 '/' Top.W=9.00'				
_						n= 0.035 Earth, dense weeds				
	33.1	1,926	Total							

Subcatchment 37S: Sub 37

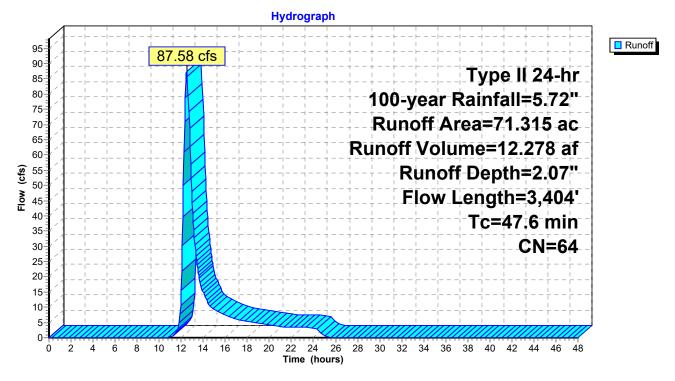


# Summary for Subcatchment 38S: Sub 38

Runoff = 87.58 cfs @ 12.49 hrs, Volume= 12.278 af, Depth= 2.07" Routed to Link SP38 :

Area	(ac)	CN De	scription							
0.	.437	96 Gra	6 Gravel surface, HSG D							
0.	.789	98 Un	Unconnected roofs, HSG D							
29.	.694	58 Me	adow, non-	grazed, HS	IG B					
36.	36.187 71 Meadow, non-grazed, HSG C									
3.	.907	30 Wo	ods, Good,	HSG A						
0.	.301	55 Wo	ods, Good,	HSG B						
71	.315	64 We	ighted Ave	rage						
70.	.526	98.	89% Pervic	us Area						
0.	.789	1.1	1% Impervi	ous Area						
0.789 100.00% Unconnected										
_										
Tc	Length		,	Capacity	Description					
(min)	(feet	· · · · ·		(cfs)						
7.7	100	0.0500	0.22		Sheet Flow,					
					Grass: Short n= 0.150 P2= 2.50"					
11.9	739	0.0220	1.04		Shallow Concentrated Flow,					
					Short Grass Pasture Kv= 7.0 fps					
6.6	753	0.0744	1.91		Shallow Concentrated Flow,					
					Short Grass Pasture Kv= 7.0 fps					
21.4	1,812	0.0800	1.41		Shallow Concentrated Flow,					
					Woodland Kv= 5.0 fps					
47.6	3,404	Total								

## Subcatchment 38S: Sub 38

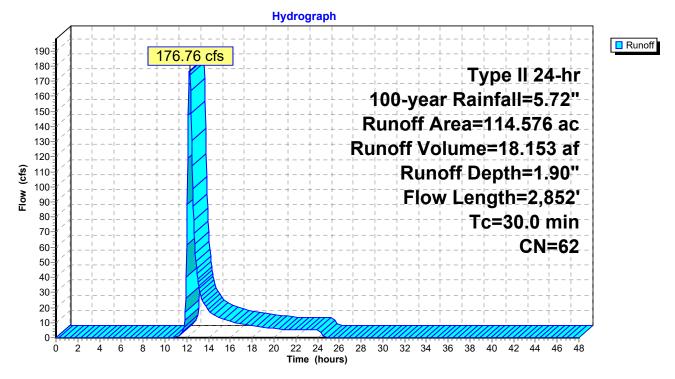


# Summary for Subcatchment 39S: Sub 39

Runoff = 176.76 cfs @ 12.27 hrs, Volume= 18.153 af, Depth= 1.90" Routed to Link SP39 :

Area	(ac) (	CN Des	cription						
2.	2.544 96 Gravel surface, HSG D								
0.	0.425 98 Unconnected roofs, HSG D								
71.	71.899 58 Meadow, non-grazed, HSG B								
22.	397			grazed, HS					
		78 Mea	dow, non-g	grazed, HS	G D				
0.	132	98 Wat	er Surface	, HSG D					
			ods, Good,						
			ods, Good,						
0.	079	77 Woo	ods, Good,	HSG D					
114.	114.576 62 Weighted Average								
114.	019	99.5	1% Pervio	us Area					
	557		% Impervi						
0.	425	76.3	0% Uncon	nected					
_				_					
Tc	Length		Velocity	Capacity	Description				
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)					
7.1	100	0.0600	0.23		Sheet Flow,				
					Grass: Short n= 0.150 P2= 2.50"				
17.7	2,151	0.0840	2.03		Shallow Concentrated Flow,				
					Short Grass Pasture Kv= 7.0 fps				
5.2	601	0.1490	1.93		Shallow Concentrated Flow,				
					Woodland Kv= 5.0 fps				
30.0	2,852	Total							

## Subcatchment 39S: Sub 39

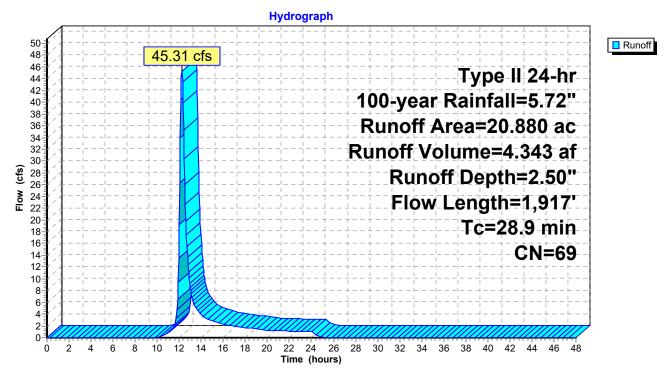


# Summary for Subcatchment 40S: Sub 40

Runoff = 45.31 cfs @ 12.24 hrs, Volume= 4.343 af, Depth= 2.50" Routed to Reach 39R :

Area	(ac) C	N Dese	cription							
0	.016	65 Brus	5 Brush, Good, HSG C							
0.	.235	,								
0.	0.018 98 Unconnected roofs, HSG D									
-				grazed, HS						
	10.584 71 Meadow, non-grazed, HSG C									
0.	.095			grazed, HS						
				over, Good	, HSG B					
			er Surface							
			ds, Good,							
			ds, Good,							
-			ghted Aver							
	.222		6% Pervio							
	.658		% Impervi							
0.	.018	1.09	% Unconn	ected						
т.	1	0	17.1.14.1	0						
Tc	Length	Slope	Velocity	Capacity	Description					
<u>(min)</u>	(feet)	(ft/ft)	(ft/sec)	(cfs)						
7.3	100	0.0575	0.23		Sheet Flow,					
	050	0 4000	0.04		Grass: Short n= 0.150 P2= 2.50"					
2.6	358	0.1089	2.31		Shallow Concentrated Flow,					
0.4	20	0 4 4 4 0	4.07		Short Grass Pasture Kv= 7.0 fps					
0.4	38	0.1118	1.67		Shallow Concentrated Flow,					
9.8	1 1 1 0	0 0722	1 00		Woodland Kv= 5.0 fps					
9.0	1,118	0.0733	1.90		Shallow Concentrated Flow,					
8.8	303	0.0132	0.57		Short Grass Pasture Kv= 7.0 fps Shallow Concentrated Flow,					
0.0	505	0.0152	0.57		Woodland Kv= 5.0 fps					
20 0	1 017	Total								
28.9	1,917	Total								

## Subcatchment 40S: Sub 40

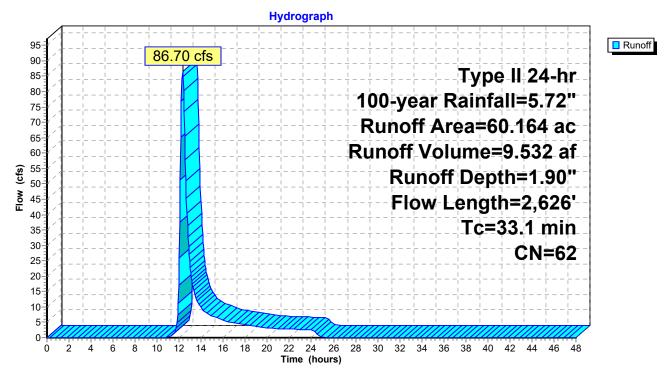


# Summary for Subcatchment 41S: Sub 41

Runoff = 86.70 cfs @ 12.30 hrs, Volume= 9.532 af, Depth= 1.90" Routed to Link SP41 :

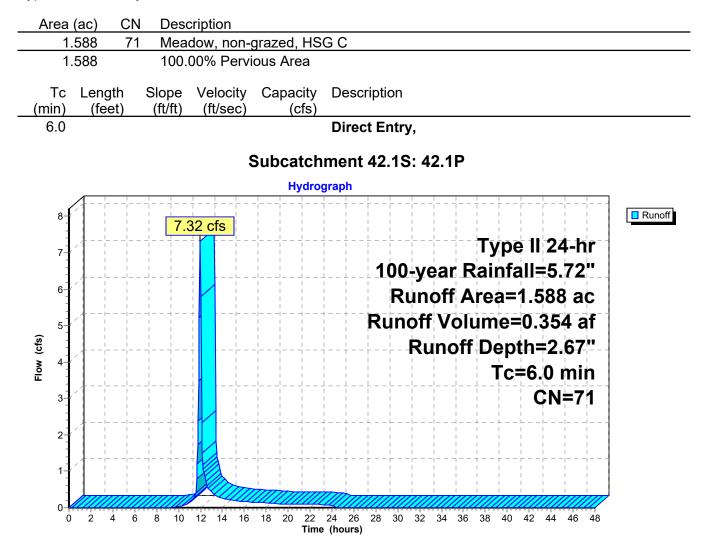
Area	(ac) C	N Dese	Description							
21.	21.630 58 Meadow, non-grazed, HSG B									
8.	8.822 71 Meadow, non-grazed, HSG C									
2.	2.302 78 Meadow, non-grazed, HSG D									
17.	.906 5	55 Woo	ds, Good,	HSG B						
9.	.226 7	70 Woo	ds, Good,	HSG C						
0.	.278 9	96 Grav	el surface/	, HSG D						
60.	.164 6		ghted Aver							
60.	.164	100.	00% Pervi	ous Area						
Tc	Length	Slope	Velocity	Capacity	Description					
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)						
13.4	100	0.0125	0.12		Sheet Flow,					
					Grass: Short n= 0.150 P2= 2.50"					
5.0	585	0.0765	1.94		Shallow Concentrated Flow,					
					Short Grass Pasture Kv= 7.0 fps					
7.8	652	0.0395	1.39		Shallow Concentrated Flow,					
					Short Grass Pasture Kv= 7.0 fps					
6.9	1,289	0.0436	3.13		Shallow Concentrated Flow,					
					Grassed Waterway Kv= 15.0 fps					
33.1	2,626	Total								

Subcatchment 41S: Sub 41



#### Summary for Subcatchment 42.1S: 42.1P

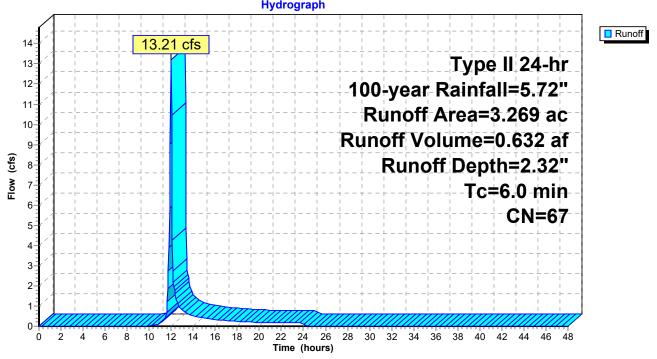
Runoff = 7.32 cfs @ 11.97 hrs, Volume= 0.354 af, Depth= 2.67" Routed to Pond 42P : 42P



# Summary for Subcatchment 42.2S: 42.2P

Runoff = 13.21 cfs @ 11.98 hrs, Volume= 0.632 af, Depth= 2.32" Routed to Pond 42P : 42P

Area	(ac)	CN	Desc	Description								
0.	922	58	Mea	Meadow, non-grazed, HSG B								
2.	2.347 71 Meadow, non-grazed, HSG C											
3.	269	67	Weig	hted Aver	age							
3.	3.269 100.00% Pervious Area											
Tc (min)												
6.0		Direct Entry,										
	Subcatchment 42.2S: 42.2P											

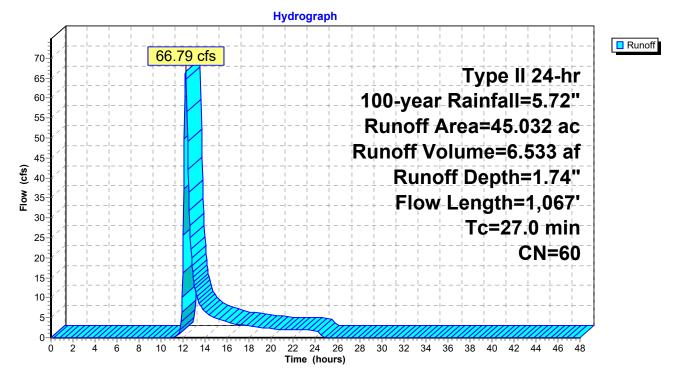


# Summary for Subcatchment 42S: Sub 42

Runoff = 66.79 cfs @ 12.23 hrs, Volume= 6.533 af, Depth= 1.74" Routed to Link SP42 :

Area	(ac) C	N Desc	cription					
8.	572 5	58 Mea	dow, non-g	grazed, HS	GB			
11.	283 7	71 Mea	Meadow, non-grazed, HSG C					
23.	485 5	55 Woo	ds, Good,	HSG B				
1.			ds, Good,					
0.	<u>499 9</u>	96 Grav	el surface	, HSG D				
45.	032 6	60 Weig	ghted Aver	age				
45.	032	100.	00% Pervi	ous Area				
_								
Tc	Length	Slope	Velocity	Capacity	Description			
<u>(min)</u>	(feet)	(ft/ft)	(ft/sec)	(cfs)				
13.4	100	0.0125	0.12		Sheet Flow,			
					Grass: Short n= 0.150 P2= 2.50"			
2.0	140	0.0270	1.15		Shallow Concentrated Flow,			
~ <del>-</del>	0.50				Short Grass Pasture Kv= 7.0 fps			
6.7	252	0.0080	0.63		Shallow Concentrated Flow,			
	400				Short Grass Pasture Kv= 7.0 fps			
1.4	103	0.0290	1.19		Shallow Concentrated Flow,			
0.5	470	0 0000	0.04		Short Grass Pasture Kv= 7.0 fps			
3.5	472	0.2000	2.24		Shallow Concentrated Flow,			
					Woodland Kv= 5.0 fps			
27.0	1,067	Total						

# Subcatchment 42S: Sub 42



#### Summary for Subcatchment 48S: Sub 48

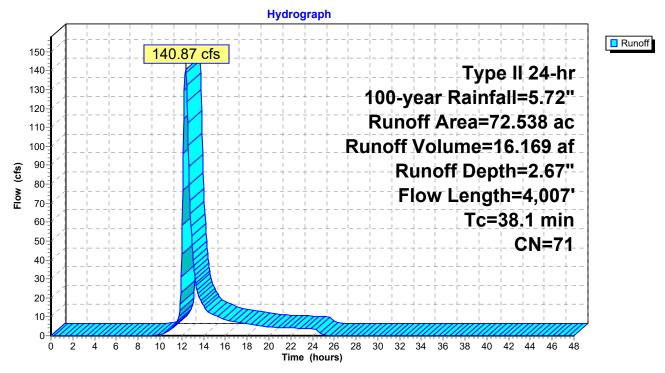
[47] Hint: Peak is 730% of capacity of segment #3

Runoff = 140.87 cfs @ 12.35 hrs, Volume= Routed to Link SP48 :

16.169 af, Depth= 2.67"

	Area	(ac)	CN	Desc	ription								
		557	48		Brush, Good, HSG B								
		091	65		Brush, Good, HSG C								
		459	73		rush, Good, HSG D								
*	0.	649	96	Grav	el surface								
*	1.	258	98	Impe	rvious Ro	of and Pave	ement						
	2.	103	58	Mea	dow, non-g	grazed, HS	G B						
	26.	750	71	Mea	dow, non-g	grazed, HS	GC						
	13.	236	78			grazed, HS							
		333	61			over, Good,							
		615	74			over, Good,							
		563	80			over, Good,	, HSG D						
0.543 98 Water Surface, HSG D													
0.355 55 Woods, Good, HSG B													
	-	418	70 77		ds, Good,								
		<u>608</u>			ds, Good,								
		538 737	71		hted Aver								
	-	801		97.52% Pervious Area 2.48% Impervious Area									
	1.	001		2.40		JUS AIEa							
	Тс	Lengt	n :	Slope	Velocity	Capacity	Description						
(	min)	(feet		(ft/ft)	(ft/sec)	(cfs)							
	7.0	10	) 0	.0625	0.24		Sheet Flow,						
							Grass: Short n= 0.150 P2= 2.50"						
	22.2	1,93	5 0	.0430	1.45		Shallow Concentrated Flow,						
		•					Short Grass Pasture Kv= 7.0 fps						
	8.9	1,972	2 0	.0230	3.68	19.31	Trap/Vee/Rect Channel Flow,						
							Bot.W=9.00' D=0.50' Z= 3.0 '/' Top.W=12.00'						
							n= 0.035 Earth, dense weeds						
	38.1	4,00	7 T	otal									





#### Summary for Subcatchment 49.1S: Sub 49.1

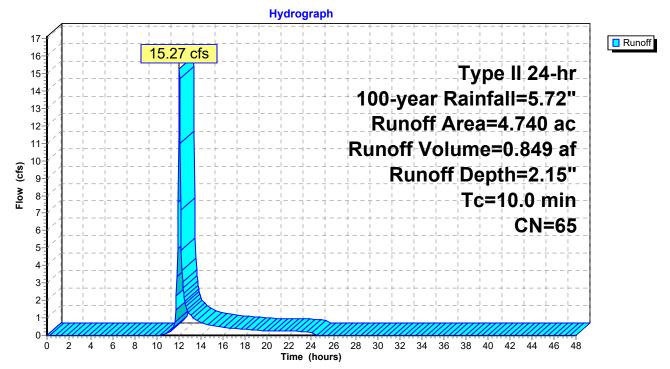
Runoff = 15.27 cfs @ 12.02 hrs, Volume= Routed to Pond 49.1P : 49.1P

0.849 af, Depth= 2.15"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 100-year Rainfall=5.72"

	Area (a	ac)	CN	Desc	cription					
	0.9	971	, , , = =							
1.992 58 Meadow, non-grazed, HSG B							SG B			
*	0.3	322	98	Impe	ervious					
	0.1	57	70	Woo	ds, Good,	HSG C				
	0.0	)95	65	Brus	h, Good, H	ISG C				
	0.1	71	48	Brus	h, Good, H	ISG B				
	0.8	353	61	>75%	6 Grass co	over, Good	d, HSG B			
	0.0	)79	74	>75%	6 Grass co	over, Good	d, HSG C			
*	0.1	00	96	Grav	el					
	4.7	740	65	Weig	hted Aver	age				
	4.4	18		93.2	, 1% Pervio	us Area				
	0.3	322		6.79	% Impervie	ous Area				
	Тс	Lengt	h :	Slope	Velocity	Capacity	Description			
_	(min)	(fee	t)	(ft/ft)	(ft/sec)	(cfs)				
	10.0						Direct Entry,			

# Subcatchment 49.1S: Sub 49.1

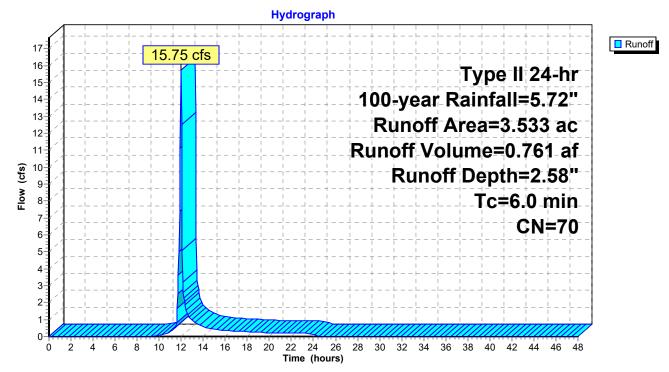


#### Summary for Subcatchment 49.2S: 49.2S

Runoff = 15.75 cfs @ 11.97 hrs, Volume= Routed to Pond 49.2P : 49.2S 0.761 af, Depth= 2.58"

	Area	(ac)	CN	Desc	Description								
	0.	083	61	>75%	>75% Grass cover, Good, HSG B								
	0.	181	58	Mea	Meadow, non-grazed, HSG B								
	3.	264	71	Mea	dow, non-g	grazed, HS	SG C						
*	0.	005	98	Impe	ervious roo	f							
	3.	533 70 Weighted Average											
	3.	528		99.8	6% Pervio	us Area							
	0.	005		0.14	% Impervio	ous Area							
	Тс	Leng	th	Slope	Velocity	Capacity	Description						
_	(min)	(fee	et)	(ft/ft)	(ft/sec)	(cfs)							
	6.0						Direct Entry,						



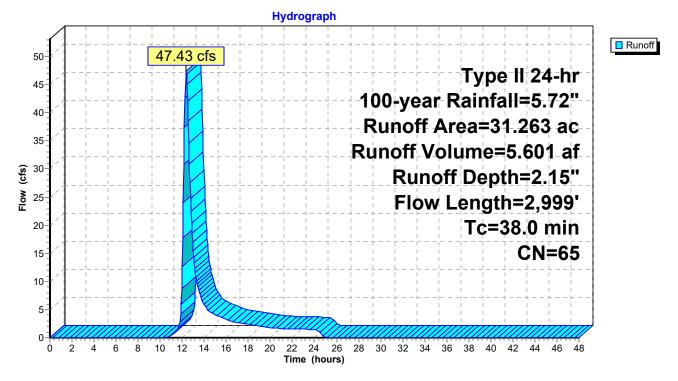


# Summary for Subcatchment 49S: Sub 49

Runoff = 47.43 cfs @ 12.36 hrs, Volume= Routed to Reach 42R : S-NSD-16 5.601 af, Depth= 2.15"

	Area	(ac) C	N Des	cription		
				sh, Good, H		
				sh, Good, H		
				sh, Good, H		
_				el surface	, HSG D	
*				ervious		
					grazed, HS	
					grazed, HS	
					grazed, HS	
					over, Good	·
				% Grass co er Surface	over, Good	, HSG C
				ds, Good,	,	
				ds, Good, ds, Good,		
				ds, Good, ds, Good,		
31.263 65 Weighted Average						
31.069 99.38% Pervious Area						
		194		% Impervi		
				•		
	Тс	Length	Slope	Velocity	Capacity	Description
	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
	7.1	100	0.0610	0.23		Sheet Flow,
						Grass: Short n= 0.150 P2= 2.50"
	1.5	240	0.1520	2.73		Shallow Concentrated Flow,
			o 400 <del>7</del>	0 -0		Short Grass Pasture Kv= 7.0 fps
	3.4	534	0.1367	2.59		Shallow Concentrated Flow,
	1 0	100	0.0500	4 57		Short Grass Pasture Kv= 7.0 fps
	1.8	168	0.0506	1.57		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
	8.2	561	0.0267	1.14		Shallow Concentrated Flow,
	0.2	501	0.0207	1.14		Short Grass Pasture Kv= 7.0 fps
	16.0	1,396	0.0434	1.46		Shallow Concentrated Flow,
		.,000	0.0101			Short Grass Pasture Kv= 7.0 fps
	38.0	2,999	Total			· .
		_,				

# Subcatchment 49S: Sub 49

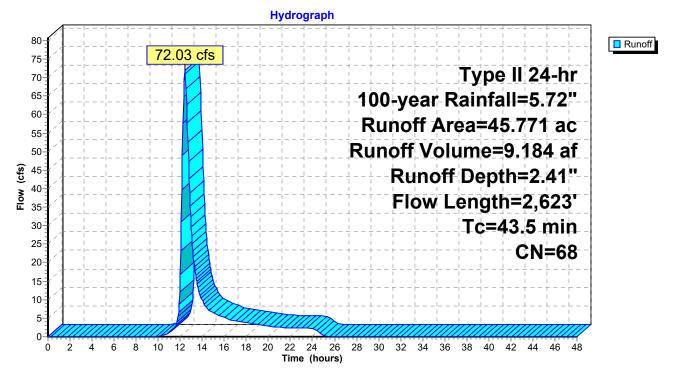


### Summary for Subcatchment 50S: Sub 50

[47] Hint: Peak is 1263% of capacity of segment #5

Runoff = 72.03 cfs @ 12.42 hrs, Volume= Routed to Link SP50 : 9.184 af, Depth= 2.41"





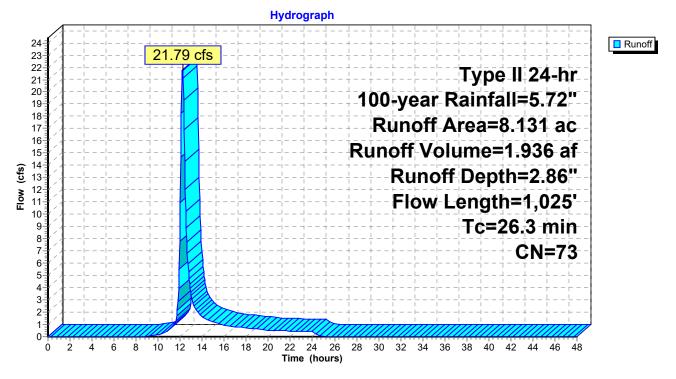
# Summary for Subcatchment 51.1S: 51.1S

Runoff = 21.79 cfs @ 12.20 hrs, Volume= 1.93 Routed to Pond 51.1P : 51.1P

1.936 af, Depth= 2.86"

Area	(ac) C	N Dese	cription				
5.	5.714 71 Meadow, non-grazed, HSG C						
0.046 70 Woods, Good, HSG C							
0.	0.397 74 >75% Grass cover, Good, HSG C						
0.	0.096 65 Brush, Good, HSG C						
			h, Good, H				
1.	769	78 Mea	dow, non-	grazed, HS	G D		
8.	131	73 Weig	ghted Aver	age			
8.	8.131 100.00% Pervious Area						
Тс	Length	Slope	Velocity	Capacity	Description		
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)			
16.9	100	0.0070	0.10		Sheet Flow,		
					Grass: Short		
5.4	334	0.0220	1.04		Shallow Concentrated Flow,		
					Short Grass Pasture Kv= 7.0 fps		
4.0	591	0.1250	2.47		Shallow Concentrated Flow,		
					Short Grass Pasture Kv= 7.0 fps		
26.3	1,025	Total					

# Subcatchment 51.1S: 51.1S



## Summary for Subcatchment 51S: Sub 51

- [47] Hint: Peak is 840% of capacity of segment #6 [47] Hint: Peak is 840% of capacity of segment #8
- Runoff = 130.61 cfs @ 12.41 hrs, Volume= Routed to Link SP51 :

16.451 af, Depth= 2.07"

Area (ac)	CN	Description			
0.877	48	Brush, Good, HSG B			
0.779	65	Brush, Good, HSG C			
0.113	73	Brush, Good, HSG D			
2.071	96	Gravel surface, HSG D			
0.729	98	Unconnected roofs, HSG D			
48.224	58	Meadow, non-grazed, HSG B			
33.849	71	Meadow, non-grazed, HSG C			
0.806	78	Meadow, non-grazed, HSG D			
2.719	61	>75% Grass cover, Good, HSG B			
0.732	74	>75% Grass cover, Good, HSG C			
1.610	55	Woods, Good, HSG B			
2.912	70	Woods, Good, HSG C			
0.135	77	Woods, Good, HSG D			
95.556	64	Weighted Average			
94.827		99.24% Pervious Area			
0.729		0.76% Impervious Area			
0.729		100.00% Unconnected			

#### Mill Pt Post 2

Type II 24-hr 100-year Rainfall=5.72" Printed 7/19/2024

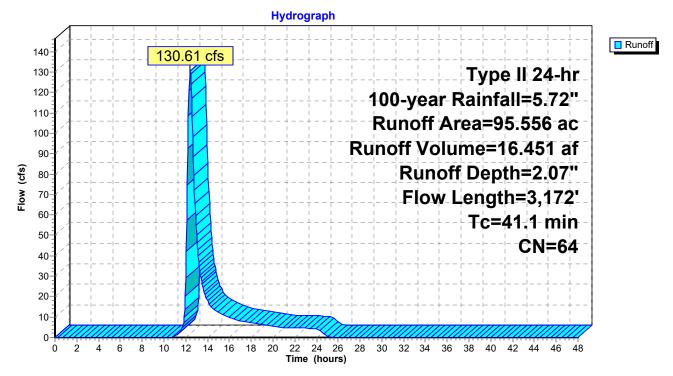
Page 327

Prepared by TRC Companies HydroCAD® 10.20-5a s/n 01402 © 2023 HydroCAD Software Solutions LLC

	Tc	Length	Slope	Velocity	• • • •	Description
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
	6.7	100	0.0700	0.25		Sheet Flow,
						Grass: Short n= 0.150 P2= 2.50"
	0.7	108	0.1300	2.52		Shallow Concentrated Flow,
						Short Grass Pasture Kv= 7.0 fps
	8.4	513	0.0210	1.01		Shallow Concentrated Flow,
						Short Grass Pasture Kv= 7.0 fps
	9.3	1,142	0.0860	2.05		Shallow Concentrated Flow,
						Short Grass Pasture Kv= 7.0 fps
	6.0	543	0.0460	1.50		Shallow Concentrated Flow,
						Short Grass Pasture Kv= 7.0 fps
	0.0	34	0.0580	12.68	15.56	Pipe Channel,
						15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31'
						n= 0.013 Corrugated PE, smooth interior
	2.4	162	0.0250	1.11		Shallow Concentrated Flow,
						Short Grass Pasture Kv= 7.0 fps
	0.0	34	0.0580	12.68	15.56	Pipe Channel,
						15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31'
						n= 0.013 Corrugated PE, smooth interior
	5.3	392	0.0310	1.23		Shallow Concentrated Flow,
						Short Grass Pasture Kv= 7.0 fps
	2.3	144	0.0420	1.02		Shallow Concentrated Flow,
						Woodland $Kv = 5.0 \text{ fps}$
_		0.470	<b>T</b> ( )			•

41.1 3,172 Total

# Subcatchment 51S: Sub 51



## Summary for Subcatchment 52.1S: 52.1S

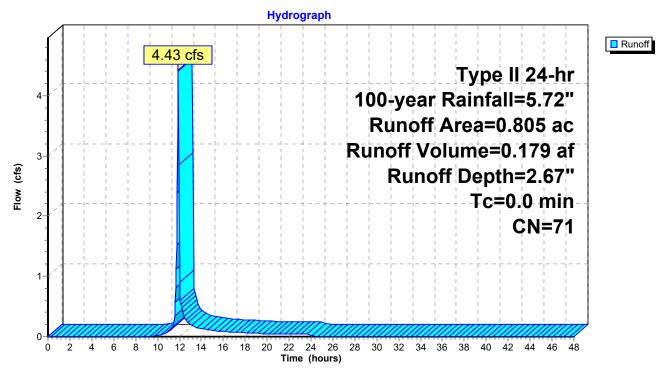
[46] Hint: Tc=0 (Instant runoff peak depends on dt)

Runoff = 4.43 cfs @ 11.89 hrs, Volume= 0.179 af, Depth= 2.67" Routed to Pond 52.1P : 52.1P

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 100-year Rainfall=5.72"

_	Area (ac)	CN	Description
	0.805	71	Meadow, non-grazed, HSG C
	0.805		100.00% Pervious Area

#### Subcatchment 52.1S: 52.1S

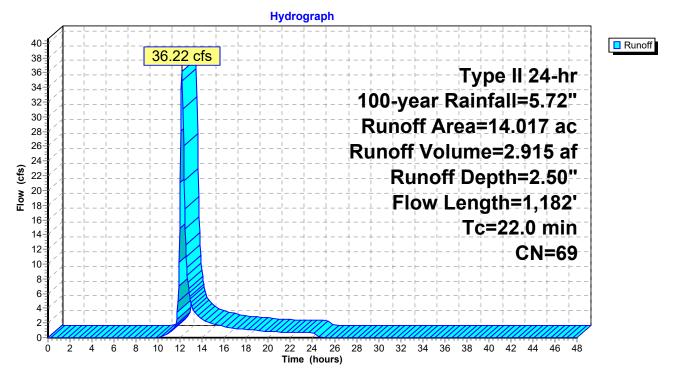


# Summary for Subcatchment 52S: Sub 52

Runoff = 36.22 cfs @ 12.16 hrs, Volume= 2.915 af, Depth= 2.50" Routed to Link SP52 :

	Area	(ac) (	CN Des	Description					
0.561 48 Brush, Good, HSG B									
0.166 73 Brush, Good, HSG D									
1.696 58 Meadow, non-grazed, HSG B									
9.328 71 Meadow, non-grazed, HSG C									
	0.	646	78 Mea	adow, non-	grazed, HS	G D			
	0.	413	98 Wa	ter Surface	, HSG D				
	0.	321	55 Wo	ods, Good,	HSG B				
	0.	736	70 Wo	ods, Good,	HSG C				
	0.	150	96 Gra	vel surface	, HSG D				
14.017 69 Weighted Average									
	13.	604	97.0	)5% Pervio	us Area				
0.413 2.95% Impervious Area					ous Area				
	Тс	Length	Slope	Velocity	Capacity	Description			
	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)				
	11.1	100	0.0200	0.15		Sheet Flow,			
						Grass: Short n= 0.150 P2= 2.50"			
	8.1	993	0.0850	2.04		Shallow Concentrated Flow,			
						Short Grass Pasture Kv= 7.0 fps			
	2.8	89	0.0112	0.53		Shallow Concentrated Flow,			
						Woodland Kv= 5.0 fps			
	22.0	1,182	Total						

# Subcatchment 52S: Sub 52



### Summary for Subcatchment 53S: Sub 53

[47] Hint: Peak is 215% of capacity of segment #5

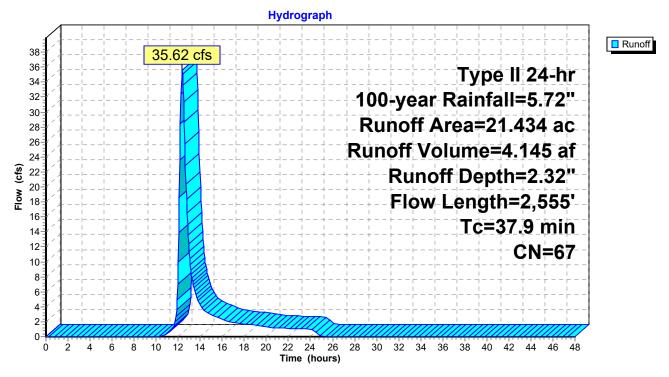
Runoff = 35.62 cfs @ 12.36 hrs, Volume= Routed to Link SP53 : 4.145 af, Depth= 2.32"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 100-year Rainfall=5.72"

_	Area	(ac) C	N Desc	cription						
	1.	579 4	8 Brus	h, Good, H	ISG B					
0.985 65 Brush, Good, HSG C										
	4.	027 5	58 Mea	adow, non-grazed, HSG B						
	13.	862 7	'1 Mea	Meadow, non-grazed, HSG C						
	0.	386 9	98 Wate	Water Surface, HSG D						
	0.	250 7		ds, Good,						
_	0.	<u>345 9</u>	<u>6 Grav</u>	el surface	, HSG D					
	21.	434 6	67 Weig	phted Aver	age					
		048	98.2	0% Pervio	us Area					
	0.	386	1.80	% Impervi	ous Area					
	_		-							
	ŢĊ	Length	Slope	Velocity	Capacity	Description				
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)					
	14.6	100	0.0100	0.11		Sheet Flow,				
		- ·				Grass: Short n= 0.150 P2= 2.50"				
	2.4	347	0.1210	2.43		Shallow Concentrated Flow,				
		4 - 4	0 4050			Short Grass Pasture Kv= 7.0 fps				
	0.9	151	0.1656	2.85		Shallow Concentrated Flow,				
	40.0	4 544	0 00 47	4 00		Short Grass Pasture Kv= 7.0 fps				
	19.3	1,511	0.0347	1.30		Shallow Concentrated Flow,				
	0.7	116	0.2600	11.00	16 52	Short Grass Pasture Kv= 7.0 fps				
	0.7	446	0.2690	11.02	16.53					
						Bot.W=2.00' D=0.50' Z= 2.0 '/' Top.W=4.00' n= 0.035 Earth, dense weeds				
-	27.0	2 5 5 5	Total							

37.9 2,555 Total





#### Summary for Subcatchment 54S: Sub 54

[47] Hint: Peak is 1075% of capacity of segment #7

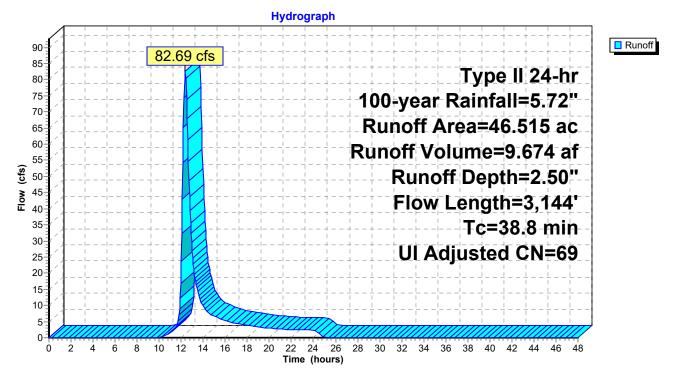
Runoff = 82.69 cfs @ 12.36 hrs, Volume= Routed to Link SP54 : 9.674 af, Depth= 2.50"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 100-year Rainfall=5.72"

Area	(ac) C	N Adj	Descrip	tion						
2	.193 4	18	Brush, (							
4	.806 6	6 65 Brush, Good, HSG C 6 98 Unconnected roofs, HSG D								
2	.566 9	98	Unconn	Inconnected roofs, HSG D						
5	.345 5	58	Meadov	v, non-graz	ed, HSG B					
22	.843 7	71	Meadov	v, non-graz	ed, HSG C					
2	.315 6	61	>75% G	Grass cover	, Good, HSG B					
5	.037 7	74	>75% G	Grass cover	, Good, HSG C					
1	.056 9	98	Water S	Surface, HS	IG D					
		55	Woods,	Good, HS0	GB					
		96		surface, HS						
0	<u>.034 7</u>	70	Woods,	Good, HSC	GC					
46	.515 7	70 69	Weighte	ed Average	, UI Adjusted					
42	.893		92.21%	Pervious A	Area					
3	.622		7.79% l	7.79% Impervious Area						
2	2.566			70.84% Unconnected						
Tc	Length	Slope	Velocity	Capacity	Description					
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)						
7.7	100	0.0500	0.22		Sheet Flow,					
					Grass: Short n= 0.150 P2= 2.50"					
4.0	375	0.0490	1.55		Shallow Concentrated Flow,					
					Short Grass Pasture Kv= 7.0 fps					
8.0	100	0.0450	0.21		Sheet Flow,					
					Grass: Short n= 0.150 P2= 2.50"					
3.0	498	0.0350	2.81		Shallow Concentrated Flow,					
					Grassed Waterway Kv= 15.0 fps					
2.8	166	0.0390	0.99		Shallow Concentrated Flow,					
					Woodland Kv= 5.0 fps					
1.9	321	0.0312	2.84		Shallow Concentrated Flow,					
					Unpaved Kv= 16.1 fps					
11.4	1,584	0.0230	2.31	7.69						
					W=5.00' D=1.00' Area=3.3 sf Perim=5.5'					
					n= 0.070 Sluggish weedy reaches w/pools					
38 S	3 144	Total								

38.8 3,144 Total

# Subcatchment 54S: Sub 54



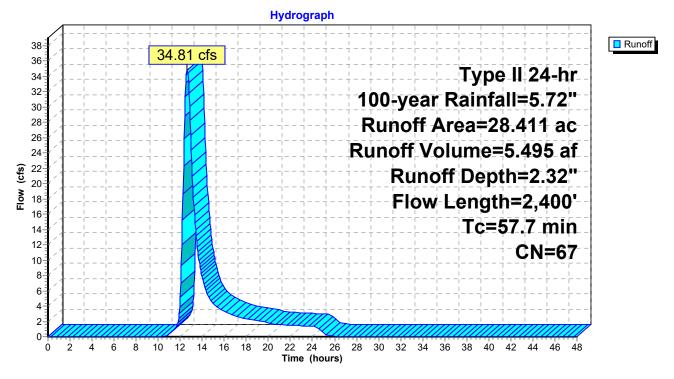
# Summary for Subcatchment 55S: Sub 55

Runoff = 34.81 cfs @ 12.62 hrs, Volume= 5.495 af, Depth= 2.32" Routed to Link SP55 :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 100-year Rainfall=5.72"

Area	(ac) C	N Desc	cription						
0.	418 4	18 Brus	h, Good, H	ISG B					
0.	0.321 65 Brush, Good, HSG C								
0.	0.278 98 Unconnected roofs, HSG D								
				grazed, HS					
				grazed, HS	GC				
			ds, Good,						
			ds, Good,						
			el surface						
			ghted Aver						
	133		2% Pervio						
	278		% Impervi						
0.	278	100.	00% Unco	nnected					
-				<b>A 1</b>					
Tc	Length	Slope	Velocity	Capacity	Description				
(min)	(feet)	<u>(ft/ft)</u>	(ft/sec)	(cfs)					
13.2	100	0.0130	0.13		Sheet Flow,				
3.0	330	0.0690	1.84		Grass: Short n= 0.150 P2= 2.50"				
3.0	330	0.0690	1.04		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps				
9.4	778	0.0390	1.38		Shallow Concentrated Flow,				
3.4	110	0.0000	1.00		Short Grass Pasture Kv= 7.0 fps				
13.0	689	0.0160	0.89		Shallow Concentrated Flow,				
10.0	000	0.0100	0.00		Short Grass Pasture Kv= 7.0 fps				
4.0	278	0.0280	1.17		Shallow Concentrated Flow,				
-	-				Short Grass Pasture Kv= 7.0 fps				
9.0	20	0.0100	0.04		Sheet Flow,				
					Grass: Bermuda n= 0.410 P2= 2.50"				
4.9	80	0.1000	0.27		Sheet Flow,				
					Grass: Short n= 0.150 P2= 2.50"				
1.2	125	0.0640	1.77		Shallow Concentrated Flow,				
					Short Grass Pasture Kv= 7.0 fps				
57.7	2,400	Total							

# Subcatchment 55S: Sub 55



#### Summary for Subcatchment 56.1S: 56.1S

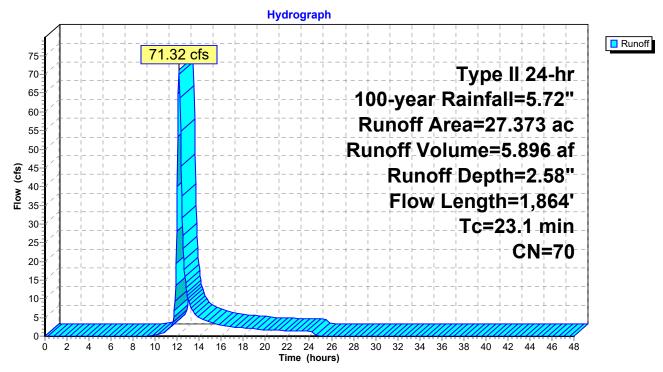
Runoff = 71.32 cfs @ 12.17 hrs, Volume= Routed to Pond 56.1P : 56.1P 5.896 af, Depth= 2.58"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 100-year Rainfall=5.72"

	Area	(ac) C	N Dese	cription						
	-	169 5	58 Mea	dow, non-g	grazed, HS	G B				
*	0.	806 9	96 Grav	/el						
_	23.	398 7	'1 Mea	dow, non-g	grazed, HS	GC				
	27.373 70 Weighted Average									
	27.	373	100.	00% Pervi	ous Area					
	Tc	Length	Slope	Velocity	Capacity	Description				
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)					
	9.4	100	0.0300	0.18		Sheet Flow,				
						Grass: Short n= 0.150 P2= 2.50"				
	7.7	1,108	0.1160	2.38		Shallow Concentrated Flow,				
						Short Grass Pasture Kv= 7.0 fps				
	6.0	656	0.0670	1.81		Shallow Concentrated Flow,				
_						Short Grass Pasture Kv= 7.0 fps				
	00.4	1 0 0 1	Tatal							

23.1 1,864 Total

#### Subcatchment 56.1S: 56.1S



# Summary for Subcatchment 56S: Sub 56

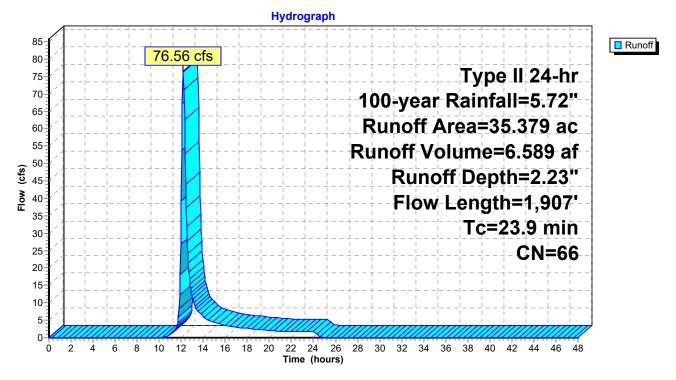
Runoff = 76.56 cfs @ 12.18 hrs, Volume= Routed to Link SP56 :

6.589 af, Depth= 2.23"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type II 24-hr 100-year Rainfall=5.72"

Area	(ac) C	N Desc	cription					
			h, Good, F					
1.	1.460 65 Brush, Good, HSG C							
10.	196 5	68 Mea	dow, non-g	grazed, HS	G B			
15.	876 7	'1 Mea	dow, non-g	grazed, HS	GC			
1.	244 5		ds, Good,					
5.	708 7	<u>'0 Woo</u>	ds, Good,	HSG C				
35.	379 6	6 Weig	ghted Aver	age				
35.	379	100.	00% Pervi	ous Area				
Тс	Length	Slope	Velocity	Capacity	Description			
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)				
8.2	100	0.0430	0.20		Sheet Flow,			
					Grass: Short n= 0.150 P2= 2.50"			
1.6	139	0.0430	1.45		Shallow Concentrated Flow,			
					Short Grass Pasture Kv= 7.0 fps			
2.7	369	0.1030	2.25		Shallow Concentrated Flow,			
					Short Grass Pasture Kv= 7.0 fps			
4.4	533	0.0820	2.00		Shallow Concentrated Flow,			
					Short Grass Pasture Kv= 7.0 fps			
0.9	206	0.2900	3.77		Shallow Concentrated Flow,			
					Short Grass Pasture Kv= 7.0 fps			
4.6	468	0.0580	1.69		Shallow Concentrated Flow,			
					Short Grass Pasture Kv= 7.0 fps			
1.5	92	0.0220	1.04		Shallow Concentrated Flow,			
					Short Grass Pasture Kv= 7.0 fps			
23.9	1,907	Total						

# Subcatchment 56S: Sub 56



# Summary for Reach 33R:

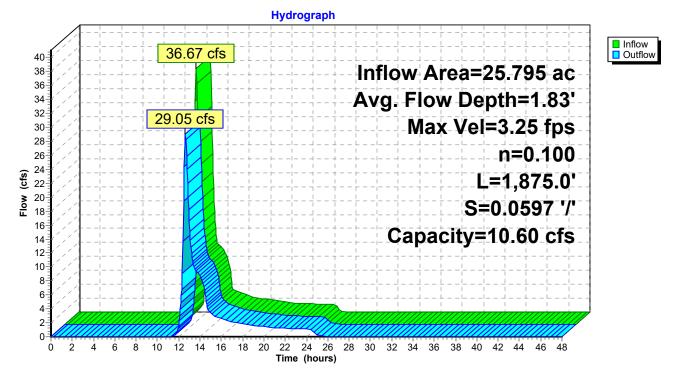
[91] Warning: Storage range exceeded by 0.83'
[55] Hint: Peak inflow is 346% of Manning's capacity
[79] Warning: Submerged Pond 34P Primary device # 1 OUTLET by 1.83'
Inflow Area = 25.795 ac, 1.16% Impervious, Inflow Depth = 1.90" for 100-year event
Inflow = 36.67 cfs @ 12.32 hrs, Volume= 4.087 af
Outflow = 29.05 cfs @ 12.62 hrs, Volume= 4.087 af, Atten= 21%, Lag= 17.9 min
Routed to Link SP34 :

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Max. Velocity= 3.25 fps, Min. Travel Time= 9.6 min Avg. Velocity = 0.75 fps, Avg. Travel Time= 41.8 min

Peak Storage= 16,794 cf @ 12.46 hrs Average Depth at Peak Storage= 1.83', Surface Width= 8.11' Bank-Full Depth= 1.00' Flow Area= 4.0 sf, Capacity= 10.60 cfs

6.00' x 1.00' deep Parabolic Channel, n= 0.100 Earth, dense brush, high stage Length= 1,875.0' Slope= 0.0597 '/' Inlet Invert= 578.00', Outlet Invert= 466.00'

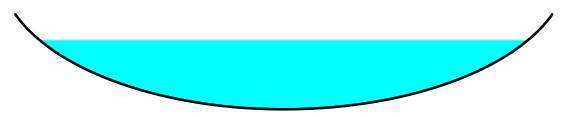
Reach 33R:



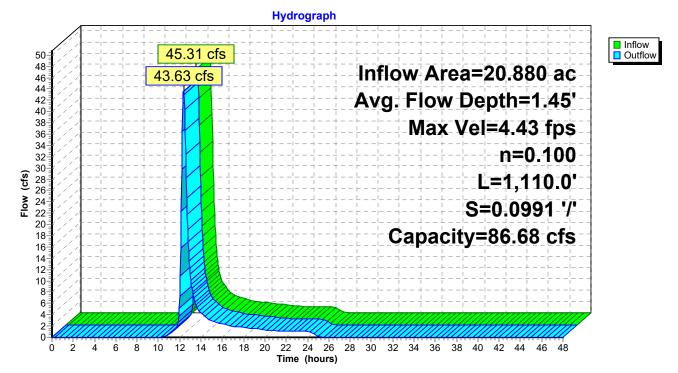
### Summary for Reach 39R:

Inflow Area = 20.880 ac. 7.94% Impervious, Inflow Depth = 2.50" for 100-year event Inflow 45.31 cfs @ 12.24 hrs, Volume= 4.343 af = 43.63 cfs @ 12.37 hrs, Volume= Outflow = 4.343 af, Atten= 4%, Lag= 7.4 min Routed to Link SP39 : Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Max. Velocity= 4.43 fps, Min. Travel Time= 4.2 min Avg. Velocity = 1.24 fps, Avg. Travel Time= 14.9 min Peak Storage= 11,003 cf @ 12.29 hrs Average Depth at Peak Storage= 1.45', Surface Width= 10.23' Bank-Full Depth= 2.00' Flow Area= 16.0 sf, Capacity= 86.68 cfs

12.00' x 2.00' deep Parabolic Channel, n= 0.100 Earth, dense brush, high stage Length= 1,110.0' Slope= 0.0991 '/' Inlet Invert= 526.00', Outlet Invert= 416.00'



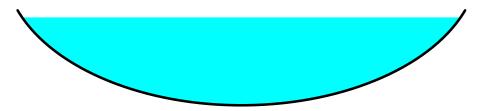
#### Reach 39R:



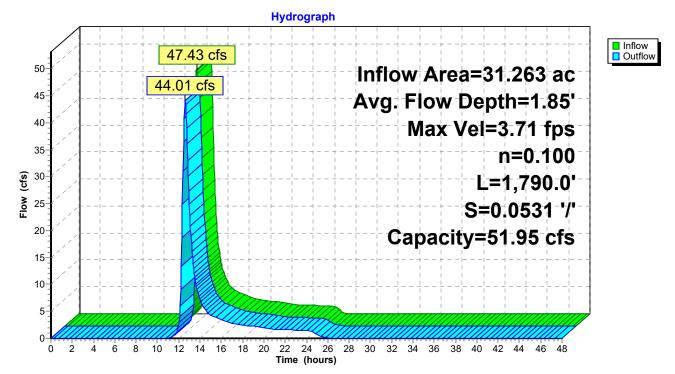
#### Summary for Reach 42R: S-NSD-16

Inflow Area = 31.263 ac. 0.62% Impervious, Inflow Depth = 2.15" for 100-year event Inflow 47.43 cfs @ 12.36 hrs, Volume= 5.601 af = 44.01 cfs @ 12.60 hrs, Volume= Outflow = 5.601 af, Atten= 7%, Lag= 14.6 min Routed to Link SP42 : Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Max. Velocity= 3.71 fps, Min. Travel Time= 8.0 min Avg. Velocity = 0.88 fps, Avg. Travel Time= 34.0 min Peak Storage= 21,274 cf @ 12.47 hrs Average Depth at Peak Storage= 1.85', Surface Width= 9.62' Bank-Full Depth= 2.00' Flow Area= 13.3 sf, Capacity= 51.95 cfs

10.00' x 2.00' deep Parabolic Channel, n= 0.100 Earth, dense brush, high stage Length= 1,790.0' Slope= 0.0531 '/' Inlet Invert= 470.00', Outlet Invert= 375.00'



Reach 42R: S-NSD-16



### Summary for Pond 25.1P: 25.1P

Inflow Area = 3.422 ac, 0.00% Impervious, Inflow Depth = 2.58" for 100-year event Inflow = 12.38 cfs @ 12.05 hrs, Volume= 0.737 af 1.15 cfs @ 12.78 hrs, Volume= Outflow = 0.647 af, Atten= 91%, Lag= 44.0 min 1.15 cfs @ 12.78 hrs, Volume= Primary = 0.647 af Routed to Link SP25 : 0.00 hrs, Volume= 0.000 af Secondary = 0.00 cfs @ Routed to Link SP25 :

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 606.40' @ 12.78 hrs Surf.Area= 7,687 sf Storage= 15,600 cf

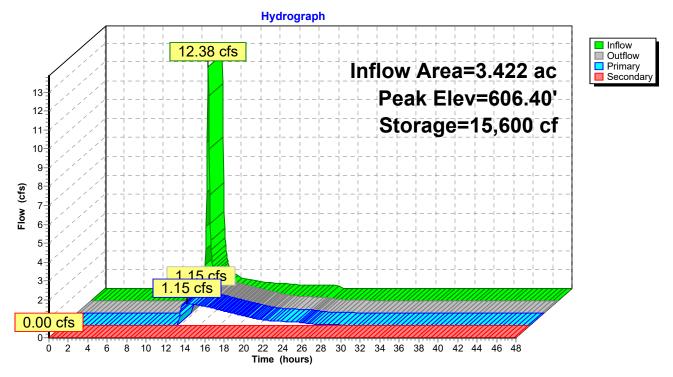
Plug-Flow detention time= 223.8 min calculated for 0.647 af (88% of inflow) Center-of-Mass det. time= 164.0 min (1,007.3 - 843.3)

Volume	Invert	Avail.Sto	rage Storage	Description	
#1	604.00'		<u> </u>	Stage Data (Prismatic)Listed b	elow (Recalc)
	_				
Elevatio		rf.Area	Inc.Store	Cum.Store	
(fee	1	(sq-ft)	(cubic-feet)	(cubic-feet)	
604.0		5,355	0	0	
605.0		6,309	5,832	5,832	
606.0		7,289	6,799	12,631	
607.0	00	8,293	7,791	20,422	
Device	Routing	Invert	Outlet Device	e a construction of the second se	
#1		604.00'			
#1	Primary	004.00	12.0" Round		000
				<sup>D</sup> , projecting, no headwall,  Ke= ( nvert= 604.00' / 603.50'   S= 0.02	
				rugated PE, smooth interior, Flo	
#2	Device 1	604.67'		fice/Grate C= 0.600 Limited to	
#2 #3	Device 1	606.50'		Drifice/Grate C= 0.600 Elimited to	well now at low neads
#3	Device I	000.50		ir flow at low heads	
#4	Secondary	606.50'		3.0 '/' SideZ x 4.0' breadth Broa	ad Crostad Bastangular Wair
#4	Secondary	000.50		0.20 0.40 0.60 0.80 1.00 1.20	
				50 4.00 4.50 5.00 5.50	1.40 1.00 1.00 2.00
				n) 2.38 2.54 2.69 2.68 2.67 2.	67 265 266 266
			, ο	73 2.76 2.79 2.88 3.07 3.32	07 2.05 2.00 2.00
			2.00 2.72 2.	13 2.10 2.19 2.00 3.01 3.32	
Primary	<b>OutFlow</b> Ma	ax=1.15 cfs @	ᡚ 12.78 hrs H	V=606.40' (Free Discharge)	
			4.11 cfs poten		
			ntrols 1.15 cfs		
	Orifico/Grat	•			

**3=Orifice/Grate** (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=604.00' (Free Discharge) 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 25.1P: 25.1P



### Summary for Pond 27.1P: 27.1P

Inflow Area = 3.749 ac, 0.00% Impervious, Inflow Depth = 2.67" for 100-year event Inflow 12.98 cfs @ 12.07 hrs, Volume= 0.836 af = 9.10 cfs @ 12.21 hrs, Volume= Outflow = 0.622 af, Atten= 30%, Lag= 8.3 min 5.73 cfs @ 12.21 hrs, Volume= Primary = 0.512 af Routed to Link SP27 : Secondary = 3.36 cfs @ 12.21 hrs, Volume= 0.110 af Routed to Link SP27 :

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 553.76' @ 12.21 hrs Surf.Area= 4,614 sf Storage= 13,224 cf

Plug-Flow detention time= 227.5 min calculated for 0.622 af (74% of inflow) Center-of-Mass det. time= 129.6 min ( 972.6 - 843.1 )

Volume	Invert	Avail.Sto	rage Storage	e Description
#1	550.00'	14,30	60 cf Custon	m Stage Data (Prismatic)Listed below (Recalc)
	•	<b>5</b> A		
Elevatio		Irf.Area	Inc.Store	Cum.Store
(feet	/	(sq-ft)	(cubic-feet)	(cubic-feet)
550.00		2,458	0	0
551.00		3,040	2,749	2,749
552.00		3,560	3,300	6,049
553.00		4,149	3,855	9,904
554.00	)	4,763	4,456	14,360
Device	Routing	Invert	Outlet Device	es
#1	Primary	550.00'	18.0" Round	nd Culvert
	,		L= 40.0' CP	PP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet	Invert= 550.00' / 549.50' S= 0.0125 '/' Cc= 0.900
			n= 0.013 Co	orrugated PE, smooth interior, Flow Area= 1.77 sf
#2	Device 1	552.84'	4.0" Vert. Or	rifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	553.50'	48.0" Horiz.	Orifice/Grate C= 0.600
			Limited to we	eir flow at low heads
#4	Secondary	553.50'	10.0' long +	+ 3.0 '/' SideZ x 4.0' breadth Broad-Crested Rectangular Wei
	-		Head (feet) (	0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00
			2.50 3.00 3.	3.50 4.00 4.50 5.00 5.50
			Coef. (Englisl	sh) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66
			2.68 2.72 2.	2.73 2.76 2.79 2.88 3.07 3.32

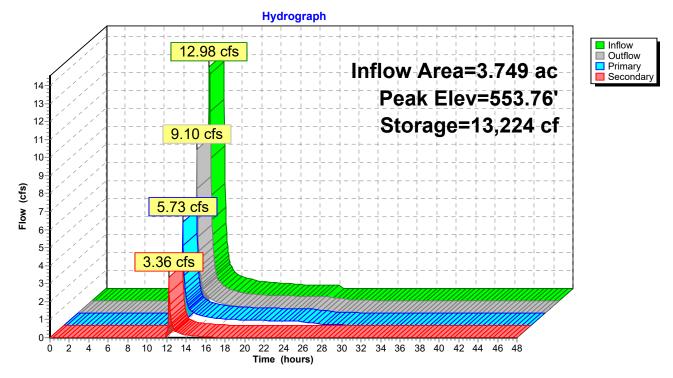
Primary OutFlow Max=5.44 cfs @ 12.21 hrs HW=553.75' (Free Discharge)

-**1=Culvert** (Passes 5.44 cfs of 11.63 cfs potential flow)

**2=Orifice/Grate** (Orifice Controls 0.36 cfs @ 4.15 fps)

-3=Orifice/Grate (Weir Controls 5.08 cfs @ 1.63 fps)

Secondary OutFlow Max=3.17 cfs @ 12.21 hrs HW=553.75' (Free Discharge) 4=Broad-Crested Rectangular Weir (Weir Controls 3.17 cfs @ 1.19 fps) Pond 27.1P: 27.1P



### Summary for Pond 28.1P: 28.1P

Inflow Area = 2.160 ac, 0.00% Impervious, Inflow Depth = 2.67" for 100-year event 8.23 cfs @ 12.04 hrs, Volume= Inflow 0.481 af = 0.90 cfs @ 12.62 hrs, Volume= Outflow = 0.344 af, Atten= 89%, Lag= 35.0 min 0.79 cfs @ 12.62 hrs, Volume= Primary = 0.341 af Routed to Link SP28 : 0.11 cfs @ 12.62 hrs, Volume= Secondary = 0.003 af Routed to Link SP28 :

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 560.53' @ 12.62 hrs Surf.Area= 4,996 sf Storage= 10,718 cf

Plug-Flow detention time= 276.9 min calculated for 0.344 af (71% of inflow) Center-of-Mass det. time= 175.2 min (1,015.7 - 840.5)

Volume	Invert	Avail.Sto	rage Storage	e Description
#1	558.00'	13,15	51 cf Custom	m Stage Data (Prismatic)Listed below (Recalc)
	-	<b>C</b> A		
Elevatio		Irf.Area	Inc.Store	Cum.Store
(fee	1	(sq-ft)	(cubic-feet)	(cubic-feet)
558.0	00	3,511	0	0
559.0	00	4,080	3,796	3,796
560.0	00	4,671	4,376	8,171
561.0	00	5,288	4,980	13,151
Device	Routing	Invert	Outlet Device	es
#1	Primary	558.00'	12.0" Round	d Culvert
			L= 22.0' CP	PP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet I	Invert= 558.00' / 557.75' S= 0.0114 '/' Cc= 0.900
			n= 0.013 Co	prrugated PE, smooth interior, Flow Area= 0.79 sf
#2	Device 1	559.50'	5.0" Vert. Or	rifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	560.50'	48.0" Horiz.	Orifice/Grate C= 0.600
			Limited to we	eir flow at low heads
#4	Secondary	560.50'	10.0' lona +	+ 3.0 '/' SideZ x 4.0' breadth Broad-Crested Rectangular We
	,			0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00
			2.00 2.12 2.	
			2.50 3.00 3. Coef. (Englist	8.50 4.00 4.50 5.00 5.50 sh) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66 2.73 2.76 2.79 2.88 3.07 3.32

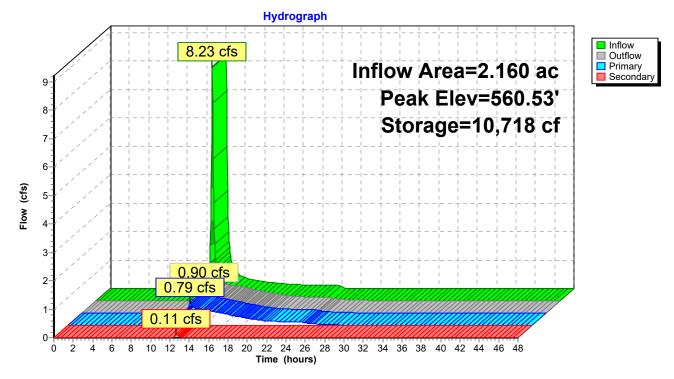
Primary OutFlow Max=0.77 cfs @ 12.62 hrs HW=560.53' (Free Discharge)

-1=Culvert (Passes 0.77 cfs of 4.25 cfs potential flow)

**2=Orifice/Grate** (Orifice Controls 0.59 cfs @ 4.35 fps) **3=Orifice/Grate** (Weir Controls 0.17 cfs @ 0.53 fps)

Secondary OutFlow Max=0.10 cfs @ 12.62 hrs HW=560.53' (Free Discharge) 4=Broad-Crested Rectangular Weir (Weir Controls 0.10 cfs @ 0.39 fps)

Pond 28.1P: 28.1P



# Summary for Pond 30.1P: 30.1P

Inflow Area = 4.003 ac, 0.00% Impervious, Inflow Depth = 2.67" for 100-year event Inflow = 9.22 cfs @ 12.25 hrs, Volume= 0.892 af 3.20 cfs @ 12.71 hrs, Volume= Outflow = 0.704 af, Atten= 65%, Lag= 27.7 min 0.02 cfs @ 12.71 hrs, Volume= Discarded = 0.048 af 3.18 cfs @ 12.71 hrs, Volume= Primary = 0.655 af Routed to Link SP30 : Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af Routed to Link SP30 :

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 462.21' @ 12.71 hrs Surf.Area= 5,907 sf Storage= 15,801 cf

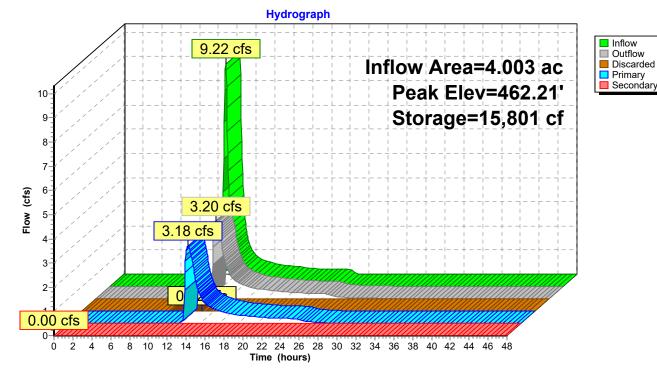
Plug-Flow detention time= 227.1 min calculated for 0.704 af (79% of inflow) Center-of-Mass det. time= 139.1 min ( 996.1 - 857.0 )

Volume	Invert	Avail.Sto	rage Storage	e Description
#1	459.00'	20,70	02 cf Custom	n Stage Data (Prismatic)Listed below (Recalc)
<b>Flavesti</b>			la a Otana	Ourse Others
Elevatio		rf.Area	Inc.Store	Cum.Store
(fee		(sq-ft)	(cubic-feet)	(cubic-feet)
459.0	•	3,996	0	0
460.0		4,562	4,279	4,279
461.0		5,153	4,858	9,137
462.0		5,770	5,462	14,598
463.0	0	6,437	6,104	20,702
Device	Routing	Invert	Outlet Device	es
#1	Primary	459.00'	24.0" Round	d Culvert
			L= 24.0' CP	P, projecting, no headwall, Ke= 0.900
			Inlet / Outlet I	Invert= 459.00' / 458.50' S= 0.0208 '/' Cc= 0.900
			n= 0.013 Co	prrugated PE, smooth interior, Flow Area= 3.14 sf
#2	Device 1	461.00'	12.0" Vert. O	Drifice/Grate C= 0.600
			Limited to we	eir flow at low heads
#3	Device 1	462.50'	48.0" Horiz.	Orifice/Grate C= 0.600
			Limited to we	eir flow at low heads
#4	Secondary	462.50'	10.0' long +	3.0 '/' SideZ x 4.0' breadth Broad-Crested Rectangular Weir
	-		Head (feet) (	0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00
			2.50 3.00 3.	.50 4.00 4.50 5.00 5.50
			Coef. (English	h) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66
				.73 2.76 2.79 2.88 3.07 3.32
#5	Discarded	459.00'		Exfiltration over Surface area

**Discarded OutFlow** Max=0.02 cfs @ 12.71 hrs HW=462.21' (Free Discharge) **5=Exfiltration** (Exfiltration Controls 0.02 cfs)

Primary OutFlow Max=3.18 cfs @ 12.71 hrs HW=462.21' (Free Discharge) 1=Culvert (Passes 3.18 cfs of 17.73 cfs potential flow) 2=Orifice/Grate (Orifice Controls 3.18 cfs @ 4.04 fps) 3=Orifice/Grate ( Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=459.00' (Free Discharge) 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)



Pond 30.1P: 30.1P

# Summary for Pond 31.1P: 31.1P

Inflow Area = 0.925 ac, 0.00% Impervious, Inflow Depth = 2.58" for 100-year event Inflow 3.58 cfs @ 12.02 hrs. Volume= 0.199 af = 0.02 cfs @ 24.16 hrs, Volume= Outflow = 0.061 af, Atten= 99%, Lag= 728.2 min 0.02 cfs @ 24.16 hrs, Volume= Discarded = 0.061 af Primary 0.00 cfs @ 0.00 hrs, Volume= 0.000 af = Routed to Link SP34 : Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af Routed to Link SP34 :

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 511.79' @ 24.16 hrs Surf.Area= 4,911 sf Storage= 7,727 cf

Plug-Flow detention time= 1,056.9 min calculated for 0.061 af (31% of inflow) Center-of-Mass det. time= 923.6 min (1,764.9 - 841.4)

Volume	Invert	Avail.Sto	rage Storage	Description
#1	510.00'	14,18	B7 cf Custom	n Stage Data (Prismatic)Listed below (Recalc)
<b>-</b> 1		5. A.		
Elevatio		Irf.Area	Inc.Store	Cum.Store
(fee	1	(sq-ft)	(cubic-feet)	(cubic-feet)
510.0		3,748	0	0
511.0		4,388	4,068	4,068
512.0		5,053	4,721	8,789
513.0	10	5,744	5,399	14,187
Device	Routing	Invert	Outlet Devices	S
#1	Primary	510.00'	12.0" Round	l Culvert
	2		L= 50.0' CPF	P, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Ir	nvert= 510.00' / 509.50' S= 0.0100 '/' Cc= 0.900
				rrugated PE, smooth interior, Flow Area= 0.79 sf
#2	Device 1	512.50'	48.0" Horiz. C	Orifice/Grate C= 0.600
			Limited to weir	ir flow at low heads
#3	Secondary	512.50'		3.0 '/' SideZ x 4.0' breadth Broad-Crested Rectangular We
			· · ·	0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00
				50 4.00 4.50 5.00 5.50
				h) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66
				73 2.76 2.79 2.88 3.07 3.32
#4	Discarded	510.00'	0.179 in/hr Ex	xfiltration over Surface area

**Discarded OutFlow** Max=0.02 cfs @ 24.16 hrs HW=511.79' (Free Discharge) **4=Exfiltration** (Exfiltration Controls 0.02 cfs)

**Primary OutFlow** Max=0.00 cfs @ 0.00 hrs HW=510.00' (Free Discharge)

**1=Culvert** (Controls 0.00 cfs)

**2=Orifice/Grate** (Controls 0.00 cfs)

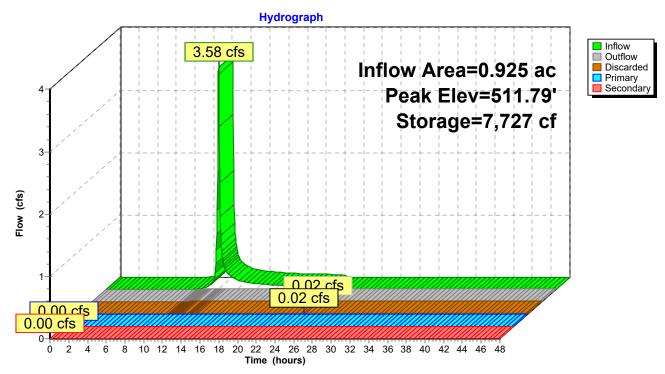
Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=510.00' (Free Discharge) -3=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

 Type II 24-hr
 100-year Rainfall=5.72"

 Printed
 7/19/2024

 ns LLC
 Page 353

Pond 31.1P: 31.1P



### Summary for Pond 32.1P: 32.1P

Inflow Area = 5.376 ac, 0.00% Impervious, Inflow Depth = 2.58" for 100-year event Inflow 15.23 cfs @ 12.13 hrs, Volume= 1.158 af = 0.51 cfs @ 16.64 hrs, Volume= Outflow = 0.867 af, Atten= 97%, Lag= 270.4 min 0.51 cfs @ 16.64 hrs, Volume= Primary = 0.867 af Routed to Link SP34 : 0.00 hrs, Volume= 0.000 af Secondary = 0.00 cfs @ Routed to Link SP34 :

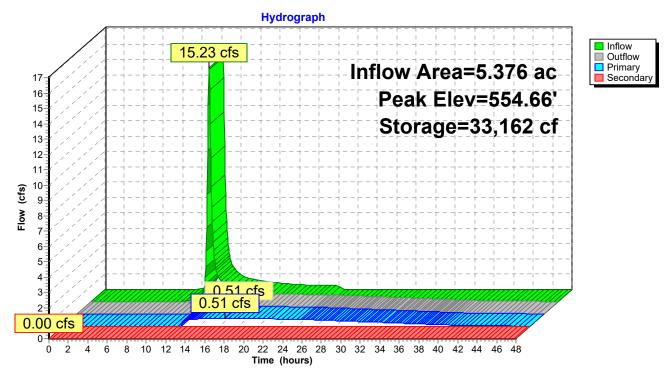
Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 554.66' @ 16.64 hrs Surf.Area= 13,998 sf Storage= 33,162 cf

Plug-Flow detention time= 682.8 min calculated for 0.867 af (75% of inflow) Center-of-Mass det. time= 585.3 min (1,435.6 - 850.3)

Volume	Invert	Avail.Sto	rage Storag	ge Description
#1	552.00'	52,9	89 cf Custo	om Stage Data (Prismatic)Listed below (Recalc)
Elevatio		urf.Area	Inc.Store	
(fee	1	(sq-ft)	(cubic-feet)	(cubic-feet)
552.0		10,968	0	0
553.0		12,086	11,527	
554.0		13,228	12,657	
555.0		14,396	13,812	
556.0	0	15,589	14,993	52,989
Device	Routing	Invert	Outlet Devic	ices
#1	Primary	552.00'	12.0" Rour	Ind Culvert
	2		L= 25.0' Cl	CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet	et Invert= 552.00' / 551.75' S= 0.0100 '/' Cc= 0.900
				Corrugated PE, smooth interior, Flow Area= 0.79 sf
#2	Device 1	553.00'		<b>Orifice/Grate</b> C= 0.600 Limited to weir flow at low heads
#3	Device 1	555.50'		z. Orifice/Grate C= 0.600
	<b>•</b> •			weir flow at low heads
#4	Secondary	555.50'		+ 3.0 '/' SideZ x 4.0' breadth Broad-Crested Rectangular Weir
				) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 3.50 4.00 4.50 5.00 5.50
				lish) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66
			, <b>U</b>	2.73 2.76 2.79 2.88 3.07 3.32
			2.00 2.72 2	2.13 2.10 2.19 2.00 3.01 3.32
Primarv	OutFlow M	lax=0.51 cfs @	@ 16.64 hrs H	HW=554.66' (Free Discharge)
			4.39 cfs poter	
				fs @ 5.88 fps)
		to (Controls)		S 1,

**--3=Orifice/Grate** (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=552.00' (Free Discharge) 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs) Pond 32.1P: 32.1P



### Summary for Pond 33.1P: 33.1P

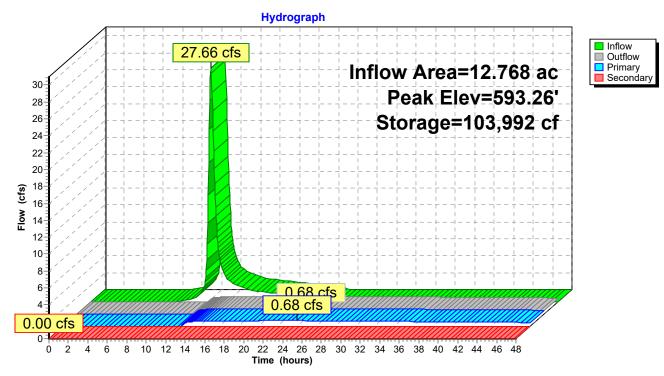
Inflow Area = 12.768 ac, 1.41% Impervious, Inflow Depth = 2.86" for 100-year event Inflow = 27.66 cfs @ 12.33 hrs, Volume= 3.041 af 0.68 cfs @ 24.04 hrs, Volume= Outflow = 1.752 af, Atten= 98%, Lag= 703.1 min 0.68 cfs @ 24.04 hrs, Volume= 1.752 af Primary = Routed to Link SP34 : 0.00 hrs, Volume= 0.000 af Secondary = 0.00 cfs @ Routed to Link SP34 :

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 593.26' @ 24.04 hrs Surf.Area= 34,840 sf Storage= 103,992 cf

Plug-Flow detention time= 1,013.7 min calculated for 1.752 af (58% of inflow) Center-of-Mass det. time= 895.3 min (1,753.5 - 858.2)

Volume	Invert	Avail.Sto	rage Storage I	Description	
#1	590.00'	130,28	85 cf Custom	Stage Data (Pr	<b>ismatic)</b> Listed below (Recalc)
<b>F</b> lowethe			lu a Otana	Ourse Otherse	
Elevatio (fee		urf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	
590.0	1		0	0	
590.0		29,006 30,767	29,887	29,887	
591.0		32,552	31,660	61,546	
593.0		34,363	33,458	95,004	
594.0		36,199	35,281	130,285	
	-		,	,	
Device	Routing	Invert	Outlet Devices	5	
#1	Primary	590.00'	12.0" Round	Culvert	
					headwall, Ke= 0.900
					589.75' S= 0.0083 '/' Cc= 0.900
					both interior, Flow Area= 0.79 sf
#2	Device 1	590.50'			0.600 Limited to weir flow at low heads
#3	Device 1	593.50'		orifice/Grate C	
#1	Secondary			flow at low hea	
#4	Secondary	593.50'			<b>1.0' breadth Broad-Crested Rectangular Weir</b> 0.80 1.00 1.20 1.40 1.60 1.80 2.00
				0 4.00 4.50 5	
					69 2.68 2.67 2.67 2.65 2.66 2.66
				3 2.76 2.79 2	
Primary	OutFlow M	lax=0.68 cfs (	@ 24.04 hrs HW	/=593.26' (Fre	e Discharge)
			4.96 cfs potentia		
			ntrols 0.68 cfs @	0 7.75 fps)	
<u></u> —3=	Orifice/Gra	te (Controls (	0.00 cfs)		

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=590.00' (Free Discharge) 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs) Pond 33.1P: 33.1P



#### Summary for Pond 34P: VAN EPPS RD CULVERT

Inflow Area = 25.795 ac. 1.16% Impervious, Inflow Depth = 1.90" for 100-year event Inflow 46.09 cfs @ 12.19 hrs, Volume= 4.087 af = 36.67 cfs @ 12.32 hrs, Volume= Outflow = 4.087 af, Atten= 20%, Lag= 7.9 min 10.51 cfs @ 12.32 hrs, Volume= Primary = 3.304 af Routed to Reach 33R : 26.16 cfs @ 12.32 hrs, Volume= Secondary = 0.783 af Routed to Reach 33R :

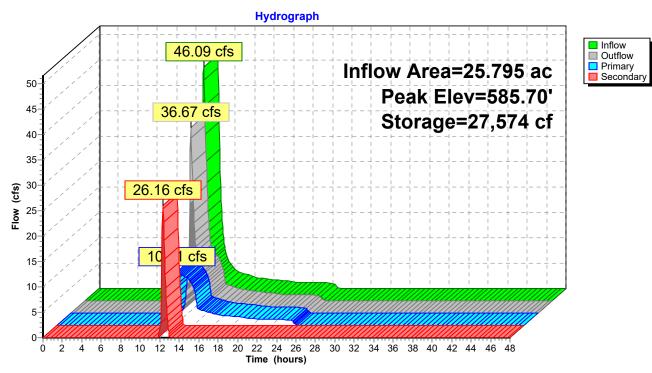
Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 585.70' @ 12.32 hrs Surf.Area= 16,549 sf Storage= 27,574 cf

Plug-Flow detention time= 11.1 min calculated for 4.083 af (100% of inflow) Center-of-Mass det. time= 11.1 min ( 884.9 - 873.9 )

Volume	Invert	Avail.	Storage	Storage Description	on				
#1	580.00'	32	2,769 cf	Custom Stage Da	<b>ata (Irregular)</b> Liste	d below (Recalc)			
Elevatio (fee		urf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)			
580.0 582.0 584.0 585.0 586.0	00 00 00	1 935 6,900 12,860 18,260	5.0 220.0 505.0 515.0 645.0	0 644 6,917 9,727 15,481	0 644 7,561 17,288 32,769	1 3,857 20,316 21,274 33,289			
Device	Routing	Inve	ert Outle	et Devices					
#1	Primary	580.0		" Round Culvert					
#2	Secondary	585.0	Inlet n= 0 0' <b>15.0</b> Head	L= 79.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 580.00' / 578.00' S= 0.0253 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf <b>15.0' long + 3.0 '/' SideZ x 25.0' breadth Broad-Crested Rectang</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63					

Primary OutFlow Max=10.50 cfs @ 12.32 hrs HW=585.69' (Free Discharge) -1=Culvert (Inlet Controls 10.50 cfs @ 8.56 fps)

Secondary OutFlow Max=25.60 cfs @ 12.32 hrs HW=585.69' (Free Discharge) 2=Broad-Crested Rectangular Weir (Weir Controls 25.60 cfs @ 2.17 fps)



#### Pond 34P: VAN EPPS RD CULVERT

#### Summary for Pond 42P: 42P

Inflow Area = 4.857 ac. 0.00% Impervious, Inflow Depth = 2.44" for 100-year event Inflow 20.60 cfs @ 11.98 hrs, Volume= 0.986 af = 0.45 cfs @ 16.31 hrs, Volume= Outflow = 0.492 af, Atten= 98%, Lag= 260.2 min 0.40 cfs @ 16.31 hrs, Volume= Primary = 0.482 af Routed to Link SP42 : Secondary = 0.05 cfs @ 16.31 hrs, Volume= 0.010 af Routed to Link SP42 :

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 460.51' @ 16.31 hrs Surf.Area= 13,766 sf Storage= 30,397 cf

Plug-Flow detention time= 644.1 min calculated for 0.491 af (50% of inflow) Center-of-Mass det. time= 518.0 min (1,359.1 - 841.1)

Volume	Invert	Avail.S	Storage	Storage Description	า			
#1	458.00'	37	,253 cf	Custom Stage Dat	<b>a (Irregular)</b> Listed	below (Recalc)		
Elevatio (fee		urf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)		
458.0 459.0 460.0 461.0	)0 )0	10,519 11,752 13,010 14,498	610.0 622.6 635.2 714.6	0 11,130 12,376 13,747	0 11,130 23,505 37,253	10,519 11,900 13,309 21,865		
Device	Routing	Inve	rt Outle	et Devices				
#1	Primary	458.00' <b>12.0" Round Culvert</b> L= 32.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 458.00' / 456.75' S= 0.0391 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf						
#2	Device 1	459.7	8' <b>4.0"</b>	Vert. Orifice/Grate	C= 0.600 Limited	to weir flow at low h	neads	
#3	Device 1	460.5		8.0" Horiz. Orifice/Grate C= 0.600				
#4	Secondary	460.5	0' <b>10.0</b> Head 2.50 Coet	Limited to weir flow at low heads <b>10.0' long + 3.0 '/' SideZ x 4.0' breadth Broad-Crested Rectangular Wei</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66 2.68 2.72 2.73 2.76 2.79 2.88 3.07 3.32				

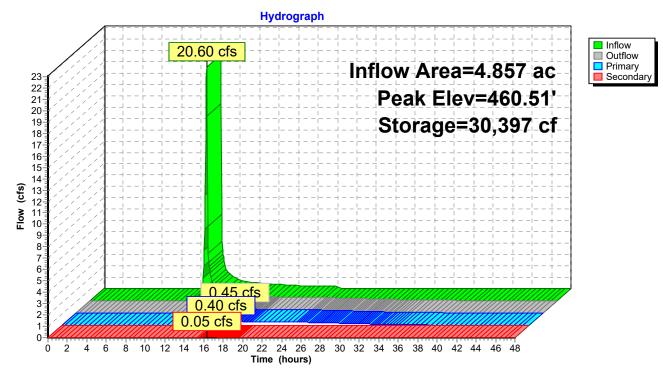
Primary OutFlow Max=0.39 cfs @ 16.31 hrs HW=460.51' (Free Discharge)

-1=Culvert (Passes 0.39 cfs of 4.24 cfs potential flow)

**2=Orifice/Grate** (Orifice Controls 0.32 cfs @ 3.63 fps) **3=Orifice/Grate** (Weir Controls 0.07 cfs @ 0.40 fps)

Secondary OutFlow Max=0.04 cfs @ 16.31 hrs HW=460.51' (Free Discharge) 4=Broad-Crested Rectangular Weir (Weir Controls 0.04 cfs @ 0.29 fps)

Pond 42P: 42P



### Summary for Pond 49.1P: 49.1P

Inflow Area = 4.740 ac. 6.79% Impervious, Inflow Depth = 2.15" for 100-year event Inflow 15.27 cfs @ 12.02 hrs, Volume= 0.849 af = 0.43 cfs @ 16.10 hrs, Volume= Outflow = 0.214 af, Atten= 97%, Lag= 244.8 min 0.27 cfs @ 16.10 hrs, Volume= Primary = 0.135 af Routed to Link SP42 : Secondary = 0.16 cfs @ 16.10 hrs, Volume= 0.079 af Routed to Link SP42 :

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 535.53' @ 16.10 hrs Surf.Area= 9,685 sf Storage= 28,001 cf

Plug-Flow detention time= 452.6 min calculated for 0.214 af (25% of inflow) Center-of-Mass det. time= 310.4 min (1,163.6 - 853.2)

Volume	Invert	Avail.Sto	rage Storage	e Description
#1	532.00'	32,64	42 cf Custor	m Stage Data (Prismatic)Listed below (Recalc)
Elevatio		urf.Area	Inc.Store	Cum.Store
(fee	et)	(sq-ft)	(cubic-feet)	(cubic-feet)
532.0	00	6,368	0	0
533.0	00	7,185	6,777	6,777
534.0	00	8,079	7,632	14,409
535.0	00	9,092	8,586	22,994
536.0	00	10,204	9,648	32,642
<b>.</b> .				
Device	Routing	Invert	Outlet Device	Ces
#1	Primary	532.00'	24.0" Roun	
				PP, projecting, no headwall, Ke= 0.900
				t Invert= 532.00' / 531.75' S= 0.0100 '/' Cc= 0.900
				orrugated PE, smooth interior, Flow Area= 3.14 sf
#2	Device 1	535.83'		rifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	535.50'	48.0" Horiz.	. Orifice/Grate C= 0.600
			Limited to we	eir flow at low heads
#4	Secondary	535.50'		+ 3.0 '/' SideZ x 4.0' breadth Broad-Crested Rectangular Weir
				0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00
			2.50 3.00 3	3.50 4.00 4.50 5.00 5.50
			Coef. (Englis	sh) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66
			2.68 2.72 2	2.73 2.76 2.79 2.88 3.07 3.32

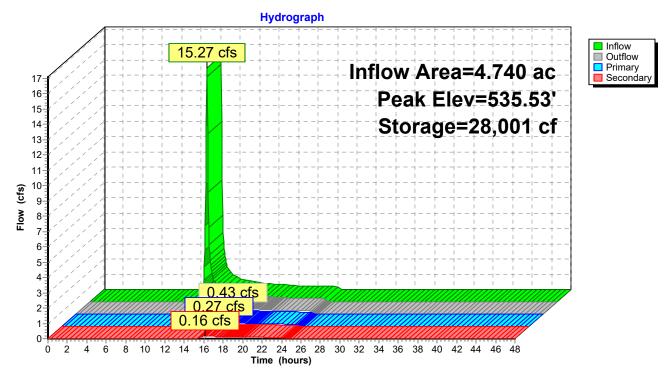
Primary OutFlow Max=0.25 cfs @ 16.10 hrs HW=535.53' (Free Discharge)

-1=Culvert (Passes 0.25 cfs of 19.01 cfs potential flow)

-2=Orifice/Grate (Controls 0.00 cfs)

-3=Orifice/Grate (Weir Controls 0.25 cfs @ 0.60 fps)

Secondary OutFlow Max=0.15 cfs @ 16.10 hrs HW=535.53' (Free Discharge) 4=Broad-Crested Rectangular Weir (Weir Controls 0.15 cfs @ 0.43 fps) Pond 49.1P: 49.1P



### Summary for Pond 49.2P: 49.2S

Inflow Area = 3.533 ac, 0.14% Impervious, Inflow Depth = 2.58" for 100-year event Inflow 15.75 cfs @ 11.97 hrs, Volume= 0.761 af = 11.36 cfs @ 12.05 hrs, Volume= Outflow = 0.685 af, Atten= 28%, Lag= 4.5 min 2.74 cfs @ 12.05 hrs, Volume= Primary = 0.502 af Routed to Link SP42 : 8.63 cfs @ 12.05 hrs, Volume= Secondary = 0.183 af Routed to Link SP42 :

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 523.95' @ 12.05 hrs Surf.Area= 6,447 sf Storage= 10,673 cf

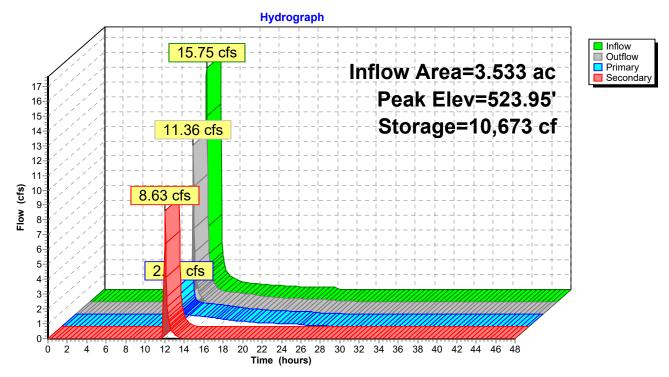
Plug-Flow detention time= 143.9 min calculated for 0.685 af (90% of inflow) Center-of-Mass det. time= 94.5 min (931.9 - 837.4)

Volume	Invert	Avail.Sto	rage Storag	age Description		
#1	522.00'	11,00	01 cf Custo	om Stage Data (Prismatic)Listed below (Recalc)		
Elevatio		rf.Area	Inc.Store			
(feet	t)	(sq-ft)	(cubic-feet)	(cubic-feet)		
522.0		4,515	0	•		
523.0		5,494	5,005			
524.0	0	6,498	5,996	11,001		
D	Destin	I		4		
Device	Routing	Invert	Outlet Devi			
#1	Primary	522.00'		und Culvert		
				CPP, projecting, no headwall, Ke= 0.900		
				et Invert= 522.00' / 521.75' S= 0.0100 '/' Cc= 0.900		
	<b>D</b> · · · ·	500 07		Corrugated PE, smooth interior, Flow Area= 0.79 sf		
#2	Device 1	522.67'		<b>Orifice/Grate</b> C= 0.600 Limited to weir flow at low heads		
#3	Device 1	523.50'		. Orifice/Grate C= 0.600		
	<b>o</b> 1	500 501		weir flow at low heads		
#4	Secondary	523.50'		+ 3.0 '/' SideZ x 4.0' breadth Broad-Crested Rectangular Weir		
				b) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00		
				3.50 4.00 4.50 5.00 5.50		
			· · ·	lish) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66		
			2.08 2.72	2.73 2.76 2.79 2.88 3.07 3.32		
Primary OutFlow Max=2.73 cfs @ 12.05 hrs HW=523.95' (Free Discharge) ▲ 1=Culvert (Passes 2.73 cfs of 3.59 cfs potential flow)						

**1=Culvert** (Passes 2.73 cfs of 3.59 cfs potential flow) **2=Orifice/Grate** (Orifice Controls 0.96 cfs @ 4.88 fps)

-3=Orifice/Grate (Orifice Controls 1.77 cfs @ 2.28 fps)

Secondary OutFlow Max=8.60 cfs @ 12.05 hrs HW=523.95' (Free Discharge) 4=Broad-Crested Rectangular Weir (Weir Controls 8.60 cfs @ 1.69 fps) Pond 49.2P: 49.2S



### Summary for Pond 51.1P: 51.1P

Inflow Area = 8.131 ac, 0.00% Impervious, Inflow Depth = 2.86" for 100-year event Inflow 21.79 cfs @ 12.20 hrs, Volume= 1.936 af = 4.27 cfs @ 12.86 hrs, Volume= Outflow = 1.314 af, Atten= 80%, Lag= 39.5 min 3.09 cfs @ 12.86 hrs, Volume= Primary = 1.232 af Routed to Link SP51 : 1.18 cfs @ 12.86 hrs, Volume= Secondary = 0.082 af Routed to Link SP51 :

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 606.63' @ 12.86 hrs Surf.Area= 11,870 sf Storage= 44,776 cf

Plug-Flow detention time= 363.4 min calculated for 1.314 af (68% of inflow) Center-of-Mass det. time= 255.7 min (1,104.8 - 849.1)

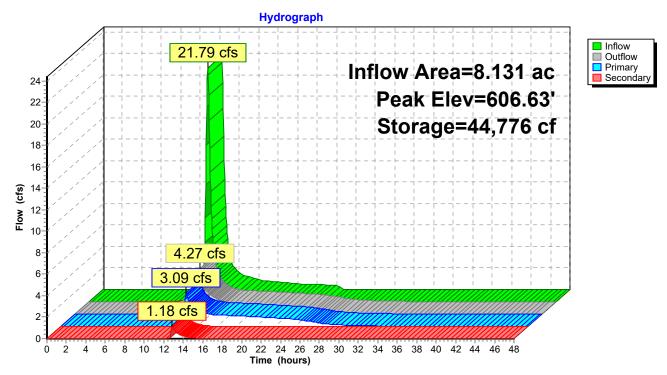
Volume	Invert	Avail.Sto	rage Storage	e Description			
#1	602.00'	49,22	22 cf Custom	<b>m Stage Data (Prismatic)</b> Listed below (Recalc)			
Elevatio		urf.Area	Inc.Store	Cum.Store			
(fee	1	(sq-ft)	(cubic-feet)	(cubic-feet)			
602.0		7,555	0	0			
603.0		8,441	7,998	7,998			
604.0		9,351	8,896	16,894			
605.0		10,287	9,819	26,713			
606.0		11,248	10,768	37,481			
607.0	00	12,234	11,741	49,222			
Device	Routing	Invert	Outlet Device	es			
#1	Primary	600.00'	12.0" Round	d Culvert			
			L= 40.0' CPI	PP, projecting, no headwall, Ke= 0.900			
			Inlet / Outlet I	Invert= 600.00' / 598.00' S= 0.0500 '/' Cc= 0.900			
			n= 0.013 Cor	prrugated PE, smooth interior, Flow Area= 0.79 sf			
#2	Device 1	605.00'	6.0" Vert. Ori	rifice/Grate C= 0.600 Limited to weir flow at low heads			
#3	Device 1	606.50'	48.0" Horiz. (	Orifice/Grate C= 0.600			
				eir flow at low heads			
#4	Secondary	606.50'		· 3.0 '/' SideZ x 4.0' breadth Broad-Crested Rectangular Weir			
				0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00			
				.50 4.00 4.50 5.00 5.50			
				sh) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66			
			2.68 2.72 2.	.73 2.76 2.79 2.88 3.07 3.32			
Duine e	OutFlow M		a 10.06 hm 14	W-606 62' (Free Discharge)			
	Primary OutFlow Max=3.05 cfs @ 12.86 hrs HW=606.63' (Free Discharge)						

**1=Culvert** (Passes 3.05 cfs of 7.39 cfs potential flow)

**2=Orifice/Grate** (Orifice Controls 1.11 cfs @ 5.66 fps)

**3=Orifice/Grate** (Weir Controls 1.94 cfs @ 1.18 fps)

Secondary OutFlow Max=1.16 cfs @ 12.86 hrs HW=606.63' (Free Discharge) 4=Broad-Crested Rectangular Weir (Weir Controls 1.16 cfs @ 0.85 fps) Pond 51.1P: 51.1P



# Summary for Pond 52.1P: 52.1P

Inflow Area = 0.805 ac, 0.00% Impervious, Inflow Depth = 2.67" for 100-year event 4.43 cfs @ 11.89 hrs, Volume= Inflow = 0.179 af 0.04 cfs @ 23.40 hrs, Volume= Outflow = 0.030 af, Atten= 99%, Lag= 690.1 min 0.04 cfs @ 23.40 hrs, Volume= 0.030 af Primary = Routed to Link SP52 : 0.00 cfs @ 0.00 hrs, Volume= Secondary = 0.000 af Routed to Link SP52 :

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 649.62' @ 23.40 hrs Surf.Area= 5,020 sf Storage= 7,046 cf

Plug-Flow detention time= 784.8 min calculated for 0.030 af (17% of inflow) Center-of-Mass det. time= 642.9 min (1,472.3 - 829.4)

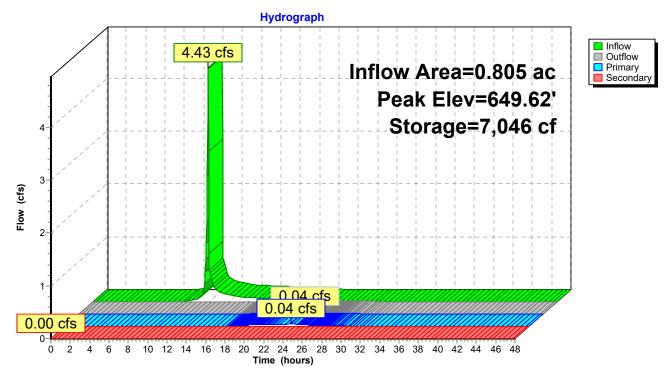
Volume	Invert	Avail.Sto	rage Storage	Description	
#1	648.00'			n Stage Data (Prismatic)Listed below (Recalc)	
		,			
Elevatio		Irf.Area	Inc.Store	Cum.Store	
(fee	et)	(sq-ft)	(cubic-feet)	(cubic-feet)	
648.0	00	3,699	0	0	
649.0	00	4,506	4,103	4,103	
650.0		5,337	4,922	9,024	
651.0	00	6,194	5,766	14,790	
Device	Routing	Invert	Outlet Device:	es	
#1	Primary	648.00'	12.0" Round	d Culvert	
	-		L= 20.0' CPF	P, projecting, no headwall, Ke= 0.900	
				Invert= 648.00' / 647.50' S= 0.0250 '/' Cc= 0.900	
			n= 0.013 Cor	rrugated PE, smooth interior, Flow Area= 0.79 sf	
#2	Device 1	649.50'	6.0" Vert. Ori	ifice/Grate C= 0.600 Limited to weir flow at low heads	
#3	Device 1	650.50'	48.0" Horiz. (	Orifice/Grate C= 0.600	
			Limited to wei	eir flow at low heads	
#4	Secondary	650.50'		3.0 '/' SideZ x 4.0' breadth Broad-Crested Rectangular \	Neir
				0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00	
				.50 4.00 4.50 5.00 5.50	
			· •	h) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66	
			2.68 2.72 2.7	.73 2.76 2.79 2.88 3.07 3.32	
Duine e			2 22 40 bra 11	W = 640.62! (Free Discharge)	
			3.16 cfs potenti	W=649.62' (Free Discharge) tial flow)	

-2=Orifice/Grate (Orifice Controls 0.04 cfs @ 1.17 fps)

-3=Orifice/Grate (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=648.00' (Free Discharge) 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 52.1P: 52.1P



#### Summary for Pond 56.1P: 56.1P

Inflow Area = 27.373 ac, 0.00% Impervious, Inflow Depth = 2.58" for 100-year event Inflow = 71.32 cfs @ 12.17 hrs, Volume= 5.896 af 17.48 cfs @ 12.66 hrs, Volume= Outflow = 5.433 af, Atten= 75%, Lag= 29.8 min 13.35 cfs @ 12.66 hrs, Volume= Primary = 5.090 af Routed to Link SP56 : 4.14 cfs @ 12.66 hrs, Volume= Secondary = 0.343 af Routed to Link SP56 :

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Peak Elev= 419.79' @ 12.66 hrs Surf.Area= 27,255 sf Storage= 122,515 cf

Plug-Flow detention time= 528.9 min calculated for 5.428 af (92% of inflow) Center-of-Mass det. time= 488.3 min (1,341.5 - 853.2)

Volume	Invert	Avail.Sto	rage Storage	e Description	
#1	414.00'	128,2	69 cf Custon	m Stage Data (Prismatic)Listed below (Recalc)	
Elevatio		urf.Area	Inc.Store	Cum.Store	
fee		(sq-ft)	(cubic-feet)	(cubic-feet)	
414.0	1	15,198	0	0	
415.0		17,220	16,209	16,209	
416.0	00	19,266	18,243	34,452	
417.0	-	21,338	20,302	54,754	
418.0		23,435	22,387	77,141	
419.0		25,558	24,497	101,637	
420.0	10	27,705	26,632	128,269	
Device	Routing	Invert	Outlet Device	ces	
#1	Primary	414.00'	12.0" Round	nd Culvert X 2.00	
				PP, projecting, no headwall, Ke= 0.900	
				t Invert= 414.00' / 413.50' S= 0.0071 '/' Cc= 0.900	
#2	Device 1	415.00'		orrugated PE, smooth interior, Flow Area= 0.79 sf <b>Drifice/Grate</b> C= 0.600 Limited to weir flow at low heads	
#2 #3	Device 1 Device 1	419.50'		. Orifice/Grate X 2.00 C= 0.600	
#0	Device 1	413.50		veir flow at low heads	
#4	Secondary	419.50'		+ 3.0 '/' SideZ x 4.0' breadth Broad-Crested Rectangular We	eir
			Head (feet) (	0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00	
				3.50 4.00 4.50 5.00 5.50	
			· · ·	sh) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66	
			2.68 2.72 2.	2.73 2.76 2.79 2.88 3.07 3.32	

Primary OutFlow Max=13.73 cfs @ 12.66 hrs HW=419.79' (Free Discharge)

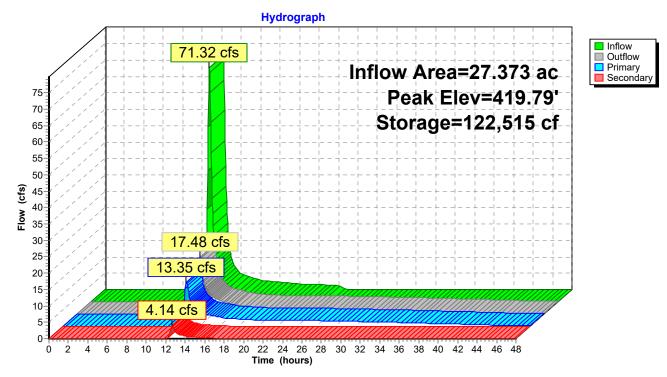
**1=Culvert** (Inlet Controls 13.73 cfs @ 8.74 fps)

-2=Orifice/Grate (Passes < 2.01 cfs potential flow)

-3=Orifice/Grate (Passes < 12.77 cfs potential flow)

Secondary OutFlow Max=4.07 cfs @ 12.66 hrs HW=419.79' (Free Discharge) 4=Broad-Crested Rectangular Weir (Weir Controls 4.07 cfs @ 1.30 fps)

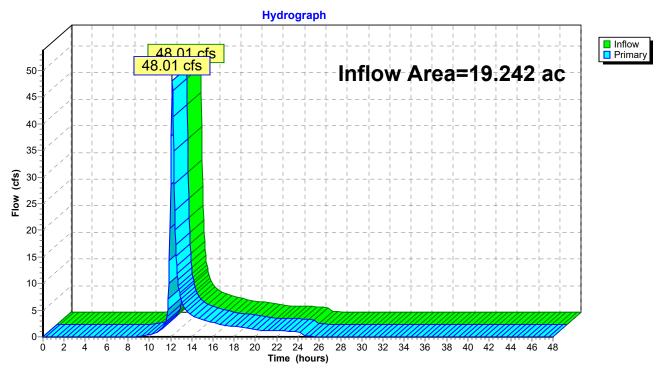
Pond 56.1P: 56.1P



## Summary for Link SP25:

Inflow Area	a =	19.242 ac,	0.51% Impervious, II	nflow Depth = 2.75"	for 100-year event
Inflow	=	48.01 cfs @	12.16 hrs, Volume=	4.415 af	-
Primary	=	48.01 cfs @	12.16 hrs, Volume=	4.415 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

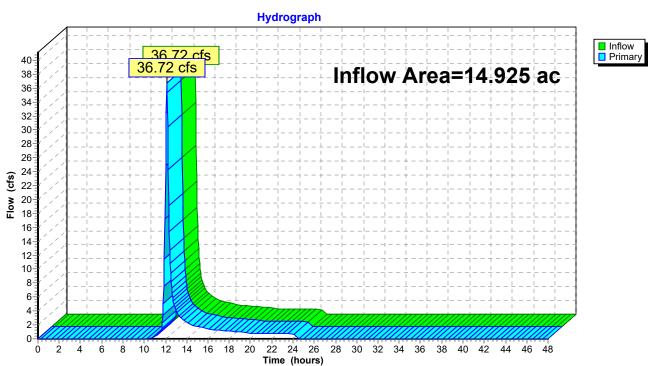


#### Link SP25:

## Summary for Link SP26:

Inflow Area	a =	14.925 ac,	5.39% Impervious,	Inflow Depth = 2.	.15" for 100-year event
Inflow	=	36.72 cfs @	12.11 hrs, Volume	= 2.674 af	
Primary	=	36.72 cfs @	12.11 hrs, Volume	= 2.674 af,	,Atten= 0%,Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

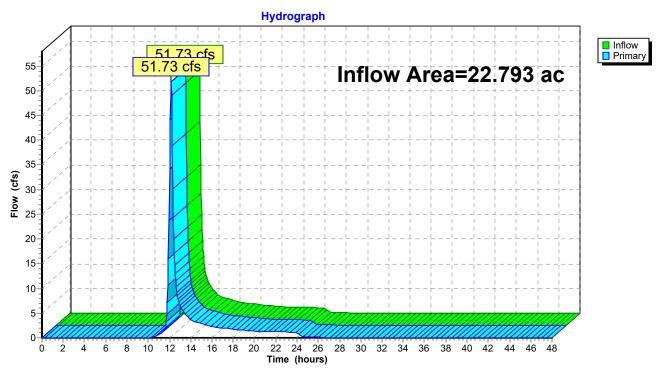


#### Link SP26:

## Summary for Link SP27:

Inflow Are	a =	22.793 ac,	1.95% Impervious, Inflow	v Depth = 2.19"	for 100-year event
Inflow	=	51.73 cfs @	12.15 hrs, Volume=	4.169 af	-
Primary	=	51.73 cfs @	12.15 hrs, Volume=	4.169 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

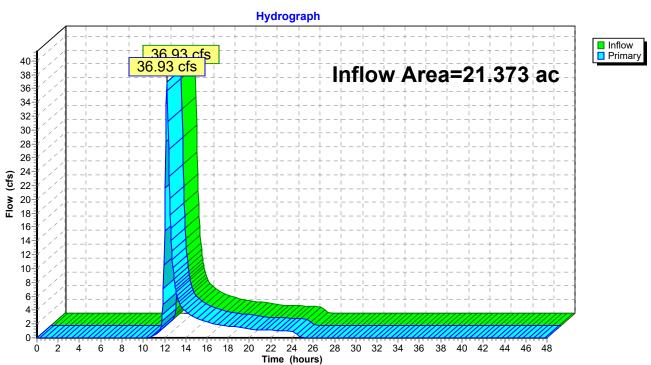


#### Link SP27:

## Summary for Link SP28:

Inflow Area =	21.373 ac,	0.53% Impervious, Inflow	Depth = 2.13"	for 100-year event
Inflow =	36.93 cfs @	12.23 hrs, Volume=	3.787 af	
Primary =	36.93 cfs @	12.23 hrs, Volume=	3.787 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

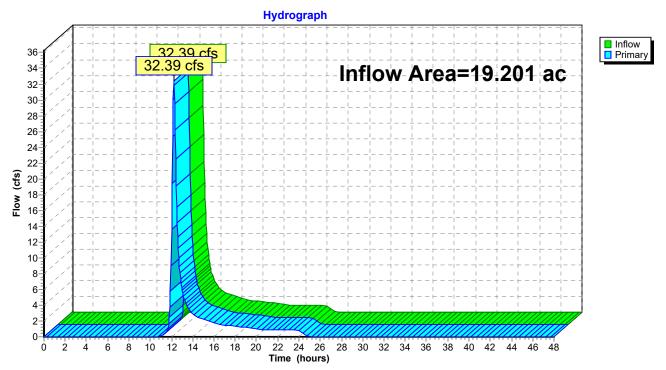


#### Link SP28:

## Summary for Link SP29:

Inflow Area	a =	19.201 ac,	1.25% Impervious, Inflov	<i>w</i> Depth = 1.90"	for 100-year event
Inflow	=	32.39 cfs @	12.22 hrs, Volume=	3.042 af	-
Primary	=	32.39 cfs @	12.22 hrs, Volume=	3.042 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

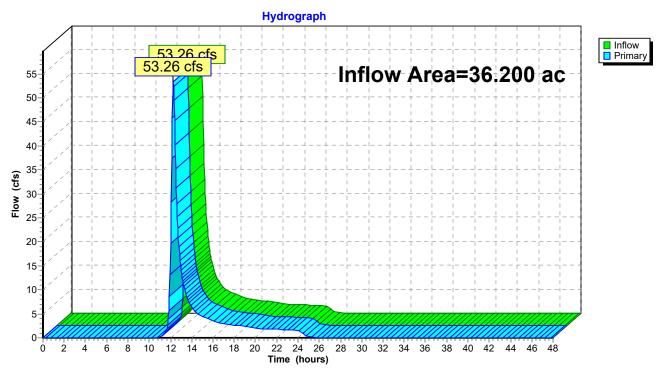


#### Link SP29:

## Summary for Link SP30:

Inflow Area	=	36.200 ac,	1.23% Impervious, Inflow	Depth = 1.98"	for 100-year event
Inflow =	=	53.26 cfs @	12.26 hrs, Volume=	5.976 af	-
Primary =	=	53.26 cfs @	12.26 hrs, Volume=	5.976 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs



#### Link SP30:

## Summary for Link SP34:

Inflow Area	a =	187.342 ac,	1.98% Impervious, Inflow	Depth > 1.73"	for 100-year event
Inflow	=	217.12 cfs @	12.21 hrs, Volume=	26.981 af	
Primary	=	217.12 cfs @	12.21 hrs, Volume=	26.981 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

#### Hydrograph Inflow Primary 217 12 cfs 217.12 cfs 240 230 Inflow Area=187.342 ac 220 210-200-190-180 170 160-150 (sj) 140 130 120 110 100 140 100-90-80 70-60-50 40-30 20 10-0-2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 Ó

Time (hours)

#### Link SP34:

## Summary for Link SP35:

Inflow Area =	54.779 ac,	2.01% Impervious, Inflo	w Depth = 2.15"	for 100-year event
Inflow =	79.38 cfs @	12.39 hrs, Volume=	9.814 af	-
Primary =	79.38 cfs @	12.39 hrs, Volume=	9.814 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

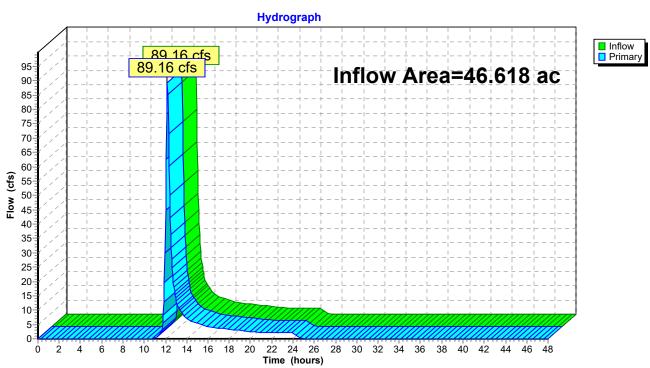
#### Hydrograph Inflow Primary 79.38 cfs 79.38 cfs 85 Inflow Area=54.779 ac 80-75 70 65 60 55 50 Flow (cfs) 45 40 35-30-25 20 15 10-5 0-8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 Time (hours) 2 4 6 Ó

#### Link SP35:

## Summary for Link SP36:

Inflow Area	a =	46.618 ac,	0.00% Impervious, Ir	nflow Depth = 1.98"	for 100-year event
Inflow	=	89.16 cfs @	12.18 hrs, Volume=	7.704 af	
Primary	=	89.16 cfs @	12.18 hrs, Volume=	7.704 af, Att	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

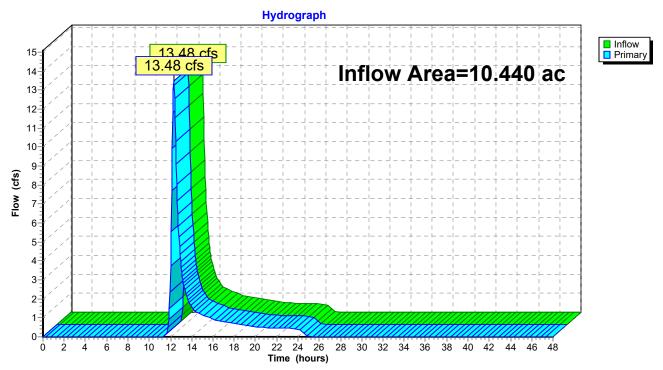


#### Link SP36:

## Summary for Link SP37:

Inflow Area	a =	10.440 ac,	5.80% Impervious, Ir	nflow Depth = 1.74"	for 100-year event
Inflow	=	13.48 cfs @	12.31 hrs, Volume=	1.515 af	
Primary	=	13.48 cfs @	12.31 hrs, Volume=	1.515 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs



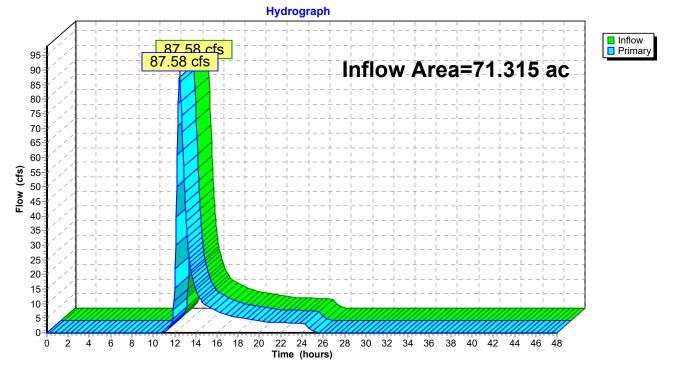
#### Link SP37:

## Summary for Link SP38:

Inflow Are	a =	71.315 ac,	1.11% Impervious, Inflow	Depth = 2.07"	for 100-year event
Inflow	=	87.58 cfs @	12.49 hrs, Volume=	12.278 af	-
Primary	=	87.58 cfs @	12.49 hrs, Volume=	12.278 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

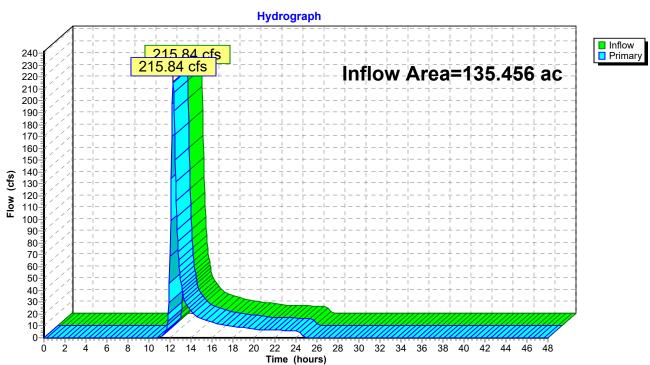
# Link SP38:



## Summary for Link SP39:

Inflow Area	a =	135.456 ac,	1.64% Impervious, Inflow	v Depth = 1.99"	for 100-year event
Inflow	=	215.84 cfs @	12.29 hrs, Volume=	22.496 af	
Primary	=	215.84 cfs @	12.29 hrs, Volume=	22.496 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

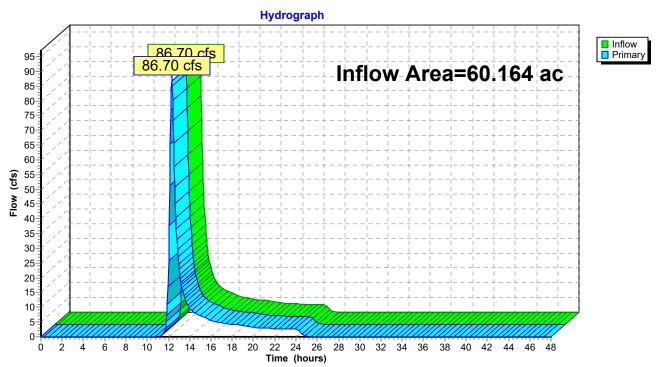


#### Link SP39:

## Summary for Link SP41:

Inflow Area	a =	60.164 ac,	0.00% Impervious,	Inflow Depth = 1.90"	for 100-year event
Inflow	=	86.70 cfs @	12.30 hrs, Volume=	= 9.532 af	
Primary	=	86.70 cfs @	12.30 hrs, Volume=	= 9.532 af, At	ten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

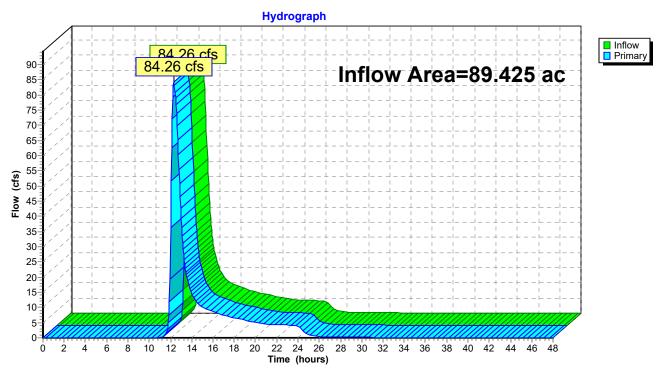


#### Link SP41:

## Summary for Link SP42:

Inflow Area	a =	89.425 ac,	0.58% Impervious,	Inflow Depth > 1	.81" for 100-year event
Inflow	=	84.26 cfs @	12.31 hrs, Volume	= 13.525 a	f
Primary	=	84.26 cfs @	12.31 hrs, Volume	= 13.525 a	f, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

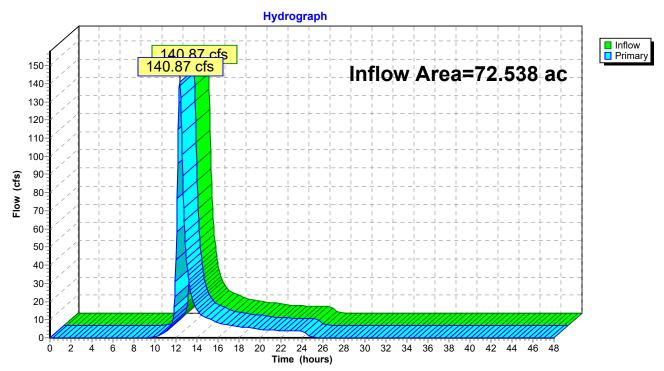


#### Link SP42:

## Summary for Link SP48:

Inflow Are	a =	72.538 ac,	2.48% Impervious, Inflo	w Depth = 2.67"	for 100-year event
Inflow	=	140.87 cfs @	12.35 hrs, Volume=	16.169 af	
Primary	=	140.87 cfs @	12.35 hrs, Volume=	16.169 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

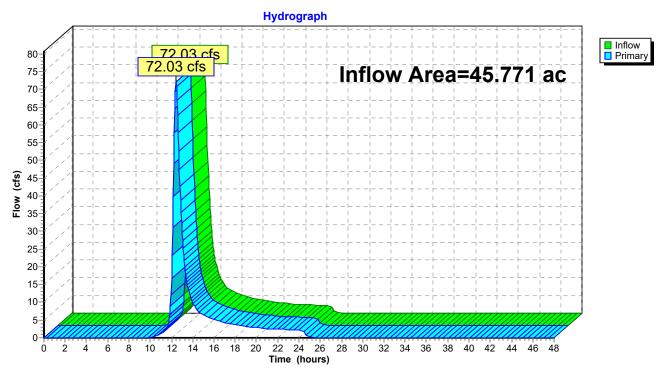


#### Link SP48:

## Summary for Link SP50:

Inflow Area	a =	45.771 ac,	1.25% Impervious, Inflo	ow Depth = 2.41"	for 100-year event
Inflow	=	72.03 cfs @	12.42 hrs, Volume=	9.184 af	
Primary	=	72.03 cfs @	12.42 hrs, Volume=	9.184 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

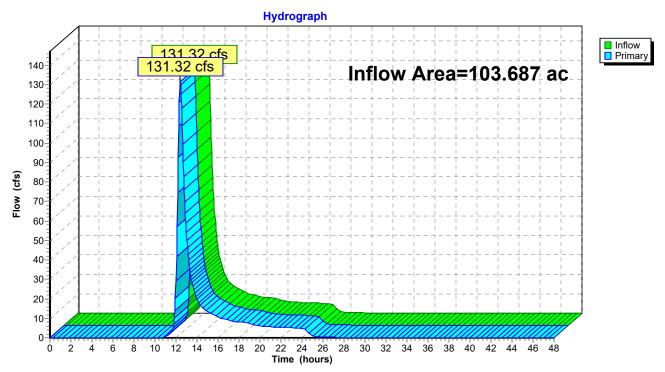


#### Link SP50:

## Summary for Link SP51:

Inflow Are	a =	103.687 ac,	0.70% Impervious, Inflow	Depth = 2.06"	for 100-year event
Inflow	=	131.32 cfs @	12.41 hrs, Volume=	17.766 af	
Primary	=	131.32 cfs @	12.41 hrs, Volume=	17.766 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

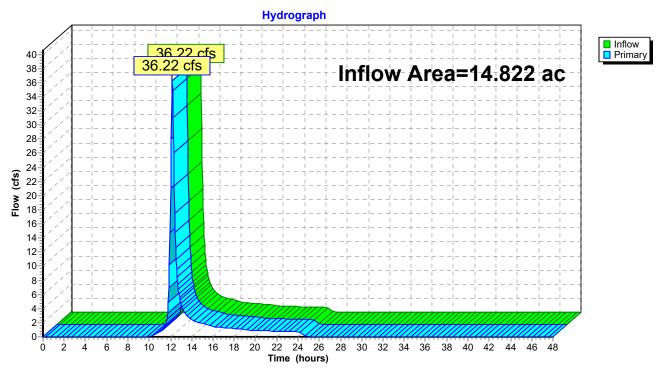


#### Link SP51:

## Summary for Link SP52:

Inflow Area	a =	14.822 ac,	2.79% Impervious,	Inflow Depth =	2.38"	for 100-year event
Inflow	=	36.22 cfs @	12.16 hrs, Volume	= 2.945	af	
Primary	=	36.22 cfs @	12.16 hrs, Volume	= 2.945	af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

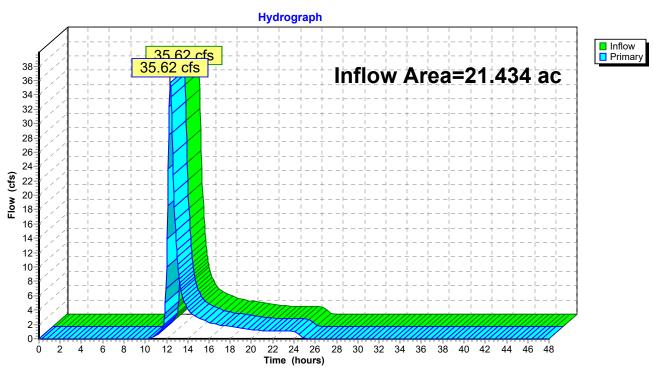


#### Link SP52:

## Summary for Link SP53:

Inflow Area	a =	21.434 ac,	1.80% Impervious, Inflow	/ Depth = 2.32"	for 100-year event
Inflow	=	35.62 cfs @	12.36 hrs, Volume=	4.145 af	-
Primary	=	35.62 cfs @	12.36 hrs, Volume=	4.145 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

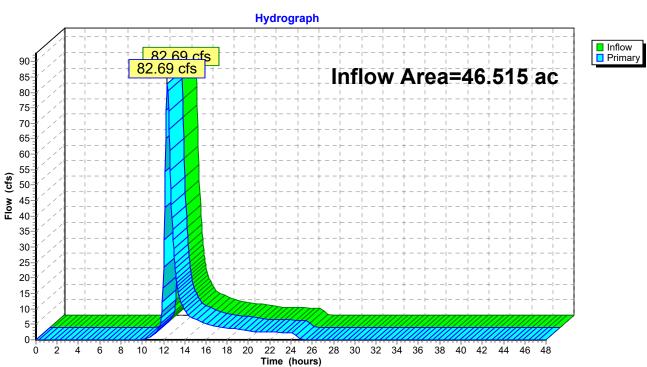


#### Link SP53:

## Summary for Link SP54:

Inflow Area =	46.515 ac,	7.79% Impervious, In	flow Depth = 2.50"	for 100-year event
Inflow =	82.69 cfs @	12.36 hrs, Volume=	9.674 af	
Primary =	82.69 cfs @	12.36 hrs, Volume=	9.674 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

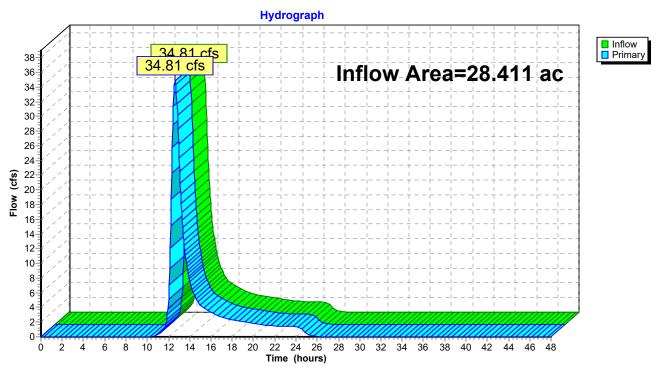


#### Link SP54:

## Summary for Link SP55:

Inflow Area	a =	28.411 ac,	0.98% Impervious, Infl	ow Depth = $2.32"$	for 100-year event
Inflow	=	34.81 cfs @	12.62 hrs, Volume=	5.495 af	
Primary	=	34.81 cfs @	12.62 hrs, Volume=	5.495 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

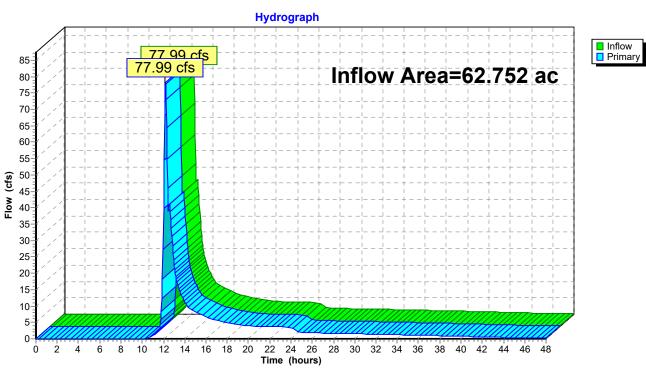


#### Link SP55:

## Summary for Link SP56:

Inflow Area	ı =	62.752 ac,	0.00% Impervious, Inflow	Depth > 2.30"	for 100-year event
Inflow	=	77.99 cfs @	12.18 hrs, Volume=	12.022 af	-
Primary	=	77.99 cfs @	12.18 hrs, Volume=	12.022 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs



#### Link SP56:

# Appendix M – SWPPP Amendments

The Owner/Operator shall have a Qualified Professional amend the SWPPP when one or more of the following occur:

- There is a significant change in design, construction, operation, or maintenance which may have a significant effect on the potential for the discharge of pollutants to the waters of the United States and which has not otherwise been addressed in the SWPPP; or
- The SWPPP proves to be ineffective in:
  - Eliminating or significantly minimizing pollutants from sources identified in the SWPPP and as required by this permit; or
  - Achieving the general objectives of controlling pollutants in stormwater discharges from permitted construction activity; and

Additionally, the SWPPP shall be amended to identify any new Contractor or Subcontractor that will implement any measure of the SWPPP.

The following information should be documented in this section:

- Dates when major grading activities occur;
- Dates when construction activities temporarily or permanently cease on a portion of the Facility Site; and
- Dates when stabilization measures (temporary and permanent) are initiated.



# AMENDMENTS TO STORMWATER POLLUTION PREVENTION PLAN

Date	Person Amending SWPPP (Name and Title)	Page(s), Figure(s), or Plan(s) Where Amendments Made	Details of Amendment



Date	Person Amending SWPPP (Name and Title)	Page(s), Figure(s), or Plan(s) Where Amendments Made	Details of Amendment

# Appendix N – SWPPP Inspection Reports

- Blank SWPPP Inspection Form -

- Completed SWPPP Inspection Reports -

Appendix N – Blank SWPPP Inspection Form



General Project Information						
Project Name:						
SPDES Permit Number:				Type of Construction		
Date of Inspection:				Activities Being		
Inspector's Name:				Completed:		
Time On Site:						
Time Off Site:				Inspection Type:		
General Project Notes:						
SWPPP Amendment	□ Yes	□ No	If yes,			
Required:			describe:			

Weather Information						
Has there been a storm event since the last inspection?	⊠ Yes	□ No				
If yes, what was the approx. amount of precipitation (inches) since the last						
inspection:						
Weather conditions at the time of inspection?	emperature:	°F				
□ Clear □ Cloudy □ Rain □ Sleet □ Snow □ Fog □	High Winds					
Does the Project Site discharge to natural surface waterbodies located within	□ Yes	□ No				
or immediately adjacent to the Project area?						
If yes, describe:						
Were there any discharges observed at the time of inspection?						
If yes, were sediment laden discharges observed?	□ Yes	□ No				
Describe:						
If yes, was erosion or sedimentation observed at the discharge location?	□ Yes	□ No				
Describe:						
Soil Condition:						
Were areas of soil disturbance observed at the time of inspection?	□ Yes	□ No				
If yes, describe:						

# Maintaining Water Quality

Water Quality Observations	Yes	No	N/A
Is there an increase in turbidity causing a substantial visual contrast to natural conditions?			
Is there residue from oil and floating substances, visible oil film, or grease or globules?			
Are all disturbances within the approved limits, as outlined on the plans?			
Have receiving waterbodies and/or wetland been impacted by the Project?			
Are the concrete washout facilities located a minimum of 100 feet from sensitive areas and properly maintained?			
Comments:			

# **General Housekeeping**

Site Conditions	Yes	No	N/A
Is construction site litter and debris appropriately managed?			
Are facilities and equipment necessary for implementation of erosion and sediment controls in working and/or properly maintained?			
Is construction impacting adjacent properties?			
Is dust adequately controlled?			
Comments:			



# **Runoff Control Practices**

Temporary Stream Crossings	Yes	No	N/A
Are the maximum necessary diameter pipes installed to span stream without dredging?			
Is non-woven geotextile fabric installed beneath the approaches?			
Is fill composed of aggregate (no earthen or soil material)?			
Is the rock on approaches clean enough to remove mud/sediment from vehicles and prevent sediment from entering the stream during high flows?			
Comments:			

Excavation Dewatering	Yes	No	N/A
Are upstream and downstream berms (sandbags, inflatable dams, etc.) are installed per the Construction Drawings?			
Is clean water from the upstream pool being pumped to the downstream pool?			
Is sediment laden water from the work area being discharged to a sediment trapping device?			
Is the water discharging from the sediment trapping device clear and free of sediment?			
Does the constructed upstream berm have a minimum of one-foot freeboard?			
Comments:			

Flow Spreader(s)	Yes	No	N/A
Is the flow spreader installed per the Construction Drawings?			
Was the flow spreader constructed on undisturbed soil, not on fill?			
Does the flow spreader receive only clear, non-sediment laden flows?			
Does the discharge from the flow spreader sheet flow out of the spreader without erosion downstream?			
Comments:			

Interceptor Dikes and Swales	Yes	No	N/A	
Is the dike/swale installed per the Construction Drawings?				
Has the dike/swale been stabilized by geotextile fabric, seed, and/or mulch?				
Was erosion observed within the dike/swale?				
Is sediment-laden runoff directed to a sediment trapping device?				
Comments:				

Stone Check Dam(s)	Yes	No	N/A
Are the check dams in good condition (rocks in place and no ponding behind the dams)?			
Has geotextile fabric been placed beneath the rock fill?			
Was sediment accumulation greater than 50% of the design capacity?			
Was erosion observed within the channel?			
Comments:			



Rock Outlet Protection	Yes	No	N/A
Is the rock outlet protection installed per approved plans?			
Was the outlet protection installed concurrently with pipe installation?			
Have the rocks been displaced?			
Is the sediment accumulation 0% of the design capacity?			
Comments:			-

## **Soil Stabilization**

Topsoil and Spoil Stockpiles	Yes	No	N/A	
Are stockpiles properly stabilized and contained?				
Are sediment control installed at the toe of the slope?				
Are idle soil stockpiles are stabilized with vegetation and/or mulch?				
Comments:				

Revegetation	Yes	No	N/A
Has temporary seed and mulch been applied to idle areas?			
Has a minimum of 4 inches of topsoil been applied under permanent seeding areas?			
Comments:			-

## **Sediment Control Practices**

Stabilized Construction Entrance(s)		No	N/A
Is the entrance installed per the Construction Drawings?			
Is the stone clean enough to effectively remove mud/sediment from vehicle tires?			
Does all traffic enter and exit the site at the stabilized construction entrance(s)?			
Is adequate drainage provided to prevent ponding at the entrance(s)?			
Comments:			

Linear Sediment Control Barriers	Yes	No	N/A
Are the sediment controls installed along the contour, 10 feet from toe of slope and not within conveyance channels?			
Are silt fence joints constructed by wrapping the two ends together for continuous support?			
Is the silt fence fabric is buried a minimum of 6 inches?			
Are the posts stable and the fabric is tight and without rips/frayed areas?			
Does the compost filter sock have good contact with the soil?			
Is the sediment accumulation 0% of the design capacity?			
Comments:			

# **TRC**

Storm Drain Inlet Protection	Yes	No	N/A
Is the inlet protection installed in accordance with the Construction Drawings?			
Is the inlet protection structurally sound?			
Are the posts stable and the fabric is tight and without rips/frayed areas?			
Is the sediment accumulation greater than 50% of the design capacity?			
Comments:			

Temporary Sediment Basin	Yes	No	N/A
Is the basin and outlet structure constructed per the Construction Drawings?			
Are the basin side slopes stabilized?			
Was the drainage structure flushed and basin surface restored upon removal of the sediment basin facility?			
Is the sediment basin dewatering at an appropriate rate?			
Is the sediment accumulation greater than 50% of the design capacity?			
Comments:			

Temporary Sediment Trap	Yes	No	N/A
Is the outlet structure constructed per the Construction Drawings?			
Has geotextile fabric been placed beneath the rock fill?			
Are the sediment trap slopes and disturbed areas are stabilized?			
Is the sediment accumulation greater than 50% of the design capacity?			
Comments:			

<u>Note:</u> Not all erosion and sediment control practices are included in this listing. Add additional pages to this list as required by site specific design. All practices shall be maintained in accordance with their respective standards.

Qualified Inspector

Qualified Inspector Signature

**Qualified Professional** 

Qualified Professional Signature

The above signed acknowledges that, to the best of his/her knowledge, all information provided in this report is accurate and complete. If there are any questions, comments, or concerns regarding the contents of this report, feel free to contact Inspector's Name at XXX-XXX or email address.



Sketch Map

Logondy	Area of Active Soil Disturbance	Area has Achieved Temporary Stabilization
Legend:	Area of Inactive Soil Disturbance	Area has Achieved Final Stabilization



# Inspection Photographs

1	2

3	4



5	6

7	8



9	10

11	12

Appendix N – Completed SWPPP Inspection Reports