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Rainfall Events Listing (selected events)

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	2 yr	Type IA 24-hr		Default	24.00	1	3.67	2
2	10 yr	Type IA 24-hr		Default	24.00	1	5.67	2
3	50 yr	Type IA 24-hr		Default	24.00	1	7.72	2
4	100 yr	Type IA 24-hr		Default	24.00	1	8.60	2

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Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.000	HSG B	
96.280	HSG C	1S, 2S
0.000	HSG D	
0.000	Other	
96.280		TOTAL AREA

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Events for Subcatchment 1S: PRE

Event	Rainfall (inches)	Runoff (cfs)	Volume (acre-feet)	Depth (inches)
2 yr	3.67	14.03	4.751	1.18
10 yr	5.67	34.08	10.277	2.56
50 yr	7.72	57.12	16.447	4.10
100 yr	8.60	67.38	19.167	4.78

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Events for Subcatchment 2S: POST

Event	Rainfall (inches)	Runoff (cfs)	Volume (acre-feet)	Depth (inches)
2 yr	3.67	13.68	4.739	1.18
10 yr	5.67	33.39	10.259	2.56
50 yr	7.72	56.10	16.428	4.10
100 yr	8.60	66.22	19.149	4.77

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Type IA 24-hr 2 yr Rainfall=3.67"

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Summary for Subcatchment 1S: PRE

Specifications for Reaches and Subcatchments were the same for all event runs.

Runoff = 14.03 cfs @ 8.06 hrs, Volume= 4.751 af, Depth> 1.18"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.02 hrs
 Type IA 24-hr 2 yr Rainfall=3.67"

Area (ac)	CN	Description
* 15.260	74	(EXISTING Vineyard) >75% Grass cover, Good, HSG C
10.790	74	Pasture/grassland/range, Good, HSG C
9.900	72	Woods/grass comb., Good, HSG C
6.290	70	Woods, Good, HSG C
1.900	98	Water Surface, HSG C
4.000	82	Farmsteads, HSG C
48.140	75	Weighted Average
46.240		96.05% Pervious Area
1.900		3.95% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.3	100	0.2500	0.23		Sheet Flow, Sheet Woods: Light underbrush n= 0.400 P2= 3.67"
3.9	1,342	0.1300	5.80		Shallow Concentrated Flow, Shallow Concentrated Unpaved Kv= 16.1 fps
1.6	477	0.0200	4.88	4.88	Trap/Vee/Rect Channel Flow, (S) Property line ditch Bot.W=0.50' D=1.00' Z= 0.5 ' / Top.W=1.50' n= 0.022
12.8	1,919	Total			

Summary for Subcatchment 2S: POST

Runoff = 13.68 cfs @ 8.09 hrs, Volume= 4.739 af, Depth> 1.18"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.02 hrs
 Type IA 24-hr 2 yr Rainfall=3.67"

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Type IA 24-hr 2 yr Rainfall=3.67"

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Area (ac)	CN	Description
* 15.260	74	(Existing Vineyard) >75% Grass cover, Good, HSG C
3.930	74	Pasture/grassland/range, Good, HSG C
7.160	72	Woods/grass comb., Good, HSG C
6.170	70	Woods, Good, HSG C
1.900	98	Water Surface, HSG C
5.980	82	Farmsteads, HSG C
* 7.740	74	(New Vineyard) >75% Grass cover, Good, HSG C
48.140	75	Weighted Average
46.240		96.05% Pervious Area
1.900		3.95% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.3	100	0.2500	0.23		Sheet Flow, Sheet Woods: Light underbrush n= 0.400 P2= 3.67"
1.2	242	0.2400	3.43		Shallow Concentrated Flow, Shallow Concentrated Short Grass Pasture Kv= 7.0 fps
0.4	93	0.0200	4.41	88.18	Trap/Vee/Rect Channel Flow, Rolling Dip Bot.W=0.00' D=1.00' Z= 15.0 & 25.0 ' / Top.W=40.00' n= 0.030 Earth, grassed & winding
4.8	699	0.1200	2.42		Shallow Concentrated Flow, Shallow Concentrated Short Grass Pasture Kv= 7.0 fps
0.5	319	0.0800	9.77	9.77	Trap/Vee/Rect Channel Flow, (S) Property line ditch Bot.W=0.50' D=1.00' Z= 0.5 ' / Top.W=1.50' n= 0.022 Earth, clean & straight
1.6	477	0.0200	4.88	4.88	Trap/Vee/Rect Channel Flow, (S) Property line ditch Bot.W=0.50' D=1.00' Z= 0.5 ' / Top.W=1.50' n= 0.022 Earth, clean & straight
15.8	1,930	Total			

Summary for Reach R1: Stream

Inflow Area = 48.140 ac, 3.95% Impervious, Inflow Depth > 1.18" for 2 yr event
 Inflow = 14.03 cfs @ 8.06 hrs, Volume= 4.751 af
 Outflow = 14.03 cfs @ 8.06 hrs, Volume= 4.750 af, Atten= 0%, Lag= 0.1 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.02 hrs
 Max. Velocity= 2.63 fps, Min. Travel Time= 0.1 min
 Avg. Velocity = 1.63 fps, Avg. Travel Time= 0.1 min

Peak Storage= 53 cf @ 8.06 hrs
 Average Depth at Peak Storage= 0.79' , Surface Width= 7.57'
 Bank-Full Depth= 5.00' Flow Area= 55.0 sf, Capacity= 376.34 cfs

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6.00' x 5.00' deep channel, n= 0.030 Stream, clean & straight
Side Slope Z-value= 1.0 '/' Top Width= 16.00'
Length= 10.0' Slope= 0.0050 '/'
Inlet Invert= 606.00', Outlet Invert= 605.95'



Summary for Reach R2: Stream

Inflow Area = 48.140 ac, 3.95% Impervious, Inflow Depth > 1.18" for 2 yr event
Inflow = 13.68 cfs @ 8.09 hrs, Volume= 4.739 af
Outflow = 13.67 cfs @ 8.09 hrs, Volume= 4.739 af, Atten= 0%, Lag= 0.1 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.02 hrs
Max. Velocity= 2.60 fps, Min. Travel Time= 0.1 min
Avg. Velocity = 1.62 fps, Avg. Travel Time= 0.1 min

Peak Storage= 53 cf @ 8.09 hrs
Average Depth at Peak Storage= 0.77' , Surface Width= 7.55'
Bank-Full Depth= 5.00' Flow Area= 55.0 sf, Capacity= 376.34 cfs

6.00' x 5.00' deep channel, n= 0.030 Stream, clean & straight
Side Slope Z-value= 1.0 '/' Top Width= 16.00'
Length= 10.0' Slope= 0.0050 '/'
Inlet Invert= 604.00', Outlet Invert= 603.95'

