

Watershed Model Schematic

Hydraflow Hydrographs by Intelisolve v9.02

1 - Entire Site


Legend

<u>Hyd.</u>	<u>Origin</u>	<u>Description</u>
1	SCS Runoff	Entire Site

Hydrograph Return Period Recap

Hydraflow Hydrographs by Intelisolve v9.02

Hyd. No.	Hydrograph type (origin)	Inflow Hyd(s)	Peak Outflow (cfs)								Hydrograph description
			1-Yr	2-Yr	3-Yr	5-Yr	10-Yr	25-Yr	50-Yr	100-Yr	
1	SCS Runoff	-----	-----	41.11	-----	-----	69.33	-----	-----	112.55	Entire Site
Proj. file: existingconditions.gpw										Monday, Mar 5, 2007	

Hydrograph Summary Report

Hydraflow Hydrographs by Intelisolve v9.02

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph description
1	SCS Runoff	41.11	2	756	296,470	----	-----	-----	Entire Site
existingconditions.gpw					Return Period: 2 Year			Monday, Mar 5, 2007	

Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.02

Monday, Mar 5, 2007

Hyd. No. 1

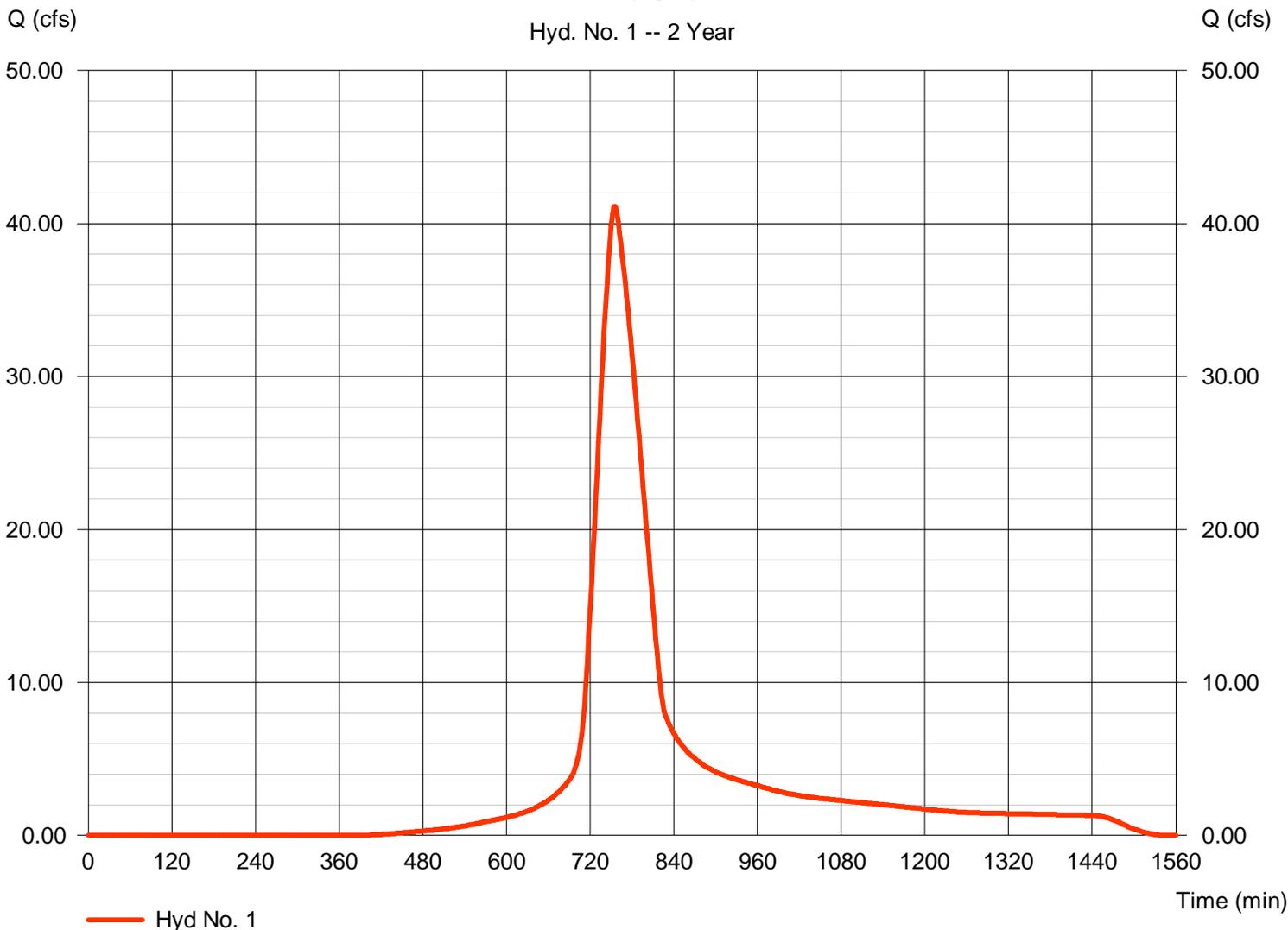
Entire Site

Hydrograph type = SCS Runoff
 Storm frequency = 2 yrs
 Time interval = 2 min
 Drainage area = 36.000 ac
 Basin Slope = 0.2 %
 Tc method = LAG
 Total precip. = 3.50 in
 Storm duration = 24 hrs

Peak discharge = 41.11 cfs
 Time to peak = 756 min
 Hyd. volume = 296,470 cuft
 Curve number = 88
 Hydraulic length = 1400 ft
 Time of conc. (Tc) = 70.80 min
 Distribution = Type II
 Shape factor = 484

Entire Site

Hyd. No. 1 -- 2 Year



Hydrograph Summary Report

Hydraflow Hydrographs by Intelisolve v9.02

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph description
1	SCS Runoff	69.33	2	754	504,323	----	-----	-----	Entire Site
existingconditions.gpw					Return Period: 10 Year			Monday, Mar 5, 2007	

Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.02

Monday, Mar 5, 2007

Hyd. No. 1

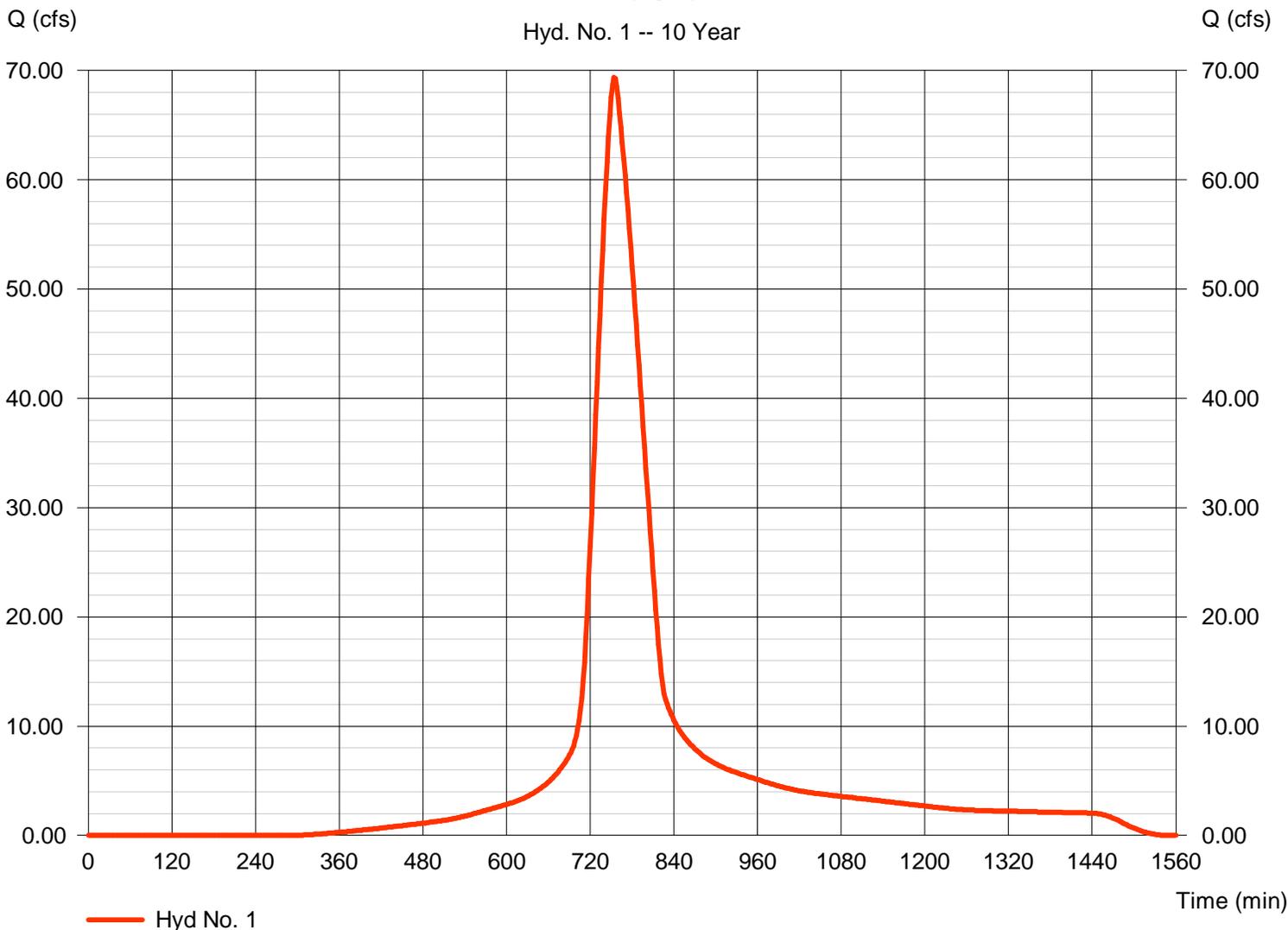
Entire Site

Hydrograph type = SCS Runoff
 Storm frequency = 10 yrs
 Time interval = 2 min
 Drainage area = 36.000 ac
 Basin Slope = 0.2 %
 Tc method = LAG
 Total precip. = 5.20 in
 Storm duration = 24 hrs

Peak discharge = 69.33 cfs
 Time to peak = 754 min
 Hyd. volume = 504,323 cuft
 Curve number = 88
 Hydraulic length = 1400 ft
 Time of conc. (Tc) = 70.80 min
 Distribution = Type II
 Shape factor = 484

Entire Site

Hyd. No. 1 -- 10 Year



Hydrograph Summary Report

Hydraflow Hydrographs by Intelisolve v9.02

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph description
1	SCS Runoff	112.55	2	754	832,795	----	-----	-----	Entire Site
existingconditions.gpw					Return Period: 100 Year			Monday, Mar 5, 2007	

Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.02

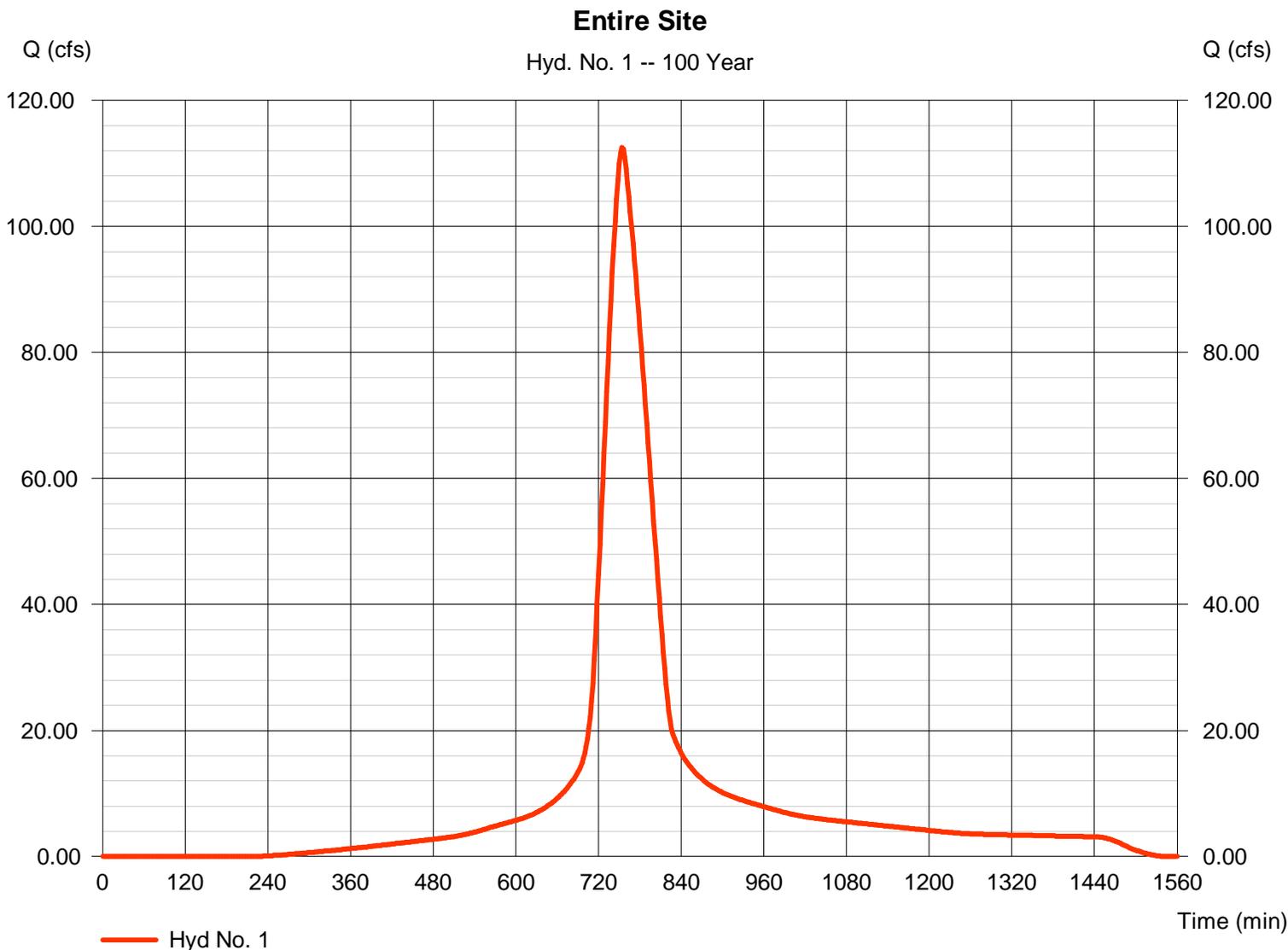
Monday, Mar 5, 2007

Hyd. No. 1

Entire Site

Hydrograph type = SCS Runoff
 Storm frequency = 100 yrs
 Time interval = 2 min
 Drainage area = 36.000 ac
 Basin Slope = 0.2 %
 Tc method = LAG
 Total precip. = 7.80 in
 Storm duration = 24 hrs

Peak discharge = 112.55 cfs
 Time to peak = 754 min
 Hyd. volume = 832,795 cuft
 Curve number = 88
 Hydraulic length = 1400 ft
 Time of conc. (Tc) = 70.80 min
 Distribution = Type II
 Shape factor = 484



Hydraflow Rainfall Report

Hydraflow Hydrographs by Intelisolve v9.02

Monday, Mar 5, 2007

Return Period (Yrs)	Intensity-Duration-Frequency Equation Coefficients (FHA)			
	B	D	E	(N/A)
1	0.0000	0.0000	0.0000	-----
2	69.8703	13.1000	0.8658	-----
3	0.0000	0.0000	0.0000	-----
5	79.2597	14.6000	0.8369	-----
10	88.2351	15.5000	0.8279	-----
25	102.6072	16.5000	0.8217	-----
50	114.8193	17.2000	0.8199	-----
100	127.1596	17.8000	0.8186	-----

File name: SampleFHA.idf

Intensity = B / (Tc + D)^E

Return Period (Yrs)	Intensity Values (in/hr)											
	5 min	10	15	20	25	30	35	40	45	50	55	60
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	5.69	4.61	3.89	3.38	2.99	2.69	2.44	2.24	2.07	1.93	1.81	1.70
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	6.57	5.43	4.65	4.08	3.65	3.30	3.02	2.79	2.59	2.42	2.27	2.15
10	7.24	6.04	5.21	4.59	4.12	3.74	3.43	3.17	2.95	2.77	2.60	2.46
25	8.25	6.95	6.03	5.34	4.80	4.38	4.02	3.73	3.48	3.26	3.07	2.91
50	9.04	7.65	6.66	5.92	5.34	4.87	4.49	4.16	3.88	3.65	3.44	3.25
100	9.83	8.36	7.30	6.50	5.87	5.36	4.94	4.59	4.29	4.03	3.80	3.60

Tc = time in minutes. Values may exceed 60.

Precip. file name: SCS_24HR.pcp

Storm Distribution	Rainfall Precipitation Table (in)							
	1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr
SCS 24-hour	0.00	3.50	0.00	3.30	5.20	5.77	6.80	7.80
SCS 6-Hr	0.00	1.80	0.00	0.00	2.60	0.00	0.00	4.00
Huff-1st	0.00	1.55	0.00	2.75	4.00	5.38	6.50	8.00
Huff-2nd	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-3rd	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-4th	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-Indy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Custom	0.00	1.75	0.00	2.80	3.90	5.25	6.00	7.10

Watershed Model Schematic	1
Hydrograph Return Period Recap	2
2 - Year	
Summary Report	3
Hydrograph Reports	4
Hydrograph No. 1, SCS Runoff, Entire Site	4
10 - Year	
Summary Report	5
Hydrograph Reports	6
Hydrograph No. 1, SCS Runoff, Entire Site	6
100 - Year	
Summary Report	7
Hydrograph Reports	8
Hydrograph No. 1, SCS Runoff, Entire Site	8
IDF Report	9