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______________________________________________________________________________
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             F L O O D    R O U T I N G    A N A L Y S I S
             USING COUNTY HYDROLOGY MANUAL OF ORANGE(1986)
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                        Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RMV PA-3 BODR 2022 - NODE 133C                                         *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL              *
* 100-YR EV NOV 2022 ROKAMOTO                                            *
 ************************************************************************

  FILE NAME: EV0033CS.DAT
  TIME/DATE OF STUDY: 16:03 11/07/2022


                       ** INPUT SUMMARY **


******************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    133.00 IS CODE =   1
------------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==============================================================================
  WATERSHED AREA =   60992.301 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.284 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.286; LOW LOSS FRACTION = 0.392
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.49; 30-MINUTE =  0.94;  1-HOUR =  1.29
    3-HOUR =  2.38;    6-HOUR =  3.53; 24-HOUR =  6.16
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.308; 30-MINUTE = 0.363;  1-HOUR = 0.408
    3-HOUR = 0.754;    6-HOUR = 0.891; 24-HOUR = 0.936
==============================================================================
```



```
 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV0033CS.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 10100.00     133.00| Subarea (UH) Added to Stream #1|       0.0     21778.2|
17.917 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
-------------------------------------+

   END OF FLOODSCx ROUTING ANALYSIS
```

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******************************************************************************

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                          Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RMV PA-3 ROMP AMENDMENT 2022 - NODE 133T                              *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL             *
* 100-YR EV OCT 2022 ROKAMOTO                                           *
 ************************************************************************

  FILE NAME: EV0033TS.DAT
  TIME/DATE OF STUDY: 09:30 10/25/2022


******************************************************************************
  FLOW PROCESS FROM NODE  13010.00 TO NODE    133.00 IS CODE =   1
------------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS)<<<<<
==============================================================================

      (UNIT-HYDROGRAPH ADDED TO STREAM #1)

         WATERSHED AREA =    6638.200 ACRES
         BASEFLOW =   0.000 CFS/SQUARE-MILE
         *USER ENTERED "LAG" TIME =    1.116 HOURS
         VALLEY(DEVELOPED) S-GRAPH SELECTED
         MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.239
         LOW LOSS FRACTION = 0.476
         *HYDROGRAPH MODEL #1 SPECIFIED*

         SPECIFIED PEAK  5-MINUTES RAINFALL(INCH)=  0.40
         SPECIFIED PEAK 30-MINUTES RAINFALL(INCH)=  0.87
         SPECIFIED PEAK  1-HOUR RAINFALL(INCH) =  1.15
         SPECIFIED PEAK  3-HOUR RAINFALL(INCH) =  1.94
         SPECIFIED PEAK  6-HOUR RAINFALL(INCH) =  2.71
         SPECIFIED PEAK 24-HOUR RAINFALL(INCH) =  4.49

         *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
           5-MINUTE FACTOR = 0.744
          30-MINUTE FACTOR = 0.744
           1-HOUR FACTOR = 0.744
           3-HOUR FACTOR = 0.959
           6-HOUR FACTOR = 0.978
          24-HOUR FACTOR = 0.987

         UNIT HYDROGRAPH TIME UNIT =   5.000 MINUTES
         UNIT INTERVAL PERCENTAGE OF LAG-TIME =   7.467
```


UNIT HYDROGRAPH DETERMINATION

INTERVAL NUMBER	"S" GRAPH MEAN VALUES	UNIT HYDROGRAPH ORDINATES(CFS)
1	0.427	342.553
2	1.280	685.106
3	2.229	762.111
4	3.509	1027.377
5	5.502	1599.999
6	8.621	2504.003
7	12.399	3032.579
8	16.865	3585.811
9	21.237	3509.774
10	26.110	3912.031
11	31.190	4078.309
12	36.907	4589.272
13	43.262	5102.404
14	50.322	5667.487
15	55.961	4527.264
16	62.428	5191.375
17	68.056	4518.263
18	72.986	3957.755
19	77.161	3351.742
20	80.533	2707.227
21	83.792	2616.664
22	86.533	2200.585
23	88.645	1695.204
24	90.357	1374.503
25	91.920	1254.656
26	93.364	1159.009
27	94.524	931.805
28	95.473	761.195
29	96.259	631.738
30	96.846	470.573
31	97.431	470.156
32	97.955	420.183
33	98.144	152.027
34	98.284	112.552
35	98.424	112.129
36	98.564	112.344
37	98.704	112.552
38	98.844	112.344
39	98.984	112.337
40	99.124	112.344
41	99.264	112.337
42	99.404	112.337
43	99.544	112.337
44	99.684	112.337
45	99.823	112.337
46	99.963	112.337
47	100.000	29.375

TOTAL SOIL-LOSS VOLUME(ACRE-FEET) = 1051.6797
TOTAL STORM RUNOFF VOLUME(ACRE-FEET) = 1397.8690

2 4 - H O U R S T O R M
R U N O F F H Y D R O G R A P H

HYDROGRAPH IN FIVE-MINUTE UNIT INTERVALS(CFS)
(Note: Time indicated is at END of Each Unit Intervals)

TIME(HRS)	VOLUME(AF)	Q(CFS)	0.	975.0	1950.0	2925.0	3900.0
0.083	0.0070	1.02	Q	.	.	.	.
0.167	0.0282	3.07	Q	.	.	.	.
0.250	0.0651	5.36	Q	.	.	.	.
0.333	0.1233	8.44	Q	.	.	.	.
0.417	0.2145	13.25	Q	.	.	.	.
0.500	0.3575	20.77	Q	.	.	.	.
0.583	0.5634	29.89	Q	.	.	.	.
0.667	0.8437	40.70	Q	.	.	.	.
0.750	1.1971	51.31	Q	.	.	.	.
0.833	1.6322	63.17	Q	.	.	.	.
0.917	2.1525	75.55	Q	.	.	.	.
1.000	2.7690	89.51	Q	.	.	.	.
1.083	3.4924	105.04	VQ	.	.	.	.
1.167	4.3348	122.32	VQ	.	.	.	.
1.250	5.2732	136.25	VQ	.	.	.	.
1.333	6.3214	152.21	VQ	.	.	.	.
1.417	7.4661	166.21	VQ	.	.	.	.
1.500	8.6961	178.60	VQ	.	.	.	.
1.583	9.9992	189.21	VQ	.	.	.	.
1.667	11.3625	197.94	V Q	.	.	.	.
1.750	12.7841	206.43	V Q	.	.	.	.
1.833	14.2560	213.71	V Q	.	.	.	.
1.917	15.7677	219.51	V Q	.	.	.	.
2.000	17.3131	224.38	V Q	.	.	.	.
2.083	18.8895	228.90	V Q	.	.	.	.
2.167	20.4954	233.17	V Q	.	.	.	.
2.250	22.1261	236.77	V Q	.	.	.	.
2.333	23.7782	239.89	V Q	.	.	.	.
2.417	25.4491	242.62	V Q	.	.	.	.
2.500	27.1357	244.90	V Q	.	.	.	.
2.583	28.8381	247.18	V Q	.	.	.	.
2.667	30.5552	249.33	V Q	.	.	.	.
2.750	32.2817	250.68	V Q	.	.	.	.
2.833	34.0168	251.94	V Q	.	.	.	.
2.917	35.7606	253.20	.VQ	.	.	.	.
3.000	37.5132	254.47	.VQ	.	.	.	.
3.083	39.2745	255.75	.VQ	.	.	.	.
3.167	41.0448	257.05	.VQ	.	.	.	.
3.250	42.8240	258.34	.VQ	.	.	.	.
3.333	44.6123	259.66	.VQ	.	.	.	.
3.417	46.4097	260.98	.VQ	.	.	.	.
3.500	48.2163	262.32	.VQ	.	.	.	.
3.583	50.0321	263.65	.VQ	.	.	.	.
3.667	51.8573	265.02	.VQ	.	.	.	.
3.750	53.6918	266.38	.VQ	.	.	.	.
3.833	55.5359	267.77	.VQ	.	.	.	.
3.917	57.3879	268.90	.VQ	.	.	.	.

4.000	59.2472	269.98	.VQ	.	.	.	.
4.083	61.1139	271.05	.VQ	.	.	.	.
4.167	62.9882	272.14	.VQ	.	.	.	.
4.250	64.8700	273.24	.VQ	.	.	.	.
4.333	66.7595	274.36	.VQ	.	.	.	.
4.417	68.6567	275.47	.VQ	.	.	.	.
4.500	70.5618	276.62	. Q	.	.	.	.
4.583	72.4747	277.76	. Q	.	.	.	.
4.667	74.3956	278.93	. Q	.	.	.	.
4.750	76.3246	280.09	. Q	.	.	.	.
4.833	78.2619	281.28	. Q	.	.	.	.
4.917	80.2073	282.47	. Q	.	.	.	.
5.000	82.1611	283.70	. Q	.	.	.	.
5.083	84.1233	284.91	. Q	.	.	.	.
5.167	86.0941	286.16	. Q	.	.	.	.
5.250	88.0735	287.41	. Q	.	.	.	.
5.333	90.0617	288.68	. Q	.	.	.	.
5.417	92.0586	289.96	. Q	.	.	.	.
5.500	94.0646	291.26	. Q	.	.	.	.
5.583	96.0795	292.57	. VQ	.	.	.	.
5.667	98.1036	293.91	. VQ	.	.	.	.
5.750	100.1370	295.24	. VQ	.	.	.	.
5.833	102.1798	296.61	. VQ	.	.	.	.
5.917	104.2319	297.98	. VQ	.	.	.	.
6.000	106.2938	299.38	. Q	.	.	.	.
6.083	108.3653	300.78	. Q	.	.	.	.
6.167	110.4467	302.22	. Q	.	.	.	.
6.250	112.5380	303.65	. Q	.	.	.	.
6.333	114.6394	305.13	. Q	.	.	.	.
6.417	116.7510	306.60	. Q	.	.	.	.
6.500	118.8729	308.11	. Q	.	.	.	.
6.583	121.0053	309.62	. Q	.	.	.	.
6.667	123.1484	311.17	. Q	.	.	.	.
6.750	125.3021	312.72	. Q	.	.	.	.
6.833	127.4667	314.31	. Q	.	.	.	.
6.917	129.6424	315.90	. Q	.	.	.	.
7.000	131.8292	317.53	. Q	.	.	.	.
7.083	134.0274	319.17	. Q	.	.	.	.
7.167	136.2370	320.85	. Q	.	.	.	.
7.250	138.4583	322.52	. Q	.	.	.	.
7.333	140.6914	324.25	. QV	.	.	.	.
7.417	142.9363	325.97	. QV	.	.	.	.
7.500	145.1935	327.74	. QV	.	.	.	.
7.583	147.4629	329.52	. QV	.	.	.	.
7.667	149.7449	331.34	. QV	.	.	.	.
7.750	152.0394	333.17	. QV	.	.	.	.
7.833	154.3469	335.04	. QV	.	.	.	.
7.917	156.6673	336.92	. QV	.	.	.	.
8.000	159.0009	338.85	. QV	.	.	.	.
8.083	161.3480	340.79	. QV	.	.	.	.
8.167	163.7087	342.78	. QV	.	.	.	.
8.250	166.0832	344.77	. QV	.	.	.	.
8.333	168.4718	346.82	. QV	.	.	.	.
8.417	170.8745	348.88	. QV	.	.	.	.
8.500	173.2919	351.00	. QV	.	.	.	.
8.583	175.7238	353.12	. Q V	.	.	.	.
8.667	178.1708	355.30	. Q V	.	.	.	.
8.750	180.6328	357.49	. Q V	.	.	.	.

8.833	183.1104	359.75	. Q V	.	.	.	.
8.917	185.6036	362.01	. Q V	.	.	.	.
9.000	188.1128	364.34	. Q V	.	.	.	.
9.083	190.6382	366.68	. Q V	.	.	.	.
9.167	193.1801	369.09	. Q V	.	.	.	.
9.250	195.7387	371.51	. Q V	.	.	.	.
9.333	198.3145	374.00	. Q V	.	.	.	.
9.417	200.9075	376.50	. Q V	.	.	.	.
9.500	203.5183	379.09	. Q V	.	.	.	.
9.583	206.1469	381.68	. Q V	.	.	.	.
9.667	208.7941	384.36	. Q V	.	.	.	.
9.750	211.4597	387.05	. Q V	.	.	.	.
9.833	214.1444	389.83	. Q V	.	.	.	.
9.917	216.8484	392.62	. Q V	.	.	.	.
10.000	219.5722	395.50	. Q V	.	.	.	.
10.083	222.3160	398.40	. Q V	.	.	.	.
10.167	225.0804	401.39	. Q V	.	.	.	.
10.250	227.8655	404.40	. Q V	.	.	.	.
10.333	230.6721	407.52	. Q V	.	.	.	.
10.417	233.5003	410.65	. Q V	.	.	.	.
10.500	236.3508	413.90	. Q V	.	.	.	.
10.583	239.2238	417.16	. Q V	.	.	.	.
10.667	242.1201	420.54	. Q V	.	.	.	.
10.750	245.0399	423.94	. Q V	.	.	.	.
10.833	247.9839	427.47	. Q V	.	.	.	.
10.917	250.9523	431.02	. Q V	.	.	.	.
11.000	253.9462	434.71	. Q V	.	.	.	.
11.083	256.9656	438.42	. Q V	.	.	.	.
11.167	260.0115	442.27	. Q V	.	.	.	.
11.250	263.0842	446.15	. Q V	.	.	.	.
11.333	266.1847	450.19	. Q V	.	.	.	.
11.417	269.3131	454.26	. Q V	.	.	.	.
11.500	272.4707	458.48	. Q V	.	.	.	.
11.583	275.6577	462.75	. Q V	.	.	.	.
11.667	278.8753	467.19	. Q V	.	.	.	.
11.750	282.1238	471.68	. Q V	.	.	.	.
11.833	285.4044	476.35	. Q V	.	.	.	.
11.917	288.7176	481.07	. Q V	.	.	.	.
12.000	292.0646	485.99	. Q V	.	.	.	.
12.083	295.4523	491.90	. Q V	.	.	.	.
12.167	298.8887	498.96	. Q V	.	.	.	.
12.250	302.3755	506.29	. Q V	.	.	.	.
12.333	305.9196	514.59	. Q V	.	.	.	.
12.417	309.5320	524.53	. Q V	.	.	.	.
12.500	313.2316	537.18	. Q V	.	.	.	.
12.583	317.0290	551.38	. Q V.	.	.	.	.
12.667	320.9366	567.38	. Q V.	.	.	.	.
12.750	324.9537	583.29	. Q V.	.	.	.	.
12.833	329.0902	600.62	. Q V.	.	.	.	.
12.917	333.3501	618.53	. Q V.	.	.	.	.
13.000	337.7453	638.19	. Q V.	.	.	.	.
13.083	342.2866	659.40	. Q V.	.	.	.	.
13.167	346.9872	682.54	. Q V.	.	.	.	.
13.250	351.8271	702.75	. Q V	.	.	.	.
13.333	356.8216	725.20	. Q V	.	.	.	.
13.417	361.9594	746.01	. Q V	.	.	.	.
13.500	367.2332	765.76	. Q V	.	.	.	.
13.583	372.6332	784.08	. Q V	.	.	.	.

13.667	378.1508	801.15	. Q V . . .
13.750	383.7859	818.22	. Q V . . .
13.833	389.5346	834.71	. Q .V . . .
13.917	395.3892	850.09	. Q .V . . .
14.000	401.3481	865.23	. Q .V . . .
14.083	407.4236	882.16	. Q.V . . .
14.167	413.6311	901.34	. Q.V . . .
14.250	419.9716	920.63	. Q. V . . .
14.333	426.4566	941.62	. Q. V . . .
14.417	433.1072	965.67	. Q. V . . .
14.500	439.9590	994.88	. Q V . . .
14.583	447.0338	1027.27	. Q V . . .
14.667	454.3570	1063.32	. Q V . . .
14.750	461.9234	1098.65	. .Q V . . .
14.833	469.7540	1136.99	. .Q V . . .
14.917	477.8595	1176.93	. . QV . . .
15.000	486.2684	1220.97	. . QV . . .
15.083	495.0063	1268.75	. . QV . . .
15.167	504.1066	1321.35	. . QV . . .
15.250	513.5391	1369.60	. . Q . . .
15.333	523.3484	1424.31	. . Q . . .
15.417	533.4922	1472.89	. . Q . . .
15.500	543.9410	1517.15	. . Q . . .
15.583	554.6876	1560.42	. . VQ . . .
15.667	565.7162	1601.35	. . Q . . .
15.750	577.0098	1639.83	. . Q . . .
15.833	588.5276	1672.38	. . VQ . . .
15.917	600.2906	1707.99	. . Q . . .
16.000	612.4019	1758.55	. . VQ . . .
16.083	625.4604	1896.10	. . V Q. . .
16.167	639.4840	2036.22	. . V Q . .
16.250	654.1524	2129.85	. . V .Q . .
16.333	669.8816	2283.88	. . V. Q . .
16.417	687.2117	2516.33	. . V. Q . .
16.500	706.5404	2806.54	. . V Q . .
16.583	727.2323	3004.47	. . V Q .
16.667	749.0294	3164.94	. . .V . Q .
16.750	771.0418	3196.20	. . . V . Q .
16.833	794.0703	3343.74	. . . V . Q .
16.917	817.8479	3452.51	. . . V . Q .
17.000	842.9398	3643.35	. . . V . Q .
17.083	868.9985	3783.73	. . . V . Q .
17.167	895.6933	3876.08	. . . V . Q.
17.250	920.4733	3598.05	. . . V . Q .
17.333	945.7007	3663.02	. . . V . Q .
17.417	969.3187	3429.33	. . . V . Q .
17.500	991.3289	3195.88	. . . V . Q .
17.583	1011.5753	2939.78	. . . V Q .
17.667	1030.1960	2703.73	. . . Q V. .
17.750	1047.9673	2580.39	. . . Q V. .
17.833	1064.3850	2383.86	. . . Q V .
17.917	1079.3196	2168.49	. . . Q V .
18.000	1093.1055	2001.71	. . Q .V .
18.083	1106.1342	1891.76	. . Q. .V .
18.167	1118.4055	1781.80	. . Q . . V .
18.250	1129.7507	1647.32	. . Q . . V .
18.333	1140.2366	1522.54	. . Q . . V .
18.417	1149.9784	1414.52	. . Q . . V .

18.500	1158.9962	1309.39	. . Q . . V .
18.583	1167.5298	1239.08	. . Q . . V .
18.667	1175.4996	1157.23	. .Q . . V .
18.750	1182.6360	1036.21	. Q . . V .
18.833	1189.3345	972.62	. Q. . . V .
18.917	1195.7305	928.69	. Q. . . V .
19.000	1201.8484	888.33	. Q. . . V .
19.083	1207.6710	845.44	. Q . . . V .
19.167	1213.2008	802.92	. Q . . . V .
19.250	1218.4878	767.67	. Q . . . V .
19.333	1223.5388	733.42	. Q . . . V .
19.417	1228.3785	702.72	. Q . . . V .
19.500	1233.0288	675.23	. Q . . . V .
19.583	1237.5017	649.46	. Q . . . V .
19.667	1241.8113	625.74	. Q . . . V .
19.750	1245.9601	602.41	. Q . . . V .
19.833	1249.9420	578.18	. Q . . . V .
19.917	1253.6549	539.11	. Q . . . V .
20.000	1257.2031	515.19	. Q . . . V .
20.083	1260.6521	500.79	. Q . . . V .
20.167	1264.0137	488.11	. Q . . . V .
20.250	1267.2887	475.54	. Q . . . V .
20.333	1270.4822	463.70	. Q . . . V .
20.417	1273.6010	452.84	. Q . . . V .
20.500	1276.6517	442.97	. Q . . . V .
20.583	1279.6376	433.55	. Q . . . V .
20.667	1282.5620	424.63	. Q . . . V .
20.750	1285.4323	416.76	. Q . . . V .
20.833	1288.2511	409.30	. Q . . . V .
20.917	1291.0236	402.56	. Q . . . V .
21.000	1293.7524	396.24	. Q . . . V .
21.083	1296.4395	390.15	. Q . . . V .
21.167	1299.0862	384.30	. Q . . . V .
21.250	1301.6941	378.66	. Q . . . V .
21.333	1304.2645	373.22	. Q . . . V .
21.417	1306.7987	367.97	. Q . . . V .
21.500	1309.2980	362.89	. Q . . . V .
21.583	1311.7634	357.98	. Q . . . V .
21.667	1314.1960	353.22	. Q . . . V .
21.750	1316.5969	348.61	. Q . . . V .
21.833	1318.9670	344.14	. Q . . . V .
21.917	1321.3088	340.03	. Q . . . V .
22.000	1323.6237	336.12	. Q . . . V .
22.083	1325.9125	332.33	. Q . . . V .
22.167	1328.1759	328.65	. Q . . . V .
22.250	1330.4147	325.08	. Q . . . V .
22.333	1332.6296	321.61	. Q . . . V .
22.417	1334.8213	318.23	. Q . . . V .
22.500	1336.9904	314.95	. Q . . . V .
22.583	1339.1375	311.75	. Q . . . V .
22.667	1341.2631	308.64	. Q . . . V .
22.750	1343.3678	305.61	. Q . . . V .
22.833	1345.4523	302.66	. Q . . . V .
22.917	1347.5168	299.78	. Q . . . V .
23.000	1349.5621	296.98	. Q . . . V .
23.083	1351.5885	294.24	. Q . . . V .
23.167	1353.5966	291.56	. Q . . . V .
23.250	1355.5865	288.95	. Q . . . V .

23.333	1357.5590	286.40	. Q	.	.	.	V .
23.417	1359.5143	283.91	. Q	.	.	.	V .
23.500	1361.4528	281.47	. Q	.	.	.	V .
23.583	1363.3749	279.09	. Q	.	.	.	V.
23.667	1365.2810	276.76	. Q	.	.	.	V.
23.750	1367.1714	274.49	. Q	.	.	.	V.
23.833	1369.0464	272.25	. Q	.	.	.	V.
23.917	1370.9064	270.07	. Q	.	.	.	V.
24.000	1372.7516	267.93	. Q	.	.	.	V.
24.083	1374.5754	264.82	. Q	.	.	.	V.
24.167	1376.3711	260.73	. Q	.	.	.	V.
24.250	1378.1375	256.47	. Q	.	.	.	V.
24.333	1379.8693	251.47	. Q	.	.	.	V.
24.417	1381.5553	244.82	. Q	.	.	.	V.
24.500	1383.1775	235.54	. Q	.	.	.	V.
24.583	1384.7255	224.77	. Q	.	.	.	V.
24.667	1386.1886	212.45	. Q	.	.	.	V.
24.750	1387.5691	200.45	. Q	.	.	.	V.
24.833	1388.8594	187.35	.Q	.	.	.	V.
24.917	1390.0566	173.85	.Q	.	.	.	V.
25.000	1391.1512	158.93	.Q	.	.	.	V.
25.083	1392.1333	142.60	.Q	.	.	.	V.
25.167	1392.9922	124.70	.Q	.	.	.	V.
25.250	1393.7521	110.33	.Q	.	.	.	V.
25.333	1394.4000	94.09	Q	.	.	.	V.
25.417	1394.9507	79.96	Q	.	.	.	V.
25.500	1395.4163	67.60	Q	.	.	.	V.
25.583	1395.8098	57.14	Q	.	.	.	V.
25.667	1396.1450	48.67	Q	.	.	.	V.
25.750	1396.4242	40.53	Q	.	.	.	V.
25.833	1396.6562	33.69	Q	.	.	.	V.
25.917	1396.8518	28.40	Q	.	.	.	V.
26.000	1397.0178	24.10	Q	.	.	.	V.
26.083	1397.1569	20.20	Q	.	.	.	V.
26.167	1397.2712	16.60	Q	.	.	.	V.
26.250	1397.3656	13.71	Q	.	.	.	V.
26.333	1397.4437	11.34	Q	.	.	.	V.
26.417	1397.5083	9.38	Q	.	.	.	V.
26.500	1397.5627	7.91	Q	.	.	.	V.
26.583	1397.6072	6.45	Q	.	.	.	V.
26.667	1397.6427	5.16	Q	.	.	.	V.
26.750	1397.6748	4.67	Q	.	.	.	V.
26.833	1397.7045	4.30	Q	.	.	.	V.
26.917	1397.7316	3.93	Q	.	.	.	V.
27.000	1397.7562	3.57	Q	.	.	.	V.
27.083	1397.7783	3.21	Q	.	.	.	V.
27.167	1397.7980	2.85	Q	.	.	.	V.
27.250	1397.8152	2.50	Q	.	.	.	V.
27.333	1397.8300	2.15	Q	.	.	.	V.
27.417	1397.8424	1.80	Q	.	.	.	V.
27.500	1397.8524	1.45	Q	.	.	.	V.
27.583	1397.8601	1.11	Q	.	.	.	V.
27.667	1397.8654	0.77	Q	.	.	.	V.
27.750	1397.8683	0.43	Q	.	.	.	V.
27.833	1397.8689	0.09	Q	.	.	.	V.

TIME DURATION(minutes) OF PERCENTILES OF ESTIMATED PEAK FLOW RATE:
(Note: 100% of Peak Flow Rate estimate assumed to have

an instantaneous time duration)

Percentile of Estimated Peak Flow Rate	Duration (minutes)
0%	1670.0
10%	680.0
20%	340.0
30%	225.0
40%	165.0
50%	115.0
60%	90.0
70%	70.0
80%	55.0
90%	25.0

END OF FLOODSCx ROUTING ANALYSIS

```
*****************************************************************************

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                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RMV PA-3 BODR 2022 - NODE 133U                                        *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL             *
* 100-YR EV NOV 2022 ROKAMOTO                                           *
 ************************************************************************

  FILE NAME: EV0033US.DAT
  TIME/DATE OF STUDY: 16:04 11/07/2022


                        ** INPUT SUMMARY **


*****************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    133.00 IS CODE =   1
-----------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
=============================================================================
  WATERSHED AREA =   54354.000 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.284 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.292; LOW LOSS FRACTION = 0.382
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.50; 30-MINUTE =  0.94;  1-HOUR =  1.31
    3-HOUR =  2.44;    6-HOUR =  3.63; 24-HOUR =  6.36
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.328; 30-MINUTE = 0.381;  1-HOUR = 0.422
    3-HOUR = 0.771;    6-HOUR = 0.897; 24-HOUR = 0.940
=============================================================================
```



```
 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV0033US.DAT   ]
Page:   1 of    |
 +-------------------+---------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                 | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+---------------------------------+----------------------+-
-----------+-------------+-----------+
 | 10100.00     133.00| Subarea (UH) Added to Stream #1|       0.0     20596.9|
18.333 |             |           |
 +-------------------+---------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
-------------------------------------+

   END OF FLOODSCx ROUTING ANALYSIS
```

```
****************************************************************************

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             Ver. 17.0  Release Date: 07/01/2010  License ID 1527

                          Analysis prepared by:




 ************************** DESCRIPTION OF STUDY **************************
* RMV PA-3 ROMP AMENDMENT 2022 - NODE 134C                                 *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL                *
* 100-YR EV AUG 2023 ROKAMOTO                                              *
 **************************************************************************

  FILE NAME: EV0034CS.DAT
  TIME/DATE OF STUDY: 06:48 08/10/2023


                         ** INPUT SUMMARY **


****************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    134.00 IS CODE =   1
----------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
============================================================================
  WATERSHED AREA =   66557.602 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.377 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.285; LOW LOSS FRACTION = 0.393
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.48; 30-MINUTE =  0.93;  1-HOUR =  1.28
    3-HOUR =  2.35;    6-HOUR =  3.46; 24-HOUR =  6.02
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.294; 30-MINUTE = 0.352;  1-HOUR = 0.397
    3-HOUR = 0.741;    6-HOUR = 0.887; 24-HOUR = 0.933
============================================================================
```



```
 +--------------------------------------------------------------------------------
-----------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV0034CS.DAT   ]
Page:   1 of    |
 +--------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +--------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 10100.00     134.00| Subarea (UH) Added to Stream #1|       0.0     22875.8|
18.000 |             |           |
 +--------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                          |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                  |
 +--------------------------------------------------------------------------------
-----------------------------------+


   END OF FLOODSCx ROUTING ANALYSIS
```

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******************************************************************************

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                          Analysis prepared by:

                        Michael Baker International
                      5 Hutton Centre Drive, Suite 500
                           Santa Ana, CA 92707


 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO - SINGLE AREA UH                                 *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL             *
* 100-YR EV SEPTEMBER 2018 CCHIU                                        *
 ************************************************************************

  FILE NAME: EV0034TS.DAT
  TIME/DATE OF STUDY: 09:27 09/27/2018


******************************************************************************
  FLOW PROCESS FROM NODE  13500.00 TO NODE    134.00 IS CODE =   1
------------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS)<<<<<
==============================================================================

      (UNIT-HYDROGRAPH ADDED TO STREAM #1)

         WATERSHED AREA =    3859.700 ACRES
         BASEFLOW =   0.000 CFS/SQUARE-MILE
         *USER ENTERED "LAG" TIME =    1.252 HOURS
         VALLEY(DEVELOPED) S-GRAPH SELECTED
         MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.284
         LOW LOSS FRACTION = 0.408
         *HYDROGRAPH MODEL #1 SPECIFIED*

         SPECIFIED PEAK  5-MINUTES RAINFALL(INCH)=  0.40
         SPECIFIED PEAK 30-MINUTES RAINFALL(INCH)=  0.87
         SPECIFIED PEAK  1-HOUR RAINFALL(INCH) =  1.15
         SPECIFIED PEAK  3-HOUR RAINFALL(INCH) =  1.94
         SPECIFIED PEAK  6-HOUR RAINFALL(INCH) =  2.71
         SPECIFIED PEAK 24-HOUR RAINFALL(INCH) =  4.49

         *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
           5-MINUTE FACTOR = 0.828
          30-MINUTE FACTOR = 0.828
           1-HOUR FACTOR = 0.828
           3-HOUR FACTOR = 0.974
           6-HOUR FACTOR = 0.987
          24-HOUR FACTOR = 0.992

         UNIT HYDROGRAPH TIME UNIT =   5.000 MINUTES
         UNIT INTERVAL PERCENTAGE OF LAG-TIME =   6.656
```


UNIT HYDROGRAPH DETERMINATION

INTERVAL NUMBER	"S" GRAPH MEAN VALUES	UNIT HYDROGRAPH ORDINATES(CFS)
1	0.380	177.538
2	1.141	355.076
3	1.929	367.811
4	3.008	503.662
5	4.367	634.172
6	6.601	1043.107
7	9.721	1456.072
8	13.136	1594.051
9	17.221	1906.742
10	21.055	1789.901
11	25.499	2074.514
12	29.756	1987.148
13	35.003	2449.106
14	40.040	2351.261
15	46.242	2894.908
16	52.299	2827.075
17	57.131	2255.431
18	63.106	2789.185
19	68.001	2284.925
20	72.435	2069.620
21	76.349	1827.030
22	79.387	1418.168
23	82.406	1408.955
24	85.105	1260.105
25	87.323	1035.196
26	89.054	808.030
27	90.554	700.127
28	91.941	647.638
29	93.228	600.583
30	94.328	513.506
31	95.176	395.781
32	95.976	373.655
33	96.535	260.795
34	97.057	243.673
35	97.579	243.673
36	98.005	199.018
37	98.149	67.048
38	98.274	58.145
39	98.399	58.351
40	98.523	58.074
41	98.648	58.351
42	98.773	58.212
43	98.898	58.212
44	99.023	58.351
45	99.147	58.212
46	99.272	58.212
47	99.397	58.212
48	99.521	58.212

49	99.646	58.212
50	99.771	58.212
51	99.896	58.212
52	100.000	48.775

TOTAL SOIL-LOSS VOLUME(ACRE-FEET) = 535.3984

TOTAL STORM RUNOFF VOLUME(ACRE-FEET) = 897.1114

==========

2 4 - H O U R S T O R M
R U N O F F H Y D R O G R A P H

==========

HYDROGRAPH IN FIVE-MINUTE UNIT INTERVALS(CFS)

(Note: Time indicated is at END of Each Unit Intervals)

TIME(HRS)	VOLUME(AF)	Q(CFS)	0.	600.0	1200.0	1800.0	2400.0
0.083	0.0041	0.60	Q	.	.	.	.
0.167	0.0165	1.80	Q	.	.	.	.
0.250	0.0375	3.04	Q	.	.	.	.
0.333	0.0702	4.75	Q	.	.	.	.
0.417	0.1178	6.91	Q	.	.	.	.
0.500	0.1897	10.45	Q	.	.	.	.
0.583	0.2957	15.39	Q	.	.	.	.
0.667	0.4391	20.82	Q	.	.	.	.
0.750	0.6273	27.32	Q	.	.	.	.
0.833	0.8576	33.44	Q	.	.	.	.
0.917	1.1369	40.55	Q	.	.	.	.
1.000	1.4632	47.39	Q	.	.	.	.
1.083	1.8476	55.81	Q	.	.	.	.
1.167	2.2878	63.92	VQ	.	.	.	.
1.250	2.7968	73.90	VQ	.	.	.	.
1.333	3.3731	83.68	VQ	.	.	.	.
1.417	4.0037	91.57	VQ	.	.	.	.
1.500	4.7013	101.29	VQ	.	.	.	.
1.583	5.4543	109.34	VQ	.	.	.	.
1.667	6.2580	116.69	VQ	.	.	.	.
1.750	7.1068	123.25	V Q	.	.	.	.
1.833	7.9915	128.46	V Q	.	.	.	.
1.917	8.9120	133.65	V Q	.	.	.	.
2.000	9.8649	138.37	V Q	.	.	.	.
2.083	10.8452	142.34	V Q	.	.	.	.
2.167	11.8477	145.56	V Q	.	.	.	.
2.250	12.8700	148.43	V Q	.	.	.	.
2.333	13.9109	151.14	V Q	.	.	.	.
2.417	14.9695	153.70	V Q	.	.	.	.
2.500	16.0437	155.98	V Q	.	.	.	.
2.583	17.1311	157.88	V Q	.	.	.	.
2.667	18.2309	159.70	V Q	.	.	.	.
2.750	19.3409	161.16	V Q	.	.	.	.
2.833	20.4605	162.57	V Q	.	.	.	.
2.917	21.5899	163.99	V Q	.	.	.	.
3.000	22.7280	165.26	.VQ	.	.	.	.
3.083	23.8720	166.10	.VQ	.	.	.	.
3.167	25.0215	166.91	.VQ	.	.	.	.
3.250	26.1767	167.73	.VQ	.	.	.	.
3.333	27.3375	168.56	.VQ	.	.	.	.
3.417	28.5042	169.39	.VQ	.	.	.	.
3.500	29.6766	170.23	.VQ	.	.	.	.
3.583	30.8548	171.08	.VQ	.	.	.	.
3.667	32.0390	171.94	.VQ	.	.	.	.
3.750	33.2290	172.80	.VQ	.	.	.	.
3.833	34.4251	173.67	.VQ	.	.	.	.
3.917	35.6272	174.55	.VQ	.	.	.	.

4.000	36.8354	175.43	.VQ	.	.	.	.
4.083	38.0498	176.33	.VQ	.	.	.	.
4.167	39.2704	177.22	.VQ	.	.	.	.
4.250	40.4972	178.13	.VQ	.	.	.	.
4.333	41.7301	179.02	.VQ	.	.	.	.
4.417	42.9680	179.75	.VQ	.	.	.	.
4.500	44.2110	180.48	.V Q	.	.	.	.
4.583	45.4591	181.23	. VQ	.	.	.	.
4.667	46.7124	181.98	. VQ	.	.	.	.
4.750	47.9709	182.74	. VQ	.	.	.	.
4.833	49.2348	183.51	. VQ	.	.	.	.
4.917	50.5039	184.28	. VQ	.	.	.	.
5.000	51.7785	185.07	. VQ	.	.	.	.
5.083	53.0586	185.86	. VQ	.	.	.	.
5.167	54.3441	186.66	. VQ	.	.	.	.
5.250	55.6353	187.48	. VQ	.	.	.	.
5.333	56.9321	188.30	. VQ	.	.	.	.
5.417	58.2347	189.13	. VQ	.	.	.	.
5.500	59.5430	189.97	. VQ	.	.	.	.
5.583	60.8572	190.82	. VQ	.	.	.	.
5.667	62.1773	191.68	. VQ	.	.	.	.
5.750	63.5034	192.55	. VQ	.	.	.	.
5.833	64.8355	193.43	. VQ	.	.	.	.
5.917	66.1738	194.32	. VQ	.	.	.	.
6.000	67.5183	195.22	. Q	.	.	.	.
6.083	68.8691	196.13	. Q	.	.	.	.
6.167	70.2262	197.05	. Q	.	.	.	.
6.250	71.5898	197.99	. Q	.	.	.	.
6.333	72.9598	198.94	. Q	.	.	.	.
6.417	74.3365	199.90	. Q	.	.	.	.
6.500	75.7199	200.86	. Q	.	.	.	.
6.583	77.1100	201.85	. Q	.	.	.	.
6.667	78.5070	202.84	. Q	.	.	.	.
6.750	79.9109	203.85	. Q	.	.	.	.
6.833	81.3219	204.87	. Q	.	.	.	.
6.917	82.7399	205.91	. Q	.	.	.	.
7.000	84.1652	206.95	. Q	.	.	.	.
7.083	85.5978	208.01	. Q	.	.	.	.
7.167	87.0378	209.09	. Q	.	.	.	.
7.250	88.4854	210.18	. Q	.	.	.	.
7.333	89.9405	211.28	. QV	.	.	.	.
7.417	91.4034	212.41	. QV	.	.	.	.
7.500	92.8740	213.54	. QV	.	.	.	.
7.583	94.3526	214.70	. QV	.	.	.	.
7.667	95.8393	215.86	. QV	.	.	.	.
7.750	97.3341	217.05	. QV	.	.	.	.
7.833	98.8372	218.25	. QV	.	.	.	.
7.917	100.3487	219.47	. QV	.	.	.	.
8.000	101.8687	220.70	. QV	.	.	.	.
8.083	103.3974	221.96	. QV	.	.	.	.
8.167	104.9348	223.23	. QV	.	.	.	.
8.250	106.4812	224.53	. QV	.	.	.	.
8.333	108.0365	225.84	. QV	.	.	.	.
8.417	109.6011	227.18	. QV	.	.	.	.
8.500	111.1750	228.53	. QV	.	.	.	.
8.583	112.7584	229.90	. Q V	.	.	.	.
8.667	114.3513	231.30	. Q V	.	.	.	.
8.750	115.9541	232.72	. Q V	.	.	.	.

8.833	117.5667	234.16	. Q V	.	.	.	.
8.917	119.1895	235.63	. Q V	.	.	.	.
9.000	120.8225	237.11	. Q V	.	.	.	.
9.083	122.4659	238.63	. Q V	.	.	.	.
9.167	124.1199	240.16	. QV	.	.	.	.
9.250	125.7848	241.73	. QV	.	.	.	.
9.333	127.4605	243.32	. QV	.	.	.	.
9.417	129.1475	244.94	. QV	.	.	.	.
9.500	130.8457	246.59	. QV	.	.	.	.
9.583	132.5556	248.27	. QV	.	.	.	.
9.667	134.2771	249.97	. QV	.	.	.	.
9.750	136.0107	251.71	. Q V	.	.	.	.
9.833	137.7564	253.48	. Q V	.	.	.	.
9.917	139.5145	255.28	. Q V	.	.	.	.
10.000	141.2853	257.11	. Q V	.	.	.	.
10.083	143.0690	258.99	. Q V	.	.	.	.
10.167	144.8658	260.89	. Q V	.	.	.	.
10.250	146.6759	262.84	. Q V	.	.	.	.
10.333	148.4997	264.82	. Q V	.	.	.	.
10.417	150.3375	266.84	. Q V	.	.	.	.
10.500	152.1894	268.90	. Q V	.	.	.	.
10.583	154.0558	271.01	. Q V	.	.	.	.
10.667	155.9370	273.15	. Q V	.	.	.	.
10.750	157.8333	275.34	. Q V	.	.	.	.
10.833	159.7450	277.58	. Q V	.	.	.	.
10.917	161.6725	279.87	. Q V	.	.	.	.
11.000	163.6160	282.20	. Q V	.	.	.	.
11.083	165.5760	284.59	. Q V	.	.	.	.
11.167	167.5528	287.03	. Q V	.	.	.	.
11.250	169.5468	289.53	. Q V	.	.	.	.
11.333	171.5583	292.08	. Q V	.	.	.	.
11.417	173.5879	294.69	. Q V	.	.	.	.
11.500	175.6358	297.36	. Q V	.	.	.	.
11.583	177.7027	300.11	. Q V	.	.	.	.
11.667	179.7888	302.91	. Q V	.	.	.	.
11.750	181.8948	305.79	. Q V	.	.	.	.
11.833	184.0210	308.73	. Q V	.	.	.	.
11.917	186.1682	311.76	. Q V	.	.	.	.
12.000	188.3366	314.86	. Q V	.	.	.	.
12.083	190.5306	318.57	. Q V	.	.	.	.
12.167	192.7542	322.87	. Q V	.	.	.	.
12.250	195.0085	327.32	. Q V	.	.	.	.
12.333	197.2968	332.25	. Q V	.	.	.	.
12.417	199.6224	337.68	. Q V	.	.	.	.
12.500	201.9943	344.40	. Q V.	.	.	.	.
12.583	204.4218	352.47	. Q V.	.	.	.	.
12.667	206.9083	361.04	. Q V.	.	.	.	.
12.750	209.4613	370.68	. Q V.	.	.	.	.
12.833	212.0790	380.10	. Q V.	.	.	.	.
12.917	214.7686	390.52	. Q V.	.	.	.	.
13.000	217.5290	400.81	. Q V.	.	.	.	.
13.083	220.3709	412.64	. Q V.	.	.	.	.
13.167	223.2933	424.33	. Q V.	.	.	.	.
13.250	226.3086	437.83	. Q V	.	.	.	.
13.333	229.4166	451.28	. Q V	.	.	.	.
13.417	232.6073	463.29	. Q V	.	.	.	.
13.500	235.8927	477.04	. Q V	.	.	.	.
13.583	239.2643	489.56	. Q V	.	.	.	.

13.667	242.7192	501.65	. Q V . . .
13.750	246.2544	513.31	. Q V . . .
13.833	249.8631	523.99	. Q .V . . .
13.917	253.5473	534.94	. Q .V . . .
14.000	257.3056	545.70	. Q.V . . .
14.083	261.1405	556.83	. Q.V . . .
14.167	265.0540	568.24	. Q.V . . .
14.250	269.0469	579.77	. Q.V . . .
14.333	273.1238	591.97	. Q. V . . .
14.417	277.2903	604.97	. Q V . . .
14.500	281.5577	619.63	. Q V . . .
14.583	285.9380	636.02	. Q V . . .
14.667	290.4371	653.27	. Q V . . .
14.750	295.0648	671.95	. .Q V . . .
14.833	299.8211	690.61	. .Q V . . .
14.917	304.7179	711.02	. .Q V . . .
15.000	309.7560	731.53	. . QV . . .
15.083	314.9504	754.22	. . Q V . . .
15.167	320.3032	777.22	. . Q V . . .
15.250	325.8354	803.28	. . QV . . .
15.333	331.5514	829.97	. . QV . . .
15.417	337.4321	853.88	. . QV . . .
15.500	343.4871	879.20	. . QV . . .
15.583	349.7144	904.19	. . Q . . .
15.667	356.1106	928.74	. . Q . . .
15.750	362.6815	954.09	. . QV . . .
15.833	369.4125	977.34	. . Q . . .
15.917	376.3256	1003.78	. . Q . . .
16.000	383.4937	1040.81	. . Q . . .
16.083	391.2191	1121.74	. . VQ . . .
16.167	399.5064	1203.32	. . V Q . . .
16.250	408.1027	1248.17	. . V Q . . .
16.333	417.2780	1332.26	. . V . Q . . .
16.417	427.1247	1429.75	. . V. Q . . .
16.500	438.1202	1596.54	. . V. Q . . .
16.583	450.1648	1748.87	. . V Q. . .
16.667	462.7190	1822.87	. . V Q . . .
16.750	476.0012	1928.58	. . .V . Q . . .
16.833	489.2701	1926.65	. . .V . Q . . .
16.917	503.2140	2024.65	. . . V . Q . . .
17.000	517.2858	2043.22	. . . V . Q . . .
17.083	532.3265	2183.91	. . . V . Q . . .
17.167	547.4509	2196.07	. . . V . Q . . .
17.250	563.4478	2322.74	. . . V . Q .
17.333	579.1493	2279.86	. . . V . Q .
17.417	593.7769	2123.92	. . . V . Q . . .
17.500	608.9361	2201.12	. . . V . Q . . .
17.583	622.9021	2027.87	. . . V . Q . . .
17.667	636.0478	1908.76	. . . V .Q . . .
17.750	648.2881	1777.29	. . . VQ. . .
17.833	659.4803	1625.11	. . . Q V. . .
17.917	670.2600	1565.21	. . . Q V. . .
18.000	680.3819	1469.70	. . . Q V . . .
18.083	689.7010	1353.13	. . . Q V . . .
18.167	698.2460	1240.74	. . Q .V . . .
18.250	706.2614	1163.82	. . Q. .V . . .
18.333	713.8691	1104.64	. . Q . .V . . .
18.417	721.0858	1047.87	. . Q . . V . . .

18.500	727.8182	977.55	. . Q . . V . .
18.583	734.0383	903.16	. . Q . . V . .
18.667	739.9171	853.59	. . Q . . V . .
18.750	745.3404	787.46	. . Q . . V . .
18.833	750.4962	748.62	. . Q . . V . .
18.917	755.3957	711.40	. .Q . . V . .
19.000	759.9630	663.17	. .Q . . V . .
19.083	764.0795	597.73	. Q. . . V . .
19.167	767.9896	567.75	. Q. . . V . .
19.250	771.7277	542.77	. Q. . . V . .
19.333	775.3054	519.49	. Q . . . V . .
19.417	778.7357	498.08	. Q . . . V . .
19.500	782.0157	476.26	. Q . . . V . .
19.583	785.1647	457.22	. Q . . . V . .
19.667	788.1931	439.72	. Q . . . V . .
19.750	791.1157	424.37	. Q . . . V . .
19.833	793.9451	410.82	. Q . . . V . .
19.917	796.6838	397.66	. Q . . . V . .
20.000	799.3381	385.41	. Q . . . V . .
20.083	801.9162	374.33	. Q . . . V . .
20.167	804.4220	363.84	. Q . . . V . .
20.250	806.8499	352.52	. Q . . . V . .
20.333	809.1788	338.16	. Q . . . V .
20.417	811.3564	316.20	. Q . . . V .
20.500	813.4751	307.62	. Q . . . V .
20.583	815.5457	300.66	. Q . . . V .
20.667	817.5717	294.17	. Q . . . V .
20.750	819.5544	287.89	. Q . . . V .
20.833	821.4964	281.97	. Q . . . V .
20.917	823.3995	276.32	. Q . . . V .
21.000	825.2662	271.04	. Q . . . V .
21.083	827.1006	266.36	. Q . . . V .
21.167	828.9042	261.89	. Q . . . V .
21.250	830.6783	257.60	. Q . . . V .
21.333	832.4243	253.51	. Q . . . V .
21.417	834.1443	249.75	. Q . . . V .
21.500	835.8394	246.13	. Q . . . V .
21.583	837.5105	242.64	. Q . . . V .
21.667	839.1584	239.28	. Q . . . V .
21.750	840.7840	236.03	. Q . . . V .
21.833	842.3879	232.89	. Q . . . V .
21.917	843.9708	229.85	. Q . . . V .
22.000	845.5335	226.90	. Q . . . V .
22.083	847.0765	224.04	. Q . . . V .
22.167	848.6005	221.27	. Q . . . V .
22.250	850.1059	218.58	. Q . . . V .
22.333	851.5935	216.00	. Q . . . V .
22.417	853.0648	213.63	. Q . . . V .
22.500	854.5202	211.33	. Q . . . V .
22.583	855.9602	209.09	. Q . . . V .
22.667	857.3853	206.92	. Q . . . V .
22.750	858.7957	204.80	. Q . . . V .
22.833	860.1920	202.74	. Q . . . V .
22.917	861.5745	200.74	. Q . . . V .
23.000	862.9436	198.79	. Q . . . V .
23.083	864.2996	196.88	. Q . . . V .
23.167	865.6427	195.03	. Q . . . V .
23.250	866.9734	193.22	. Q . . . V .

23.333	868.2919	191.45	.	Q	.	.	.	V .
23.417	869.5986	189.73	.	Q	.	.	.	V .
23.500	870.8936	188.04	.	Q	.	.	.	V .
23.583	872.1774	186.40	.	Q	.	.	.	V .
23.667	873.4500	184.79	.	Q	.	.	.	V .
23.750	874.7119	183.22	.	Q	.	.	.	V.
23.833	875.9631	181.68	.	Q	.	.	.	V.
23.917	877.2040	180.18	.	Q	.	.	.	V.
24.000	878.4348	178.70	.	Q	.	.	.	V.
24.083	879.6515	176.67	.	Q	.	.	.	V.
24.167	880.8503	174.07	.	Q	.	.	.	V.
24.250	882.0311	171.46	.	Q	.	.	.	V.
24.333	883.1911	168.43	.	Q	.	.	.	V.
24.417	884.3275	165.00	.	Q	.	.	.	V.
24.500	885.4310	160.23	.	Q	.	.	.	V.
24.583	886.4924	154.12	.	Q	.	.	.	V.
24.667	887.5090	147.60	.	Q	.	.	.	V.
24.750	888.4738	140.09	.	Q	.	.	.	V.
24.833	889.3900	133.03	.	Q	.	.	.	V.
24.917	890.2513	125.07	.	Q	.	.	.	V.
25.000	891.0604	117.47	.	Q	.	.	.	V.
25.083	891.8068	108.38	.	Q	.	.	.	V.
25.167	892.4933	99.69	.	Q	.	.	.	V.
25.250	893.1078	89.23	.	Q	.	.	.	V.
25.333	893.6523	79.07	.	Q	.	.	.	V.
25.417	894.1407	70.92	.	Q	.	.	.	V.
25.500	894.5610	61.02	.	Q	.	.	.	V.
25.583	894.9254	52.90	Q	.	.	.	.	V.
25.667	895.2391	45.56	Q	.	.	.	.	V.
25.750	895.5083	39.08	Q	.	.	.	.	V.
25.833	895.7427	34.03	Q	.	.	.	.	V.
25.917	895.9427	29.05	Q	.	.	.	.	V.
26.000	896.1122	24.60	Q	.	.	.	.	V.
26.083	896.2564	20.94	Q	.	.	.	.	V.
26.167	896.3809	18.08	Q	.	.	.	.	V.
26.250	896.4883	15.59	Q	.	.	.	.	V.
26.333	896.5799	13.30	Q	.	.	.	.	V.
26.417	896.6569	11.18	Q	.	.	.	.	V.
26.500	896.7215	9.38	Q	.	.	.	.	V.
26.583	896.7764	7.98	Q	.	.	.	.	V.
26.667	896.8223	6.66	Q	.	.	.	.	V.
26.750	896.8619	5.74	Q	.	.	.	.	V.
26.833	896.8954	4.88	Q	.	.	.	.	V.
26.917	896.9232	4.02	Q	.	.	.	.	V.
27.000	896.9460	3.32	Q	.	.	.	.	V.
27.083	896.9672	3.07	Q	.	.	.	.	V.
27.167	896.9869	2.86	Q	.	.	.	.	V.
27.250	897.0051	2.64	Q	.	.	.	.	V.
27.333	897.0218	2.43	Q	.	.	.	.	V.
27.417	897.0370	2.21	Q	.	.	.	.	V.
27.500	897.0508	2.00	Q	.	.	.	.	V.
27.583	897.0632	1.79	Q	.	.	.	.	V.
27.667	897.0741	1.58	Q	.	.	.	.	V.
27.750	897.0836	1.38	Q	.	.	.	.	V.
27.833	897.0916	1.17	Q	.	.	.	.	V.
27.917	897.0983	0.97	Q	.	.	.	.	V.
28.000	897.1035	0.76	Q	.	.	.	.	V.
28.083	897.1074	0.56	Q	.	.	.	.	V.

28.167	897.1099	0.36	Q	.	.	.	V.
28.250	897.1111	0.17	Q	.	.	.	V.

TIME DURATION(minutes) OF PERCENTILES OF ESTIMATED PEAK FLOW RATE:
(Note: 100% of Peak Flow Rate estimate assumed to have
an instantaneous time duration)

Percentile of Estimated Peak Flow Rate	Duration (minutes)
0%	1695.0
10%	790.0
20%	365.0
30%	245.0
40%	170.0
50%	130.0
60%	100.0
70%	75.0
80%	60.0
90%	30.0

END OF FLOODSCx ROUTING ANALYSIS

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             F L O O D    R O U T I N G    A N A L Y S I S
             USING COUNTY HYDROLOGY MANUAL OF ORANGE(1986)
         (c) Copyright 1989-2010 Advanced Engineering Software (aes)
             Ver. 17.0  Release Date: 07/01/2010  License ID 1527

                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RMV PA-3 ROMP AMENDMENT 2022 - NODE 134U                              *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL             *
* 100-YR EV AUG 2023 ROKAMOTO                                           *
 *************************************************************************

  FILE NAME: EV0034US.DAT
  TIME/DATE OF STUDY: 06:48 08/10/2023


                        ** INPUT SUMMARY **


*****************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    134.00 IS CODE =   1
-----------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
=============================================================================
  WATERSHED AREA =   62698.000 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.377 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.285; LOW LOSS FRACTION = 0.392
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.49; 30-MINUTE =  0.93;  1-HOUR =  1.29
    3-HOUR =  2.37;    6-HOUR =  3.51; 24-HOUR =  6.11
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.304; 30-MINUTE = 0.358;  1-HOUR = 0.405
    3-HOUR = 0.750;    6-HOUR = 0.890; 24-HOUR = 0.936
=============================================================================
```



```
 +-----------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV0034US.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 10100.00     134.00| Subarea (UH) Added to Stream #1|       0.0     22091.5|
18.000 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-----------------------------------------------------------------------------
-------------------------------------+

   END OF FLOODSCx ROUTING ANALYSIS
```

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            F L O O D   R O U T I N G   A N A L Y S I S
            USING COUNTY HYDROLOGY MANUAL OF ORANGE(1986)
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            Ver. 20.0  Release Date: 06/01/2013  License ID 1264

                        Analysis prepared by:

                      Michael Baker International
                    5 Hutton Centre Drive Suite 500
                          Santa Ana, CA92707


 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJJO - SINGLE AREA UH                                *
* PHASE CONDITION NO PA5 - REGIONAL NODE 119                            *
* 100-YR EV JANUARY 2019 CCHIU                                          *
 ************************************************************************

  FILE NAME: EV00119S.DAT
  TIME/DATE OF STUDY: 12:51 01/02/2019


************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    119.00 IS CODE =   1
------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS)<<<<<
========================================================================

      (UNIT-HYDROGRAPH ADDED TO STREAM #1)

         WATERSHED AREA =   49495.699 ACRES
         BASEFLOW =   0.000 CFS/SQUARE-MILE
         *USER ENTERED "LAG" TIME =    1.964 HOURS
         VALLEY(DEVELOPED) S-GRAPH SELECTED
         MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.298
         LOW LOSS FRACTION = 0.376
         *HYDROGRAPH MODEL #1 SPECIFIED*

         SPECIFIED PEAK  5-MINUTES RAINFALL(INCH)=  0.51
         SPECIFIED PEAK 30-MINUTES RAINFALL(INCH)=  0.95
         SPECIFIED PEAK  1-HOUR RAINFALL(INCH) =  1.32
         SPECIFIED PEAK  3-HOUR RAINFALL(INCH) =  2.49
         SPECIFIED PEAK  6-HOUR RAINFALL(INCH) =  3.72
         SPECIFIED PEAK 24-HOUR RAINFALL(INCH) =  6.54

         *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
           5-MINUTE FACTOR = 0.345
          30-MINUTE FACTOR = 0.395
           1-HOUR FACTOR = 0.435
           3-HOUR FACTOR = 0.785
           6-HOUR FACTOR = 0.904
          24-HOUR FACTOR = 0.944

         UNIT HYDROGRAPH TIME UNIT =   5.000 MINUTES
         UNIT INTERVAL PERCENTAGE OF LAG-TIME =   4.243
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UNIT HYDROGRAPH DETERMINATION

INTERVAL NUMBER	"S" GRAPH MEAN VALUES	UNIT HYDROGRAPH ORDINATES(CFS)
1	0.242	1451.336
2	0.727	2902.669
3	1.212	2902.670
4	1.697	2902.671
5	2.279	3483.213
6	3.015	4405.389
7	3.761	4467.788
8	4.903	6834.843
9	6.364	8742.525
10	8.208	11040.349
11	10.394	13084.627
12	12.522	12740.137
13	15.029	15003.568
14	17.617	15488.998
15	19.936	13883.749
16	22.822	17274.580
17	25.577	16493.475
18	28.123	15241.114
19	31.192	18365.377
20	34.750	21297.615
21	37.558	16810.805
22	41.359	22750.998
23	45.188	22923.033
24	49.462	25583.668
25	52.874	20420.457
26	55.850	17818.346
27	59.337	20870.088
28	63.378	24187.758
29	66.432	18284.008
30	69.459	18120.742
31	72.180	16286.321
32	74.861	16048.708
33	77.066	13197.565
34	78.952	11288.478
35	80.887	11584.273
36	82.790	11391.415
37	84.520	10351.950
38	86.085	9371.763
39	87.417	7971.972
40	88.553	6798.926
41	89.551	5975.702
42	90.492	5629.944
43	91.385	5347.484
44	92.250	5178.053
45	93.060	4848.782
46	93.853	4744.749
47	94.451	3580.608
48	94.990	3223.798

49	95.529	3226.539
50	96.027	2984.083
51	96.374	2078.930
52	96.707	1990.789
53	97.040	1993.484
54	97.373	1990.789
55	97.706	1993.484
56	97.990	1704.218
57	98.089	588.258
58	98.168	476.690
59	98.248	476.690
60	98.327	475.320
61	98.407	473.904
62	98.487	479.430
63	98.566	475.320
64	98.645	475.274
65	98.726	479.430
66	98.805	473.950
67	98.884	476.690
68	98.964	476.690
69	99.043	473.904
70	99.122	473.904
71	99.201	473.904
72	99.281	473.904
73	99.360	473.904
74	99.439	473.904
75	99.518	473.904
76	99.597	473.904
77	99.676	473.904
78	99.756	473.904
79	99.835	473.904
80	99.914	473.904
81	99.993	473.904
82	100.000	40.828

TOTAL SOIL-LOSS VOLUME(ACRE-FEET) = 9403.4258
TOTAL STORM RUNOFF VOLUME(ACRE-FEET) = 16050.0771

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2 4 - H O U R S T O R M
R U N O F F H Y D R O G R A P H

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HYDROGRAPH IN FIVE-MINUTE UNIT INTERVALS(CFS)
(Note: Time indicated is at END of Each Unit Intervals)

TIME(HRS)	VOLUME(AF)	Q(CFS)	0. 5100.0 10200.0 15300.0 20400.0
0.083	0.0587	8.52	Q . . . .
0.167	0.2348	25.58	Q . . . .
0.250	0.5288	42.68	Q . . . .
0.333	0.9409	59.84	Q . . . .
0.417	1.4951	80.46	Q . . . .
0.500	2.2289	106.55	Q . . . .
0.583	3.1454	133.08	Q . . . .
0.667	4.3409	173.59	Q . . . .
0.750	5.8932	225.40	Q . . . .
0.833	7.8964	290.86	Q . . . .
0.917	10.4343	368.50	Q . . . .
1.000	13.4947	444.36	Q . . . .
1.083	17.1705	533.73	VQ . . . .
1.167	21.4833	626.21	VQ . . . .
1.250	26.3700	709.56	VQ . . . .
1.333	31.9697	813.07	VQ . . . .
1.417	38.2526	912.28	VQ . . . .
1.500	45.1705	1004.48	VQ . . . .
1.583	52.8515	1115.28	V Q . . . .
1.667	61.4165	1243.64	V Q . . . .
1.750	70.6868	1346.04	V Q . . . .
1.833	80.9049	1483.68	V Q . . . .
1.917	92.0804	1622.67	V Q . . . .
2.000	104.3242	1777.80	V Q . . . .
2.083	117.4303	1903.01	V Q . . . .
2.167	131.2972	2013.47	V Q . . . .
2.250	146.0498	2142.08	V Q . . . .
2.333	161.8258	2290.68	V Q . . . .
2.417	178.3891	2404.98	V Q . . . .
2.500	195.7366	2518.86	V Q . . . .
2.583	213.7957	2622.18	V Q . . . .
2.667	232.5604	2724.63	V Q . . . .
2.750	251.9166	2810.53	V Q . . . .
2.833	271.7906	2885.70	V Q . . . .
2.917	292.1949	2962.70	V Q . . . .
3.000	313.1248	3039.03	V Q . . . .
3.083	334.5392	3109.37	V Q . . . .
3.167	356.4014	3174.39	V Q . . . .
3.250	378.6554	3231.27	V Q . . . .
3.333	401.2565	3281.68	.V Q . . . .
3.417	424.1718	3327.30	.V Q . . . .
3.500	447.3898	3371.26	.V Q . . . .
3.583	470.8993	3413.58	.V Q . . . .
3.667	494.6960	3455.28	.V Q . . . .
3.750	518.7667	3495.06	.V Q . . . .
3.833	543.1098	3534.61	.V Q . . . .
3.917	567.6782	3567.32	.V Q . . . .

4.000	592.4599	3598.31	.V	Q	.	.	.	.
4.083	617.4550	3629.28	.V	Q	.	.	.	.
4.167	642.6561	3659.20	.V	Q	.	.	.	.
4.250	668.0265	3683.78	.V	Q	.	.	.	.
4.333	693.5651	3708.20	.V	Q	.	.	.	.
4.417	719.2715	3732.58	.V	Q	.	.	.	.
4.500	745.1484	3757.32	.V	Q	.	.	.	.
4.583	771.1954	3782.03	.V	Q	.	.	.	.
4.667	797.4034	3805.40	.V	Q	.	.	.	.
4.750	823.7270	3822.18	. V	Q	.	.	.	.
4.833	850.1641	3838.66	. V	Q	.	.	.	.
4.917	876.7141	3855.07	. V	Q	.	.	.	.
5.000	903.3797	3871.84	. V	Q	.	.	.	.
5.083	930.1602	3888.52	. V	Q	.	.	.	.
5.167	957.0583	3905.62	. V	Q	.	.	.	.
5.250	984.0735	3922.61	. V	Q	.	.	.	.
5.333	1011.2085	3939.99	. V	Q	.	.	.	.
5.417	1038.4628	3957.32	. V	Q	.	.	.	.
5.500	1065.8389	3975.02	. V	Q	.	.	.	.
5.583	1093.3364	3992.65	. V	Q	.	.	.	.
5.667	1120.9584	4010.70	. V	Q	.	.	.	.
5.750	1148.7039	4028.65	. V	Q	.	.	.	.
5.833	1176.5759	4047.03	. V	Q	.	.	.	.
5.917	1204.5740	4065.32	. V	Q	.	.	.	.
6.000	1232.7010	4084.05	. V	Q	.	.	.	.
6.083	1260.9567	4102.71	. V	Q	.	.	.	.
6.167	1289.3438	4121.81	. V	Q	.	.	.	.
6.250	1317.8619	4140.84	. V	Q	.	.	.	.
6.333	1346.5143	4160.32	. V	Q	.	.	.	.
6.417	1375.3003	4179.73	. V	Q	.	.	.	.
6.500	1404.2233	4199.61	. V	Q	.	.	.	.
6.583	1433.2826	4219.42	. V	Q	.	.	.	.
6.667	1462.4817	4239.71	. V	Q	.	.	.	.
6.750	1491.8201	4259.93	. V	Q	.	.	.	.
6.833	1521.2837	4278.11	. V	Q	.	.	.	.
6.917	1550.8702	4295.97	. V	Q	.	.	.	.
7.000	1580.5834	4314.34	. V	Q	.	.	.	.
7.083	1610.4225	4332.63	. V	Q	.	.	.	.
7.167	1640.3911	4351.44	. V	Q	.	.	.	.
7.250	1670.4888	4370.18	. V	Q	.	.	.	.
7.333	1700.7191	4389.45	. V	Q	.	.	.	.
7.417	1731.0817	4408.65	. V	Q	.	.	.	.
7.500	1761.5803	4428.40	. V	Q	.	.	.	.
7.583	1792.2145	4448.09	. V	Q	.	.	.	.
7.667	1822.9882	4468.34	. V	Q	.	.	.	.
7.750	1853.9009	4488.53	. V	Q	.	.	.	.
7.833	1884.9568	4509.31	. V	Q	.	.	.	.
7.917	1916.1553	4530.02	. V	Q	.	.	.	.
8.000	1947.5006	4551.35	. V	Q	.	.	.	.
8.083	1978.9924	4572.61	. V	Q	.	.	.	.
8.167	2010.6350	4594.51	. V	Q.	.	.	.	.
8.250	2042.4280	4616.34	. V	Q.	.	.	.	.
8.333	2074.3757	4638.83	. V	Q.	.	.	.	.
8.417	2106.4780	4661.26	. V	Q.	.	.	.	.
8.500	2138.7395	4684.38	. V	Q.	.	.	.	.
8.583	2171.1599	4707.43	. V	Q.	.	.	.	.
8.667	2203.7439	4731.20	. V	Q.	.	.	.	.
8.750	2236.4912	4754.92	. V	Q.	.	.	.	.

8.833	2269.4070	4779.37	.	V	Q.	.	.	.
8.917	2302.4907	4803.77	.	V	Q.	.	.	.
9.000	2335.7478	4828.94	.	V	Q.	.	.	.
9.083	2369.1780	4854.06	.	V	Q.	.	.	.
9.167	2402.7866	4879.98	.	V	Q.	.	.	.
9.250	2436.5735	4905.86	.	V	Q.	.	.	.
9.333	2470.5444	4932.58	.	V	Q.	.	.	.
9.417	2504.6990	4959.25	.	V	Q.	.	.	.
9.500	2539.0432	4986.80	.	V	Q.	.	.	.
9.583	2573.5771	5014.31	.	V	Q.	.	.	.
9.667	2608.3066	5042.73	.	V	Q.	.	.	.
9.750	2643.2317	5071.13	.	V	Q.	.	.	.
9.833	2678.3589	5100.47	.	V	Q	.	.	.
9.917	2713.6880	5129.80	.	V	Q	.	.	.
10.000	2749.2261	5160.12	.	V	Q	.	.	.
10.083	2784.9729	5190.43	.	V	Q	.	.	.
10.167	2820.9355	5221.77	.	V	Q	.	.	.
10.250	2857.1140	5253.12	.	V	Q	.	.	.
10.333	2893.5159	5285.55	.	V	Q	.	.	.
10.417	2930.1411	5318.00	.	V	Q	.	.	.
10.500	2966.9978	5351.58	.	V	Q	.	.	.
10.583	3004.0859	5385.20	.	V	Q	.	.	.
10.667	3041.4138	5420.00	.	V	Q	.	.	.
10.750	3078.9817	5454.86	.	V	Q	.	.	.
10.833	3116.7981	5490.95	.	V	Q	.	.	.
10.917	3154.8638	5527.12	.	V	Q	.	.	.
11.000	3193.1875	5564.59	.	V	Q	.	.	.
11.083	3231.7700	5602.17	.	V	Q	.	.	.
11.167	3270.6206	5641.10	.	V	.Q	.	.	.
11.250	3309.7402	5680.17	.	V	.Q	.	.	.
11.333	3349.1389	5720.67	.	V	.Q	.	.	.
11.417	3388.8176	5761.34	.	V	.Q	.	.	.
11.500	3428.7869	5803.52	.	V	.Q	.	.	.
11.583	3469.0479	5845.88	.	V	.Q	.	.	.
11.667	3509.6116	5889.86	.	V	.Q	.	.	.
11.750	3550.4797	5934.06	.	V	.Q	.	.	.
11.833	3591.6641	5979.96	.	V	.Q	.	.	.
11.917	3633.1663	6026.12	.	V	.Q	.	.	.
12.000	3674.9988	6074.09	.	V	.Q	.	.	.
12.083	3717.2639	6136.90	.	V	. Q	.	.	.
12.167	3760.0747	6216.12	.	V	. Q	.	.	.
12.250	3803.4326	6295.56	.	V	. Q	.	.	.
12.333	3847.3506	6376.90	.	V	. Q	.	.	.
12.417	3891.8706	6464.32	.	V	. Q	.	.	.
12.500	3937.0703	6562.99	.	V	. Q	.	.	.
12.583	3982.9553	6662.52	.	V	. Q	.	.	.
12.667	4029.7036	6787.84	.	V	Q	.	.	.
12.750	4077.4480	6932.47	.	V	Q	.	.	.
12.833	4126.3608	7102.13	.	V	Q	.	.	.
12.917	4176.5835	7292.32	.	V	Q	.	.	.
13.000	4228.1055	7481.01	.	V	Q	.	.	.
13.083	4281.0830	7692.34	.	V	Q	.	.	.
13.167	4335.5635	7910.56	.	V	Q	.	.	.
13.250	4391.4351	8112.56	.	V	Q	.	.	.
13.333	4448.9468	8350.71	.	V	Q	.	.	.
13.417	4508.0439	8580.90	.	V	Q	.	.	.
13.500	4568.6553	8800.73	.	V	Q	.	.	.
13.583	4630.9956	9051.84	.	V	Q	.	.	.

13.667	4695.2837	9334.62	. .V Q . . .
13.750	4761.2080	9572.22	. .V Q . . .
13.833	4829.1953	9871.76	. . V Q. . .
13.917	4899.2568	10172.91	. . V Q. . .
14.000	4971.5913	10502.97	. . V Q . .
14.083	5045.9521	10797.18	. . V .Q . .
14.167	5122.2837	11083.37	. . V .Q . .
14.250	5200.7905	11399.17	. . V . Q . .
14.333	5281.7109	11749.65	. . V . Q . .
14.417	5364.6738	12046.18	. . V . Q . .
14.500	5449.7471	12352.65	. . V . Q . .
14.583	5536.7993	12639.95	. . V . Q . .
14.667	5626.0005	12952.03	. . V . Q . .
14.750	5717.2847	13254.47	. . V . Q . .
14.833	5810.6899	13562.47	. . V . Q . .
14.917	5906.3662	13892.20	. . V . Q . .
15.000	6004.2568	14213.71	. . V . Q . .
15.083	6104.4263	14544.59	. . V . Q . .
15.167	6206.8223	14867.88	. . V . Q. .
15.250	6311.1782	15152.50	. . V . Q. .
15.333	6417.6489	15459.53	. . V . Q .
15.417	6525.9214	15721.17	. . V . Q .
15.500	6635.7061	15940.75	. . V . .Q .
15.583	6747.2026	16189.30	. . V . .Q .
15.667	6860.6177	16467.85	. . V . . Q .
15.750	6975.4312	16670.95	. . V . . Q .
15.833	7091.9370	16916.66	. . V . . Q .
15.917	7210.1152	17159.45	. . V . . Q .
16.000	7330.0391	17412.96	. . V . . Q .
16.083	7452.2944	17751.45	. . V . . Q .
16.167	7576.2505	17998.41	. . V . . Q .
16.250	7700.6562	18063.74	. . V. . Q .
16.333	7825.7920	18169.68	. . V. . Q .
16.417	7951.5713	18263.14	. . V. . Q .
16.500	8078.3511	18408.41	. . V . Q .
16.583	8205.6494	18483.75	. . V . Q .
16.667	8335.1543	18804.12	. . V . Q .
16.750	8466.2793	19039.35	. . .V . Q .
16.833	8599.3428	19320.76	. . .V . Q .
16.917	8733.7676	19518.52	. . .V . Q .
17.000	8867.3916	19402.21	. . . V . Q .
17.083	9002.7793	19658.33	. . . V . Q .
17.167	9137.8379	19610.50	. . . V . Q .
17.250	9271.0850	19347.41	. . . V . Q .
17.333	9406.0596	19598.24	. . . V . Q .
17.417	9540.1514	19470.08	. . . V . Q .
17.500	9673.5039	19362.73	. . . V . Q .
17.583	9809.1387	19694.19	. . . V . Q .
17.667	9946.2988	19915.61	. . . V . Q.
17.750	10079.9863	19411.45	. . . V . Q .
17.833	10218.6777	20137.96	. . . V . Q.
17.917	10357.1289	20103.11	. . . V . Q.
18.000	10497.0820	20321.23	. . . V . Q.
18.083	10631.8594	19569.68	. . . V . Q .
18.167	10764.8398	19308.73	. . . V . Q .
18.250	10900.5947	19711.57	. . . V . Q .
18.333	11038.6650	20047.84	. . . V . Q.
18.417	11171.2139	19246.12	. . . V . Q .

18.500	11303.0293	19139.67	. . . V . Q .
18.583	11432.6562	18821.78	. . . V . Q .
18.667	11561.3330	18683.84	. . . V . Q .
18.750	11686.5840	18186.38	. . . V. Q .
18.833	11808.8066	17746.68	. . . V. Q .
18.917	11929.4990	17524.55	. . . V. Q .
19.000	12047.9316	17196.47	. . . V Q .
19.083	12163.3096	16752.94	. . . V Q .
19.167	12275.5586	16298.61	. . . VQ .
19.250	12384.2969	15788.83	. . . Q .
19.333	12489.2480	15238.85	. . . Q.V .
19.417	12591.1182	14791.50	. . . Q.V .
19.500	12690.3379	14406.74	. . . Q .V .
19.583	12786.8652	14015.71	. . . Q .V .
19.667	12880.4668	13591.00	. . . Q . V .
19.750	12971.3662	13198.57	. . . Q . V .
19.833	13059.3574	12776.34	. . . Q . V .
19.917	13143.5469	12224.32	. . . Q . V .
20.000	13224.4902	11752.98	. . . Q . V .
20.083	13302.9326	11389.86	. . . Q . V .
20.167	13378.8740	11026.67	. . .Q . V .
20.250	13451.5908	10558.41	. . Q . V .
20.333	13521.6309	10169.88	. . Q. . V .
20.417	13589.5742	9865.35	. . Q. . V .
20.500	13655.4238	9561.35	. . Q . . V .
20.583	13719.1719	9256.26	. . Q . . V .
20.667	13780.5293	8909.14	. . Q . . V .
20.750	13839.0967	8503.94	. . Q . . V .
20.833	13895.8818	8245.19	. . Q . . V .
20.917	13951.0586	8011.71	. . Q . . V .
21.000	14004.6777	7785.52	. . Q . . V .
21.083	14056.7227	7556.98	. . Q . . V .
21.167	14107.2812	7341.15	. . Q . . V .
21.250	14156.5195	7149.42	. . Q . . V .
21.333	14204.5420	6972.84	. . Q . . V .
21.417	14251.4209	6806.80	. . Q . . V .
21.500	14297.1865	6645.12	. . Q . . V .
21.583	14341.8760	6488.95	. .Q . . V .
21.667	14385.5342	6339.10	. .Q . . V .
21.750	14428.2803	6206.75	. .Q . . V .
21.833	14470.1514	6079.69	. .Q . . V .
21.917	14511.2461	5966.90	. .Q . . V .
22.000	14551.6064	5860.31	. .Q . . V .
22.083	14591.2490	5756.06	. .Q . . V .
22.167	14630.2490	5662.82	. .Q . . V .
22.250	14668.6855	5581.02	. Q . . V .
22.333	14706.5732	5501.32	. Q . . V .
22.417	14743.9209	5422.86	. Q . . V .
22.500	14780.7539	5348.16	. Q . . V .
22.583	14817.0781	5274.29	. Q . . V .
22.667	14852.8994	5201.31	. Q . . V .
22.750	14888.2744	5136.44	. Q . . V .
22.833	14922.8799	5024.69	. Q. . . V .
22.917	14957.0762	4965.29	. Q. . . V .
23.000	14990.9072	4912.25	. Q. . . V .
23.083	15024.3916	4861.88	. Q. . . V .
23.167	15057.4980	4807.03	. Q. . . V .
23.250	15090.2285	4752.50	. Q. . . V .

```
 23.333  15122.5889   4698.74  .       Q.        .        .     V  .
 23.417  15154.5840   4645.72  .       Q.        .        .     V  .
 23.500  15186.2197   4593.52  .       Q.        .        .     V  .
 23.583  15217.5010   4542.03  .      Q .        .        .     V  .
 23.667  15248.4326   4491.26  .      Q .        .        .      V .
 23.750  15279.0195   4441.22  .      Q .        .        .      V .
 23.833  15309.2998   4396.73  .      Q .        .        .      V .
 23.917  15339.2842   4353.71  .      Q .        .        .      V .
 24.000  15368.9785   4311.65  .      Q .        .        .      V .
 24.083  15398.3311   4262.02  .      Q .        .        .      V .
 24.167  15427.2900   4204.81  .      Q .        .        .      V .
 24.250  15455.8613   4148.55  .      Q .        .        .      V .
 24.333  15484.0518   4093.19  .      Q .        .        .      V .
 24.417  15511.8428   4035.30  .     Q  .        .        .      V .
 24.500  15539.2041   3972.85  .     Q  .        .        .      V .
 24.583  15566.1387   3910.89  .     Q  .        .        .      V .
 24.667  15592.5566   3835.89  .     Q  .        .        .      V .
 24.750  15618.3867   3750.59  .     Q  .        .        .      V .
 24.833  15643.5732   3657.08  .     Q  .        .        .      V .
 24.917  15668.0430   3553.02  .    Q   .        .        .       V.
 25.000  15691.8174   3452.01  .    Q   .        .        .       V.
 25.083  15714.8115   3338.74  .    Q   .        .        .       V.
 25.167  15737.0137   3223.68  .    Q   .        .        .       V.
 25.250  15758.4951   3119.06  .    Q   .        .        .       V.
 25.333  15779.1260   2995.54  .   Q    .        .        .       V.
 25.417  15798.9443   2877.63  .   Q    .        .        .       V.
 25.500  15818.0078   2768.05  .   Q    .        .        .       V.
 25.583  15836.1973   2641.10  .   Q    .        .        .       V.
 25.667  15853.4014   2497.98  .  Q     .        .        .       V.
 25.750  15869.8076   2382.23  .  Q     .        .        .       V.
 25.833  15885.1836   2232.59  .  Q     .        .        .       V.
 25.917  15899.5293   2083.03  .  Q     .        .        .       V.
 26.000  15912.7451   1918.95  . Q      .        .        .       V.
 26.083  15925.0469   1786.27  . Q      .        .        .       V.
 26.167  15936.5469   1669.78  . Q      .        .        .       V.
 26.250  15947.1270   1536.25  . Q      .        .        .       V.
 26.333  15956.6602   1384.20  .Q       .        .        .       V.
 26.417  15965.3916   1267.76  .Q       .        .        .       V.
 26.500  15973.3330   1153.08  .Q       .        .        .       V.
 26.583  15980.5635   1049.92  .Q       .        .        .       V.
 26.667  15987.0986    948.85 .Q       .        .        .       V.
 26.750  15993.0566    865.16 .Q       .        .        .       V.
 26.833  15998.5195    793.23 .Q       .        .        .       V.
 26.917  16003.4785    720.05 .Q       .        .        .       V.
 27.000  16007.9443    648.50 .Q       .        .        .       V.
 27.083  16011.9629    583.52 .Q       .        .        .       V.
 27.167  16015.5762    524.71 .Q       .        .        .       V.
 27.250  16018.8438    474.50 Q        .        .        .       V.
 27.333  16021.8154    431.49 Q        .        .        .       V.
 27.417  16024.5264    393.60 Q        .        .        .       V.
 27.500  16026.9922    357.99 Q        .        .        .       V.
 27.583  16029.2256    324.27 Q        .        .        .       V.
 27.667  16031.2354    291.78 Q        .        .        .       V.
 27.750  16033.0361    261.43 Q        .        .        .       V.
 27.833  16034.6328    231.89 Q        .        .        .       V.
 27.917  16036.0742    209.36 Q        .        .        .       V.
 28.000  16037.3760    189.08 Q        .        .        .       V.
 28.083  16038.5391    168.91 Q        .        .        .       V.
```



```
 28.167  16039.5742    150.30  Q       .        .        .       V.
 28.250  16040.5186    137.11  Q       .        .        .       V.
 28.333  16041.3760    124.53  Q       .        .        .       V.
 28.417  16042.1475    112.02  Q       .        .        .       V.
 28.500  16042.8330     99.61  Q       .        .        .       V.
 28.583  16043.4336     87.26  Q       .        .        .       V.
 28.667  16043.9619     76.69  Q       .        .        .       V.
 28.750  16044.4629     72.72  Q       .        .        .       V.
 28.833  16044.9414     69.44  Q       .        .        .       V.
 28.917  16045.3975     66.18  Q       .        .        .       V.
 29.000  16045.8311     62.96  Q       .        .        .       V.
 29.083  16046.2422     59.77  Q       .        .        .       V.
 29.167  16046.6318     56.57  Q       .        .        .       V.
 29.250  16047.0000     53.41  Q       .        .        .       V.
 29.333  16047.3467     50.28  Q       .        .        .       V.
 29.417  16047.6719     47.15  Q       .        .        .       V.
 29.500  16047.9756     44.07  Q       .        .        .       V.
 29.583  16048.2578     41.00  Q       .        .        .       V.
 29.667  16048.5195     37.95  Q       .        .        .       V.
 29.750  16048.7598     34.94  Q       .        .        .       V.
 29.833  16048.9795     31.94  Q       .        .        .       V.
 29.917  16049.1787     28.97  Q       .        .        .       V.
 30.000  16049.3574     26.01  Q       .        .        .       V.
 30.083  16049.5166     23.08  Q       .        .        .       V.
 30.167  16049.6553     20.16  Q       .        .        .       V.
 30.250  16049.7744     17.26  Q       .        .        .       V.
 30.333  16049.8730     14.38  Q       .        .        .       V.
 30.417  16049.9521     11.52  Q       .        .        .       V.
 30.500  16050.0117      8.67  Q       .        .        .       V.
 30.583  16050.0518      5.85  Q       .        .        .       V.
 30.667  16050.0723      3.04  Q       .        .        .       V.
 30.750  16050.0742      0.24  Q       .        .        .       V.
--------------------------------------------------------------------------------
   TIME DURATION(minutes) OF PERCENTILES OF ESTIMATED PEAK FLOW RATE:
   (Note: 100% of Peak Flow Rate estimate assumed to have
   an instantaneous time duration)

   Percentile of Estimated          Duration
       Peak Flow Rate               (minutes)
   ======================           =========
              0%                     1845.0
             10%                     1425.0
             20%                     1110.0
             30%                      585.0
             40%                      455.0
             50%                      390.0
             60%                      330.0
             70%                      270.0
             80%                      215.0
             90%                      135.0
================================================================================

  END OF FLOODSCx ROUTING ANALYSIS
```

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                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RMV PA-3 BODR 2022 - NODE 126                                         *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL             *
* 100-YR EV NOV 2022 ROKAMOTO                                           *
 *************************************************************************

  FILE NAME: EV00126S.DAT
  TIME/DATE OF STUDY: 16:06 11/07/2022


                        ** INPUT SUMMARY **


*****************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    126.00 IS CODE =   1
-----------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
=============================================================================
  WATERSHED AREA =   50438.699 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.046 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.297; LOW LOSS FRACTION = 0.378
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.51; 30-MINUTE =  0.95;  1-HOUR =  1.32
    3-HOUR =  2.48;    6-HOUR =  3.70; 24-HOUR =  6.50
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.341; 30-MINUTE = 0.392;  1-HOUR = 0.432
    3-HOUR = 0.782;    6-HOUR = 0.902; 24-HOUR = 0.943
=============================================================================
```



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 +-------------------------------------------------------------------------------
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 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV00126S.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 10100.00     126.00| Subarea (UH) Added to Stream #1|       0.0     20337.1|
18.083 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
-------------------------------------+

   END OF FLOODSCx ROUTING ANALYSIS
```

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                          Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RMV PA-3 BODR 2022 - NODE 127                                         *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL             *
* 100-YR EV NOV 2022 ROKAMOTO                                           *
 *************************************************************************

  FILE NAME: EV00127S.DAT
  TIME/DATE OF STUDY: 16:05 11/07/2022


                        ** INPUT SUMMARY **


*****************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    127.00 IS CODE =   1
-----------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
=============================================================================
  WATERSHED AREA =   53506.199 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.155 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.286; LOW LOSS FRACTION = 0.392
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.50; 30-MINUTE =  0.95;  1-HOUR =  1.31
    3-HOUR =  2.45;    6-HOUR =  3.64; 24-HOUR =  6.39
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.331; 30-MINUTE = 0.383;  1-HOUR = 0.424
    3-HOUR = 0.773;    6-HOUR = 0.898; 24-HOUR = 0.941
=============================================================================
```



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 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV00127S.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
----------+-------------+-----------+
 | 10100.00     127.00| Subarea (UH) Added to Stream #1|       0.0     20405.2|
18.167 |             |           |
 +-------------------+--------------------------------+----------------------+-
----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
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   END OF FLOODSCx ROUTING ANALYSIS
```

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                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RMV PA-3 ROMP AMENDMENT 2022 - NODE 137                                *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL              *
* 100-YR EV AUG 2023 ROKAMOTO                                            *
 ************************************************************************

  FILE NAME: EV00137S.DAT
  TIME/DATE OF STUDY: 06:49 08/10/2023


                        ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    137.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =   67798.297 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.493 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.284; LOW LOSS FRACTION = 0.393
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.48; 30-MINUTE =  0.93;  1-HOUR =  1.28
    3-HOUR =  2.34;    6-HOUR =  3.45; 24-HOUR =  5.99
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.291; 30-MINUTE = 0.350;  1-HOUR = 0.394
    3-HOUR = 0.738;    6-HOUR = 0.886; 24-HOUR = 0.933
==========================================================================
```



```
 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV00137S.DAT   ]
Page:   1 of    |
 +-------------------+---------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                 | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+---------------------------------+----------------------+-
-----------+-------------+-----------+
 | 10100.00     137.00| Subarea (UH) Added to Stream #1|       0.0     22970.4|
18.083 |             |           |
 +-------------------+---------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
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   END OF FLOODSCx ROUTING ANALYSIS
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                          Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RMV PA-3 ROMP AMENDMENT 2022 - NODE 138                                *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL              *
* 100-YR EV AUG 2023 ROKAMOTO                                            *
 ************************************************************************

  FILE NAME: EV00138S.DAT
  TIME/DATE OF STUDY: 06:50 08/10/2023


                        ** INPUT SUMMARY **


*****************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    138.00 IS CODE =   1
-----------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
=============================================================================
  WATERSHED AREA =   69102.000 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.578 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.284; LOW LOSS FRACTION = 0.394
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.48; 30-MINUTE =  0.93;  1-HOUR =  1.27
    3-HOUR =  2.33;    6-HOUR =  3.43; 24-HOUR =  5.96
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.287; 30-MINUTE = 0.348;  1-HOUR = 0.392
    3-HOUR = 0.734;    6-HOUR = 0.885; 24-HOUR = 0.932
=============================================================================
```



```
 +-----------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV00138S.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 10100.00     138.00| Subarea (UH) Added to Stream #1|       0.0     23113.3|
18.167 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
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   END OF FLOODSCx ROUTING ANALYSIS
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                          Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RMV PA-3 ROMP AMENDMENT 2022 - NODE 139                                *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL              *
* 100-YR EV AUG 2023 ROKAMOTO                                            *
 ************************************************************************

  FILE NAME: EV00139S.DAT
  TIME/DATE OF STUDY: 06:50 08/10/2023


                        ** INPUT SUMMARY **


******************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    139.00 IS CODE =   1
------------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==============================================================================
  WATERSHED AREA =   69529.797 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.624 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.283; LOW LOSS FRACTION = 0.394
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.48; 30-MINUTE =  0.93;  1-HOUR =  1.27
    3-HOUR =  2.33;    6-HOUR =  3.43; 24-HOUR =  5.95
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.286; 30-MINUTE = 0.348;  1-HOUR = 0.391
    3-HOUR = 0.733;    6-HOUR = 0.885; 24-HOUR = 0.932
==============================================================================
```



```
 +------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV00139S.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 10100.00     139.00| Subarea (UH) Added to Stream #1|       0.0     22994.2|
18.417 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +------------------------------------------------------------------------------
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   END OF FLOODSCx ROUTING ANALYSIS
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                        Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RMV PA-3 BODR 2022 - NODE 133C                                        *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL             *
* 2-YR EV NOV 2022 ROKAMOTO                                             *
 ************************************************************************

  FILE NAME: EV0233CS.DAT
  TIME/DATE OF STUDY: 04:15 11/08/2022


                       ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE  13010.00 TO NODE    133.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =   60992.301 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    5.932 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.570; LOW LOSS FRACTION = 0.907
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.15; 30-MINUTE =  0.29;  1-HOUR =  0.41
    3-HOUR =  0.75;    6-HOUR =  1.09; 24-HOUR =  1.91
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.308; 30-MINUTE = 0.363;  1-HOUR = 0.408
    3-HOUR = 0.754;    6-HOUR = 0.891; 24-HOUR = 0.936
==========================================================================
```



```
 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV0233CS.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 13010.00     133.00| Subarea (UH) Added to Stream #1|       0.0       769.4|
20.833 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
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   END OF FLOODSCx ROUTING ANALYSIS
```

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**************************************************************************

            F L O O D   R O U T I N G   A N A L Y S I S
            USING COUNTY HYDROLOGY MANUAL OF ORANGE(1986)
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                        Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RMV PA-3 ROMP AMENDMENT 2022 - NODE 133T                              *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL             *
* 2-YR EV OCT 2022 ROKAMOTO                                             *
 ************************************************************************

  FILE NAME: EV0233TS.DAT
  TIME/DATE OF STUDY: 13:44 10/25/2022


**************************************************************************
  FLOW PROCESS FROM NODE  13010.00 TO NODE    133.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS)<<<<<
==========================================================================

      (UNIT-HYDROGRAPH ADDED TO STREAM #1)

         WATERSHED AREA =    6638.200 ACRES
         BASEFLOW =   0.000 CFS/SQUARE-MILE
         *USER ENTERED "LAG" TIME =    1.853 HOURS
         VALLEY(DEVELOPED) S-GRAPH SELECTED
         MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.478
         LOW LOSS FRACTION = 0.810
         *HYDROGRAPH MODEL #1 SPECIFIED*

         SPECIFIED PEAK  5-MINUTES RAINFALL(INCH)=  0.13
         SPECIFIED PEAK 30-MINUTES RAINFALL(INCH)=  0.28
         SPECIFIED PEAK  1-HOUR RAINFALL(INCH) =  0.37
         SPECIFIED PEAK  3-HOUR RAINFALL(INCH) =  0.62
         SPECIFIED PEAK  6-HOUR RAINFALL(INCH) =  0.85
         SPECIFIED PEAK 24-HOUR RAINFALL(INCH) =  1.44

         *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
           5-MINUTE FACTOR = 0.744
          30-MINUTE FACTOR = 0.744
           1-HOUR FACTOR = 0.744
           3-HOUR FACTOR = 0.959
           6-HOUR FACTOR = 0.978
          24-HOUR FACTOR = 0.987

         UNIT HYDROGRAPH TIME UNIT =   5.000 MINUTES
         UNIT INTERVAL PERCENTAGE OF LAG-TIME =   4.497
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UNIT HYDROGRAPH DETERMINATION

INTERVAL NUMBER	"S" GRAPH MEAN VALUES	UNIT HYDROGRAPH ORDINATES(CFS)
1	0.257	206.308
2	0.771	412.617
3	1.285	412.616
4	1.800	413.888
5	2.476	542.385
6	3.258	627.894
7	4.140	708.122
8	5.519	1107.070
9	7.256	1394.265
10	9.447	1758.960
11	11.735	1837.109
12	14.148	1936.750
13	17.046	2326.428
14	19.468	1944.901
15	22.414	2364.829
16	25.404	2400.251
17	28.097	2162.063
18	31.353	2613.814
19	35.102	3009.855
20	38.128	2429.060
21	42.229	3292.887
22	46.348	3306.181
23	50.801	3575.020
24	54.094	2643.950
25	57.370	2630.025
26	61.528	3338.172
27	65.245	2983.458
28	68.363	2503.089
29	71.423	2456.944
30	74.244	2264.351
31	76.733	1998.891
32	78.739	1609.835
33	80.782	1640.257
34	82.802	1621.778
35	84.628	1466.272
36	86.262	1311.734
37	87.650	1114.309
38	88.799	922.023
39	89.850	843.489
40	90.819	778.197
41	91.763	757.722
42	92.644	707.859
43	93.501	687.726
44	94.237	591.148
45	94.810	459.352
46	95.381	458.310
47	95.933	443.494
48	96.323	312.917

49	96.676	283.284
50	97.028	283.284
51	97.381	282.935
52	97.734	283.284
53	98.012	223.315
54	98.105	74.785
55	98.189	67.638
56	98.274	67.644
57	98.358	67.987
58	98.443	67.638
59	98.527	67.638
60	98.611	67.644
61	98.696	67.987
62	98.780	67.638
63	98.864	67.638
64	98.948	67.644
65	99.033	67.638
66	99.117	67.638
67	99.201	67.638
68	99.285	67.638
69	99.370	67.638
70	99.454	67.638
71	99.538	67.638
72	99.622	67.638
73	99.707	67.638
74	99.791	67.638
75	99.875	67.638
76	99.959	67.638
77	100.000	32.523

TOTAL SOIL-LOSS VOLUME(ACRE-FEET) = 615.2339

TOTAL STORM RUNOFF VOLUME(ACRE-FEET) = 170.5114

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2 4 - H O U R S T O R M
R U N O F F H Y D R O G R A P H

==========

HYDROGRAPH IN FIVE-MINUTE UNIT INTERVALS(CFS)
(Note: Time indicated is at END of Each Unit Intervals)

TIME(HRS)	VOLUME(AF)	Q(CFS)	0.	125.0	250.0	375.0	500.0
0.083	0.0005	0.07	Q	.	.	.	.
0.167	0.0021	0.22	Q	.	.	.	.
0.250	0.0046	0.37	Q	.	.	.	.
0.333	0.0083	0.53	Q	.	.	.	.
0.417	0.0132	0.72	Q	.	.	.	.
0.500	0.0198	0.95	Q	.	.	.	.
0.583	0.0282	1.21	Q	.	.	.	.
0.667	0.0393	1.62	Q	.	.	.	.
0.750	0.0540	2.13	Q	.	.	.	.
0.833	0.0731	2.77	Q	.	.	.	.
0.917	0.0968	3.45	Q	.	.	.	.
1.000	0.1255	4.16	Q	.	.	.	.
1.083	0.1600	5.02	Q	.	.	.	.
1.167	0.1995	5.74	Q	.	.	.	.
1.250	0.2451	6.61	Q	.	.	.	.
1.333	0.2968	7.50	Q	.	.	.	.
1.417	0.3540	8.31	Q	.	.	.	.
1.500	0.4180	9.29	Q	.	.	.	.
1.583	0.4897	10.41	Q	.	.	.	.
1.667	0.5676	11.32	Q	.	.	.	.
1.750	0.6541	12.55	VQ	.	.	.	.
1.833	0.7491	13.79	VQ	.	.	.	.
1.917	0.8533	15.13	VQ	.	.	.	.
2.000	0.9645	16.14	VQ	.	.	.	.
2.083	1.0826	17.15	VQ	.	.	.	.
2.167	1.2094	18.42	VQ	.	.	.	.
2.250	1.3441	19.56	VQ	.	.	.	.
2.333	1.4855	20.53	VQ	.	.	.	.
2.417	1.6335	21.49	VQ	.	.	.	.
2.500	1.7877	22.38	VQ	.	.	.	.
2.583	1.9473	23.18	VQ	.	.	.	.
2.667	2.1116	23.85	VQ	.	.	.	.
2.750	2.2805	24.52	VQ	.	.	.	.
2.833	2.4540	25.19	V Q	.	.	.	.
2.917	2.6318	25.81	V Q	.	.	.	.
3.000	2.8134	26.38	V Q	.	.	.	.
3.083	2.9985	26.87	V Q	.	.	.	.
3.167	3.1866	27.30	V Q	.	.	.	.
3.250	3.3774	27.70	V Q	.	.	.	.
3.333	3.5708	28.08	V Q	.	.	.	.
3.417	3.7668	28.46	V Q	.	.	.	.
3.500	3.9652	28.82	V Q	.	.	.	.
3.583	4.1661	29.17	V Q	.	.	.	.
3.667	4.3692	29.49	.VQ	.	.	.	.
3.750	4.5742	29.76	.VQ	.	.	.	.
3.833	4.7811	30.04	.VQ	.	.	.	.
3.917	4.9898	30.31	.VQ	.	.	.	.

4.000	5.2001	30.53	.VQ	.	.	.	.
4.083	5.4119	30.75	.VQ	.	.	.	.
4.167	5.6252	30.97	.VQ	.	.	.	.
4.250	5.8399	31.19	.VQ	.	.	.	.
4.333	6.0562	31.41	.VQ	.	.	.	.
4.417	6.2739	31.61	.VQ	.	.	.	.
4.500	6.4926	31.75	.VQ	.	.	.	.
4.583	6.7123	31.90	.VQ	.	.	.	.
4.667	6.9330	32.05	.VQ	.	.	.	.
4.750	7.1548	32.20	.VQ	.	.	.	.
4.833	7.3775	32.35	.VQ	.	.	.	.
4.917	7.6014	32.50	.VQ	.	.	.	.
5.000	7.8263	32.65	.VQ	.	.	.	.
5.083	8.0522	32.81	.VQ	.	.	.	.
5.167	8.2792	32.96	.VQ	.	.	.	.
5.250	8.5073	33.12	.VQ	.	.	.	.
5.333	8.7366	33.28	. Q	.	.	.	.
5.417	8.9669	33.44	. Q	.	.	.	.
5.500	9.1983	33.60	. Q	.	.	.	.
5.583	9.4309	33.77	. Q	.	.	.	.
5.667	9.6646	33.93	. Q	.	.	.	.
5.750	9.8994	34.10	. Q	.	.	.	.
5.833	10.1354	34.27	. Q	.	.	.	.
5.917	10.3726	34.44	. Q	.	.	.	.
6.000	10.6110	34.61	. Q	.	.	.	.
6.083	10.8506	34.79	. Q	.	.	.	.
6.167	11.0913	34.96	. Q	.	.	.	.
6.250	11.3334	35.14	. Q	.	.	.	.
6.333	11.5766	35.32	. Q	.	.	.	.
6.417	11.8210	35.49	. Q	.	.	.	.
6.500	12.0665	35.65	. Q	.	.	.	.
6.583	12.3131	35.81	. Q	.	.	.	.
6.667	12.5608	35.97	. Q	.	.	.	.
6.750	12.8097	36.13	. QV	.	.	.	.
6.833	13.0597	36.30	. QV	.	.	.	.
6.917	13.3109	36.47	. QV	.	.	.	.
7.000	13.5632	36.64	. QV	.	.	.	.
7.083	13.8167	36.81	. QV	.	.	.	.
7.167	14.0715	36.99	. QV	.	.	.	.
7.250	14.3274	37.17	. QV	.	.	.	.
7.333	14.5846	37.34	. QV	.	.	.	.
7.417	14.8431	37.53	. Q	.	.	.	.
7.500	15.1028	37.71	. Q	.	.	.	.
7.583	15.3638	37.90	. Q	.	.	.	.
7.667	15.6261	38.09	. Q	.	.	.	.
7.750	15.8897	38.28	. Q	.	.	.	.
7.833	16.1547	38.47	. Q	.	.	.	.
7.917	16.4210	38.67	. Q	.	.	.	.
8.000	16.6887	38.87	. Q	.	.	.	.
8.083	16.9578	39.07	. Q	.	.	.	.
8.167	17.2283	39.28	. QV	.	.	.	.
8.250	17.5002	39.49	. QV	.	.	.	.
8.333	17.7736	39.69	. QV	.	.	.	.
8.417	18.0485	39.91	. QV	.	.	.	.
8.500	18.3248	40.13	. QV	.	.	.	.
8.583	18.6027	40.35	. QV	.	.	.	.
8.667	18.8821	40.57	. QV	.	.	.	.
8.750	19.1631	40.80	. QV	.	.	.	.

8.833	19.4456	41.03	. QV	.	.	.	.
8.917	19.7298	41.26	. QV	.	.	.	.
9.000	20.0156	41.50	. QV	.	.	.	.
9.083	20.3030	41.74	. QV	.	.	.	.
9.167	20.5922	41.98	. QV	.	.	.	.
9.250	20.8830	42.23	. QV	.	.	.	.
9.333	21.1756	42.48	. QV	.	.	.	.
9.417	21.4700	42.74	. Q V	.	.	.	.
9.500	21.7661	43.00	. Q V	.	.	.	.
9.583	22.0641	43.27	. Q V	.	.	.	.
9.667	22.3639	43.53	. Q V	.	.	.	.
9.750	22.6656	43.81	. Q V	.	.	.	.
9.833	22.9693	44.09	. Q V	.	.	.	.
9.917	23.2749	44.37	. Q V	.	.	.	.
10.000	23.5824	44.66	. Q V	.	.	.	.
10.083	23.8920	44.95	. Q V	.	.	.	.
10.167	24.2036	45.25	. Q V	.	.	.	.
10.250	24.5174	45.55	. Q V	.	.	.	.
10.333	24.8332	45.86	. Q V	.	.	.	.
10.417	25.1513	46.18	. Q V	.	.	.	.
10.500	25.4715	46.50	. Q V	.	.	.	.
10.583	25.7940	46.83	. Q V	.	.	.	.
10.667	26.1188	47.16	. Q V	.	.	.	.
10.750	26.4459	47.50	. Q V	.	.	.	.
10.833	26.7754	47.84	. Q V	.	.	.	.
10.917	27.1073	48.20	. Q V	.	.	.	.
11.000	27.4417	48.55	. Q V	.	.	.	.
11.083	27.7786	48.92	. Q V	.	.	.	.
11.167	28.1181	49.30	. Q V	.	.	.	.
11.250	28.4603	49.68	. Q V	.	.	.	.
11.333	28.8051	50.07	. Q V	.	.	.	.
11.417	29.1527	50.47	. Q V	.	.	.	.
11.500	29.5031	50.87	. Q V	.	.	.	.
11.583	29.8563	51.29	. Q V	.	.	.	.
11.667	30.2125	51.71	. Q V	.	.	.	.
11.750	30.5716	52.15	. Q V	.	.	.	.
11.833	30.9339	52.59	. Q V	.	.	.	.
11.917	31.2992	53.05	. Q V	.	.	.	.
12.000	31.6678	53.52	. Q V	.	.	.	.
12.083	32.0400	54.04	. Q V	.	.	.	.
12.167	32.4161	54.62	. Q V	.	.	.	.
12.250	32.7964	55.21	. Q V	.	.	.	.
12.333	33.1807	55.81	. Q V	.	.	.	.
12.417	33.5695	56.46	. Q V	.	.	.	.
12.500	33.9630	57.13	. Q V	.	.	.	.
12.583	34.3613	57.84	. Q V	.	.	.	.
12.667	34.7652	58.65	. Q V	.	.	.	.
12.750	35.1753	59.54	. Q V	.	.	.	.
12.833	35.5921	60.52	. Q V	.	.	.	.
12.917	36.0159	61.54	. Q V	.	.	.	.
13.000	36.4470	62.59	. Q V	.	.	.	.
13.083	36.8861	63.76	. Q V	.	.	.	.
13.167	37.3328	64.86	. Q V	.	.	.	.
13.250	37.7878	66.08	. Q V	.	.	.	.
13.333	38.2514	67.31	. Q V	.	.	.	.
13.417	38.7235	68.54	. Q V.	.	.	.	.
13.500	39.2047	69.87	. Q V.	.	.	.	.
13.583	39.6959	71.33	. Q V.	.	.	.	.

13.667	40.1965	72.68	. Q V. . . .
13.750	40.7079	74.26	. Q V. . . .
13.833	41.2303	75.86	. Q V. . . .
13.917	41.7645	77.56	. Q V. . . .
14.000	42.3092	79.09	. Q V. . . .
14.083	42.8657	80.80	. Q V . . .
14.167	43.4362	82.84	. Q V . . .
14.250	44.0205	84.85	. Q V . . .
14.333	44.6182	86.79	. Q V . . .
14.417	45.2302	88.86	. Q V . . .
14.500	45.8569	90.99	. Q V . . .
14.583	46.4986	93.18	. Q V . . .
14.667	47.1570	95.59	. Q .V . . .
14.750	47.8338	98.28	. Q .V . . .
14.833	48.5312	101.26	. Q .V . . .
14.917	49.2497	104.33	. Q .V . . .
15.000	49.9900	107.49	. Q .V . . .
15.083	50.7542	110.96	. Q .V . . .
15.167	51.5406	114.18	. Q. V . . .
15.250	52.3518	117.79	. Q. V . . .
15.333	53.1884	121.47	. Q. V . . .
15.417	54.0482	124.85	. Q. V . . .
15.500	54.9322	128.36	. Q V . . .
15.583	55.8434	132.31	. Q V . . .
15.667	56.7800	135.98	. Q V . . .
15.750	57.7466	140.35	. .Q V . . .
15.833	58.7445	144.91	. .Q V . . .
15.917	59.7780	150.06	. . Q V . . .
16.000	60.8440	154.78	. . Q V . . .
16.083	62.0159	170.16	. . QV . . .
16.167	63.2920	185.30	. . Q . . .
16.250	64.5963	189.39	. . Q . . .
16.333	65.9285	193.43	. . Q . . .
16.417	67.3348	204.20	. . VQ . . .
16.500	68.8084	213.97	. . VQ . . .
16.583	70.3489	223.67	. . VQ . . .
16.667	72.0688	249.74	. . V Q. . .
16.750	73.9317	270.49	. . V .Q . .
16.833	75.9528	293.46	. . V . Q . .
16.917	78.0237	300.70	. . V . Q . .
17.000	80.1548	309.44	. . V . Q . .
17.083	82.4343	330.98	. . V. Q . .
17.167	84.5909	313.15	. . V. Q . .
17.250	86.9037	335.82	. . V Q . .
17.333	89.2409	339.35	. . V Q . .
17.417	91.5154	330.26	. . .V Q . .
17.500	93.9580	354.66	. . . V Q . .
17.583	96.5490	376.22	. . . V Q .
17.667	98.9458	348.01	. . . V Q . .
17.750	101.6506	392.73	. . . V .Q .
17.833	104.3542	392.56	. . . V .Q .
17.917	107.1305	403.13	. . . V . Q .
18.000	109.5532	351.77	. . . V Q . .
18.083	111.9594	349.39	. . . VQ . .
18.167	114.5972	383.01	. . . V Q .
18.250	117.0792	360.38	. . . VQ . .
18.333	119.3491	329.59	. . . QV . .
18.417	121.5625	321.39	. . . Q V . .

18.500	123.6706	306.10	. . . Q V. .
18.583	125.6426	286.33	. . . Q V. .
18.667	127.4388	260.82	. . Q V. .
18.750	129.2070	256.74	. . Q V .
18.833	130.9275	249.81	. . Q. V .
18.917	132.5462	235.04	. . Q . .V .
19.000	134.0642	220.41	. . Q . .V .
19.083	135.4687	203.93	. . Q . .V .
19.167	136.7623	187.83	. . Q . . V .
19.250	137.9891	178.14	. . Q . . V .
19.333	139.1589	169.85	. . Q . . V .
19.417	140.2880	163.95	. . Q . . V .
19.500	141.3653	156.43	. . Q . . V .
19.583	142.4008	150.35	. . Q . . V .
19.667	143.3695	140.65	. .Q . . V .
19.750	144.2602	129.33	. . Q . . V .
19.833	145.1217	125.09	. . Q . . V .
19.917	145.9498	120.23	. . Q. . . V .
20.000	146.7062	109.83	. . Q . . . V .
20.083	147.4287	104.91	. . Q . . . V .
20.167	148.1291	101.70	. . Q . . . V .
20.250	148.8085	98.65	. . Q . . . V .
20.333	149.4658	95.44	. . Q . . . V .
20.417	150.0788	89.00	. . Q . . . V .
20.500	150.6185	78.37	. . Q . . . V .
20.583	151.1382	75.47	. . Q . . . V .
20.667	151.6437	73.40	. Q . . . V .
20.750	152.1362	71.51	. Q . . . V .
20.833	152.6149	69.51	. Q . . . V .
20.917	153.0807	67.64	. Q . . . V .
21.000	153.5352	65.98	. Q . . . V .
21.083	153.9791	64.46	. Q . . . V .
21.167	154.4129	63.00	. Q . . . V .
21.250	154.8373	61.62	. Q . . . V .
21.333	155.2526	60.30	. Q . . . V .
21.417	155.6594	59.07	. Q . . . V .
21.500	156.0587	57.98	. Q . . . V .
21.583	156.4508	56.93	. Q . . . V .
21.667	156.8361	55.94	. Q . . . V .
21.750	157.2151	55.04	. Q . . . V .
21.833	157.5884	54.21	. Q . . . V .
21.917	157.9561	53.39	. Q . . . V .
22.000	158.3185	52.61	. Q . . . V .
22.083	158.6754	51.83	. Q . . . V .
22.167	159.0270	51.05	. Q . . . V .
22.250	159.3729	50.22	. Q . . . V .
22.333	159.7125	49.31	. Q . . . V .
22.417	160.0334	46.60	. Q . . . V .
22.500	160.3376	44.16	. Q . . . V .
22.583	160.6372	43.51	. Q . . . V .
22.667	160.9329	42.93	. Q . . . V .
22.750	161.2246	42.35	. Q . . . V .
22.833	161.5121	41.76	. Q . . . V .
22.917	161.7958	41.19	. Q . . . V .
23.000	162.0757	40.64	. Q . . . V .
23.083	162.3519	40.11	. Q . . . V .
23.167	162.6246	39.59	. Q . . . V .
23.250	162.8938	39.10	. Q . . . V .

23.333	163.1598	38.61	. Q	.	.	.	V	.
23.417	163.4226	38.17	. Q	.	.	.	V	.
23.500	163.6826	37.75	. Q	.	.	.	V	.
23.583	163.9399	37.36	. Q	.	.	.	V	.
23.667	164.1945	36.97	. Q	.	.	.	V	.
23.750	164.4465	36.59	. Q	.	.	.	V	.
23.833	164.6960	36.23	. Q	.	.	.	V	.
23.917	164.9430	35.87	. Q	.	.	.	V	.
24.000	165.1877	35.52	. Q	.	.	.	V	.
24.083	165.4295	35.11	. Q	.	.	.	V	.
24.167	165.6680	34.63	. Q	.	.	.	V	.
24.250	165.9032	34.16	. Q	.	.	.	V	.
24.333	166.1353	33.70	. Q	.	.	.	V	.
24.417	166.3640	33.21	. Q	.	.	.	V	.
24.500	166.5892	32.70	. Q	.	.	.	V	.
24.583	166.8108	32.17	. Q	.	.	.	V	.
24.667	167.0277	31.50	. Q	.	.	.	V	.
24.750	167.2395	30.74	. Q	.	.	.	V	.
24.833	167.4451	29.86	. Q	.	.	.	V	.
24.917	167.6445	28.96	. Q	.	.	.	V	.
25.000	167.8376	28.03	. Q	.	.	.	V	.
25.083	168.0233	26.97	. Q	.	.	.	V	.
25.167	168.2027	26.05	. Q	.	.	.	V	.
25.250	168.3749	25.00	.Q	.	.	.	V	.
25.333	168.5397	23.94	.Q	.	.	.	V	.
25.417	168.6980	22.97	.Q	.	.	.	V	.
25.500	168.8485	21.86	.Q	.	.	.	V	.
25.583	168.9904	20.60	.Q	.	.	.	V	.
25.667	169.1252	19.57	.Q	.	.	.	V	.
25.750	169.2508	18.24	.Q	.	.	.	V	.
25.833	169.3672	16.91	.Q	.	.	.	V	.
25.917	169.4739	15.49	.Q	.	.	.	V	.
26.000	169.5732	14.42	.Q	.	.	.	V	.
26.083	169.6652	13.36	.Q	.	.	.	V	.
26.167	169.7483	12.06	Q	.	.	.	V	.
26.250	169.8233	10.89	Q	.	.	.	V	.
26.333	169.8915	9.91	Q	.	.	.	V	.
26.417	169.9531	8.95	Q	.	.	.	V	.
26.500	170.0087	8.06	Q	.	.	.	V	.
26.583	170.0588	7.28	Q	.	.	.	V	.
26.667	170.1046	6.65	Q	.	.	.	V	.
26.750	170.1459	6.00	Q	.	.	.	V	.
26.833	170.1829	5.38	Q	.	.	.	V	.
26.917	170.2160	4.81	Q	.	.	.	V	.
27.000	170.2456	4.30	Q	.	.	.	V	.
27.083	170.2722	3.86	Q	.	.	.	V	.
27.167	170.2963	3.50	Q	.	.	.	V	.
27.250	170.3182	3.17	Q	.	.	.	V	.
27.333	170.3379	2.87	Q	.	.	.	V	.
27.417	170.3556	2.57	Q	.	.	.	V	.
27.500	170.3714	2.30	Q	.	.	.	V	.
27.583	170.3854	2.03	Q	.	.	.	V	.
27.667	170.3979	1.80	Q	.	.	.	V	.
27.750	170.4090	1.62	Q	.	.	.	V	.
27.833	170.4190	1.45	Q	.	.	.	V	.
27.917	170.4278	1.28	Q	.	.	.	V	.
28.000	170.4357	1.15	Q	.	.	.	V	.
28.083	170.4429	1.04	Q	.	.	.	V	.

28.167	170.4494	0.93	Q	.	.	.	V	.
28.250	170.4550	0.82	Q	.	.	.	V	.
28.333	170.4600	0.72	Q	.	.	.	V	.
28.417	170.4643	0.63	Q	.	.	.	V	.
28.500	170.4684	0.60	Q	.	.	.	V	.
28.583	170.4723	0.57	Q	.	.	.	V	.
28.667	170.4761	0.54	Q	.	.	.	V	.
28.750	170.4796	0.51	Q	.	.	.	V	.
28.833	170.4829	0.48	Q	.	.	.	V	.
28.917	170.4861	0.46	Q	.	.	.	V	.
29.000	170.4890	0.43	Q	.	.	.	V	.
29.083	170.4918	0.40	Q	.	.	.	V	.
29.167	170.4943	0.37	Q	.	.	.	V	.
29.250	170.4967	0.35	Q	.	.	.	V	.
29.333	170.4989	0.32	Q	.	.	.	V	.
29.417	170.5009	0.29	Q	.	.	.	V	.
29.500	170.5028	0.27	Q	.	.	.	V	.
29.583	170.5044	0.24	Q	.	.	.	V	.
29.667	170.5059	0.21	Q	.	.	.	V	.
29.750	170.5072	0.19	Q	.	.	.	V	.
29.833	170.5083	0.16	Q	.	.	.	V	.
29.917	170.5092	0.14	Q	.	.	.	V	.
30.000	170.5100	0.11	Q	.	.	.	V	.
30.083	170.5106	0.09	Q	.	.	.	V	.
30.167	170.5110	0.06	Q	.	.	.	V	.
30.250	170.5113	0.04	Q	.	.	.	V	.
30.333	170.5114	0.01	Q	.	.	.	V	.

TIME DURATION(minutes) OF PERCENTILES OF ESTIMATED PEAK FLOW RATE:
(Note: 100% of Peak Flow Rate estimate assumed to have
an instantaneous time duration)

Percentile of Estimated Peak Flow Rate	Duration (minutes)
0%	1820.0
10%	870.0
20%	385.0
30%	275.0
40%	205.0
50%	165.0
60%	135.0
70%	110.0
80%	75.0
90%	25.0

END OF FLOODSCx ROUTING ANALYSIS

```
**************************************************************************

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                        Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RMV PA-3 ROMP AMENDMENT 2022 - NODE 133U                              *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL             *
* 2-YR EV NOV 2022 ROKAMOTO                                             *
 ************************************************************************

  FILE NAME: EV0233US.DAT
  TIME/DATE OF STUDY: 04:17 11/08/2022


                       ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE  13010.00 TO NODE    133.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =   54354.000 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    5.932 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.584; LOW LOSS FRACTION = 0.920
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.15; 30-MINUTE =  0.29;  1-HOUR =  0.41
    3-HOUR =  0.76;    6-HOUR =  1.12; 24-HOUR =  1.97
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.328; 30-MINUTE = 0.381;  1-HOUR = 0.422
    3-HOUR = 0.771;    6-HOUR = 0.897; 24-HOUR = 0.940
==========================================================================
```



```
 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV0233US.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 13010.00     133.00| Subarea (UH) Added to Stream #1|       0.0       610.8|
20.833 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
-------------------------------------+

   END OF FLOODSCx ROUTING ANALYSIS
```

```
_____
*****************************************************************************

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                          Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RMV PA-3 ROMP AMENDMENT 2022 - NODE 134C                              *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL             *
* 2-YR EV NOV 2022 ROKAMOTO                                             *
 *************************************************************************

  FILE NAME: EV0234CS.DAT
  TIME/DATE OF STUDY: 04:24 11/08/2022


                        ** INPUT SUMMARY **


*****************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    134.00 IS CODE =   1
-----------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
=============================================================================
  WATERSHED AREA =   66557.602 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    6.120 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.570; LOW LOSS FRACTION = 0.907
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.15; 30-MINUTE =  0.29;  1-HOUR =  0.40
    3-HOUR =  0.74;    6-HOUR =  1.07; 24-HOUR =  1.88
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.294; 30-MINUTE = 0.352;  1-HOUR = 0.397
    3-HOUR = 0.741;    6-HOUR = 0.887; 24-HOUR = 0.933
=============================================================================
```



```
 +-----------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV0234CS.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+---------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+---------------------+-
-----------+-------------+-----------+
 | 10100.00     134.00| Subarea (UH) Added to Stream #1|       0.0       808.0|
21.000 |             |           |
 +-------------------+--------------------------------+---------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-----------------------------------------------------------------------------
-------------------------------------+

   END OF FLOODSCx ROUTING ANALYSIS
```

```
**************************************************************************

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                        Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RMV PA-3 ROMP AMENDMENT 2022 - NODE 134T                              *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL             *
* 2-YR EV OCT 2022 ROKAMOTO                                             *
 ************************************************************************

  FILE NAME: EV0234TS.DAT
  TIME/DATE OF STUDY: 13:45 10/25/2022


**************************************************************************
  FLOW PROCESS FROM NODE  13500.00 TO NODE    134.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS)<<<<<
==========================================================================

      (UNIT-HYDROGRAPH ADDED TO STREAM #1)

         WATERSHED AREA =    3859.700 ACRES
         BASEFLOW =   0.000 CFS/SQUARE-MILE
         *USER ENTERED "LAG" TIME =    2.991 HOURS
         VALLEY(DEVELOPED) S-GRAPH SELECTED
         MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.567
         LOW LOSS FRACTION = 0.908
         *HYDROGRAPH MODEL #1 SPECIFIED*

         SPECIFIED PEAK  5-MINUTES RAINFALL(INCH)=  0.13
         SPECIFIED PEAK 30-MINUTES RAINFALL(INCH)=  0.28
         SPECIFIED PEAK  1-HOUR RAINFALL(INCH) =  0.37
         SPECIFIED PEAK  3-HOUR RAINFALL(INCH) =  0.62
         SPECIFIED PEAK  6-HOUR RAINFALL(INCH) =  0.85
         SPECIFIED PEAK 24-HOUR RAINFALL(INCH) =  1.44

         *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
           5-MINUTE FACTOR = 0.828
          30-MINUTE FACTOR = 0.828
           1-HOUR FACTOR = 0.828
           3-HOUR FACTOR = 0.974
           6-HOUR FACTOR = 0.987
          24-HOUR FACTOR = 0.992

         UNIT HYDROGRAPH TIME UNIT =   5.000 MINUTES
         UNIT INTERVAL PERCENTAGE OF LAG-TIME =   2.786
```


UNIT HYDROGRAPH DETERMINATION

INTERVAL NUMBER	"S" GRAPH MEAN VALUES	UNIT HYDROGRAPH ORDINATES(CFS)
1	0.159	74.315
2	0.478	148.631
3	0.796	148.631
4	1.114	148.631
5	1.433	148.631
6	1.751	148.631
7	2.113	168.669
8	2.591	223.114
9	3.075	226.177
10	3.560	226.178
11	4.115	259.392
12	4.973	400.300
13	5.882	424.128
14	6.995	519.660
15	8.233	577.793
16	9.695	682.399
17	11.111	660.965
18	12.504	650.261
19	13.973	685.640
20	15.960	927.671
21	17.528	732.149
22	19.014	693.602
23	20.630	754.313
24	22.590	914.753
25	24.571	924.816
26	26.169	745.954
27	27.801	761.383
28	29.857	959.865
29	31.836	923.634
30	34.320	1159.797
31	36.367	955.180
32	38.042	782.040
33	40.766	1271.399
34	43.255	1161.864
35	45.768	1173.069
36	48.677	1358.134
37	51.232	1192.376
38	53.257	945.119
39	55.178	896.873
40	57.245	964.794
41	59.678	1135.745
42	62.495	1315.064
43	64.719	1038.070
44	66.617	885.954
45	68.567	910.086
46	70.588	943.583
47	72.257	778.910
48	74.045	834.661

49	75.739	790.487
50	77.073	622.620
51	78.311	578.079
52	79.550	578.282
53	80.834	599.390
54	82.119	599.878
55	83.303	552.598
56	84.430	526.170
57	85.492	495.579
58	86.447	445.839
59	87.304	400.112
60	88.114	377.858
61	88.779	310.535
62	89.435	306.034
63	90.076	299.488
64	90.667	275.931
65	91.254	273.723
66	91.839	273.064
67	92.386	255.560
68	92.917	247.708
69	93.447	247.708
70	93.960	239.036
71	94.339	177.191
72	94.693	165.246
73	95.047	165.083
74	95.401	165.086
75	95.755	165.246
76	96.064	144.630
77	96.285	103.077
78	96.504	102.091
79	96.722	101.931
80	96.941	102.094
81	97.159	101.927
82	97.378	101.931
83	97.596	102.094
84	97.815	102.091
85	97.998	85.243
86	98.060	29.124
87	98.112	24.377
88	98.165	24.377
89	98.217	24.380
90	98.269	24.541
91	98.321	24.049
92	98.374	24.544
93	98.426	24.541
94	98.478	24.213
95	98.530	24.377
96	98.583	24.544
97	98.635	24.377
98	98.687	24.213
99	98.739	24.544
100	98.791	24.213
101	98.844	24.541
102	98.896	24.217
103	98.948	24.541
104	99.000	24.213
105	99.052	24.213
106	99.104	24.213

107	99.156	24.213
108	99.208	24.213
109	99.260	24.213
110	99.311	24.213
111	99.363	24.213
112	99.415	24.213
113	99.467	24.213
114	99.519	24.213
115	99.571	24.213
116	99.623	24.213
117	99.675	24.213
118	99.726	24.213
119	99.778	24.213
120	99.830	24.213
121	99.882	24.213
122	99.934	24.213
123	99.986	24.213
124	100.000	6.628

TOTAL SOIL-LOSS VOLUME(ACRE-FEET) = 401.0648

TOTAL STORM RUNOFF VOLUME(ACRE-FEET) = 58.4774

---

2 4 - H O U R S T O R M
R U N O F F H Y D R O G R A P H

HYDROGRAPH IN FIVE-MINUTE UNIT INTERVALS(CFS)
(Note: Time indicated is at END of Each Unit Intervals)

TIME(HRS)	VOLUME(AF)	Q(CFS)	0.	50.0	100.0	150.0	200.0
0.083	0.0001	0.01	Q	.	.	.	.
0.167	0.0004	0.04	Q	.	.	.	.
0.250	0.0008	0.07	Q	.	.	.	.
0.333	0.0014	0.09	Q	.	.	.	.
0.417	0.0023	0.12	Q	.	.	.	.
0.500	0.0032	0.14	Q	.	.	.	.
0.583	0.0044	0.17	Q	.	.	.	.
0.667	0.0059	0.21	Q	.	.	.	.
0.750	0.0077	0.25	Q	.	.	.	.
0.833	0.0097	0.30	Q	.	.	.	.
0.917	0.0121	0.34	Q	.	.	.	.
1.000	0.0149	0.41	Q	.	.	.	.
1.083	0.0183	0.49	Q	.	.	.	.
1.167	0.0223	0.58	Q	.	.	.	.
1.250	0.0270	0.68	Q	.	.	.	.
1.333	0.0325	0.81	Q	.	.	.	.
1.417	0.0389	0.93	Q	.	.	.	.
1.500	0.0461	1.04	Q	.	.	.	.
1.583	0.0541	1.17	Q	.	.	.	.
1.667	0.0633	1.33	Q	.	.	.	.
1.750	0.0734	1.47	Q	.	.	.	.
1.833	0.0844	1.59	Q	.	.	.	.
1.917	0.0963	1.73	Q	.	.	.	.
2.000	0.1093	1.90	Q	.	.	.	.
2.083	0.1235	2.06	Q	.	.	.	.
2.167	0.1387	2.20	Q	.	.	.	.
2.250	0.1548	2.34	Q	.	.	.	.
2.333	0.1722	2.52	Q	.	.	.	.
2.417	0.1907	2.69	Q	.	.	.	.
2.500	0.2107	2.90	Q	.	.	.	.
2.583	0.2319	3.08	Q	.	.	.	.
2.667	0.2542	3.23	Q	.	.	.	.
2.750	0.2780	3.46	Q	.	.	.	.
2.833	0.3033	3.68	Q	.	.	.	.
2.917	0.3301	3.90	Q	.	.	.	.
3.000	0.3587	4.15	Q	.	.	.	.
3.083	0.3888	4.37	Q	.	.	.	.
3.167	0.4202	4.55	Q	.	.	.	.
3.250	0.4527	4.72	Q	.	.	.	.
3.333	0.4865	4.91	Q	.	.	.	.
3.417	0.5218	5.13	VQ	.	.	.	.
3.500	0.5588	5.38	VQ	.	.	.	.
3.583	0.5972	5.58	VQ	.	.	.	.
3.667	0.6368	5.75	VQ	.	.	.	.
3.750	0.6777	5.93	VQ	.	.	.	.
3.833	0.7198	6.12	VQ	.	.	.	.
3.917	0.7630	6.28	VQ	.	.	.	.

4.000	0.8074	6.44	VQ	.	.	.	.
4.083	0.8529	6.61	VQ	.	.	.	.
4.167	0.8993	6.74	VQ	.	.	.	.
4.250	0.9466	6.86	VQ	.	.	.	.
4.333	0.9948	6.99	VQ	.	.	.	.
4.417	1.0438	7.12	VQ	.	.	.	.
4.500	1.0937	7.25	VQ	.	.	.	.
4.583	1.1445	7.38	VQ	.	.	.	.
4.667	1.1962	7.50	VQ	.	.	.	.
4.750	1.2486	7.61	VQ	.	.	.	.
4.833	1.3017	7.72	VQ	.	.	.	.
4.917	1.3556	7.82	VQ	.	.	.	.
5.000	1.4100	7.91	VQ	.	.	.	.
5.083	1.4651	8.00	.Q	.	.	.	.
5.167	1.5207	8.08	.Q	.	.	.	.
5.250	1.5770	8.16	.Q	.	.	.	.
5.333	1.6337	8.24	.Q	.	.	.	.
5.417	1.6910	8.32	.Q	.	.	.	.
5.500	1.7489	8.40	.Q	.	.	.	.
5.583	1.8073	8.48	.Q	.	.	.	.
5.667	1.8662	8.56	.Q	.	.	.	.
5.750	1.9257	8.63	.Q	.	.	.	.
5.833	1.9857	8.71	.Q	.	.	.	.
5.917	2.0461	8.78	.Q	.	.	.	.
6.000	2.1070	8.84	.Q	.	.	.	.
6.083	2.1683	8.90	.Q	.	.	.	.
6.167	2.2301	8.97	.Q	.	.	.	.
6.250	2.2923	9.03	.Q	.	.	.	.
6.333	2.3550	9.10	.Q	.	.	.	.
6.417	2.4180	9.15	.Q	.	.	.	.
6.500	2.4814	9.21	.Q	.	.	.	.
6.583	2.5452	9.26	.Q	.	.	.	.
6.667	2.6094	9.32	.Q	.	.	.	.
6.750	2.6740	9.38	.Q	.	.	.	.
6.833	2.7390	9.44	.Q	.	.	.	.
6.917	2.8044	9.50	.Q	.	.	.	.
7.000	2.8702	9.55	.Q	.	.	.	.
7.083	2.9364	9.61	.QV	.	.	.	.
7.167	3.0029	9.66	.QV	.	.	.	.
7.250	3.0697	9.70	.QV	.	.	.	.
7.333	3.1369	9.75	.QV	.	.	.	.
7.417	3.2044	9.80	.QV	.	.	.	.
7.500	3.2722	9.85	.QV	.	.	.	.
7.583	3.3404	9.90	.QV	.	.	.	.
7.667	3.4089	9.95	.QV	.	.	.	.
7.750	3.4777	10.00	.QV	.	.	.	.
7.833	3.5469	10.05	. Q	.	.	.	.
7.917	3.6165	10.10	. Q	.	.	.	.
8.000	3.6864	10.15	. Q	.	.	.	.
8.083	3.7566	10.20	. Q	.	.	.	.
8.167	3.8273	10.26	. Q	.	.	.	.
8.250	3.8983	10.31	. Q	.	.	.	.
8.333	3.9697	10.36	. Q	.	.	.	.
8.417	4.0414	10.42	. Q	.	.	.	.
8.500	4.1136	10.48	. Q	.	.	.	.
8.583	4.1861	10.53	. Q	.	.	.	.
8.667	4.2590	10.59	. Q	.	.	.	.
8.750	4.3324	10.65	. Q	.	.	.	.

8.833	4.4061	10.71	. QV	.	.	.	.
8.917	4.4802	10.76	. QV	.	.	.	.
9.000	4.5548	10.83	. QV	.	.	.	.
9.083	4.6298	10.89	. QV	.	.	.	.
9.167	4.7051	10.95	. QV	.	.	.	.
9.250	4.7810	11.01	. QV	.	.	.	.
9.333	4.8572	11.07	. QV	.	.	.	.
9.417	4.9340	11.14	. QV	.	.	.	.
9.500	5.0111	11.20	. QV	.	.	.	.
9.583	5.0887	11.27	. QV	.	.	.	.
9.667	5.1668	11.34	. QV	.	.	.	.
9.750	5.2454	11.40	. QV	.	.	.	.
9.833	5.3244	11.47	. QV	.	.	.	.
9.917	5.4039	11.54	. QV	.	.	.	.
10.000	5.4839	11.62	. QV	.	.	.	.
10.083	5.5644	11.69	. QV	.	.	.	.
10.167	5.6454	11.76	. QV	.	.	.	.
10.250	5.7269	11.83	. QV	.	.	.	.
10.333	5.8089	11.91	. QV	.	.	.	.
10.417	5.8914	11.98	. Q V	.	.	.	.
10.500	5.9744	12.05	. Q V	.	.	.	.
10.583	6.0579	12.13	. Q V	.	.	.	.
10.667	6.1420	12.21	. Q V	.	.	.	.
10.750	6.2266	12.28	. Q V	.	.	.	.
10.833	6.3117	12.36	. Q V	.	.	.	.
10.917	6.3974	12.44	. Q V	.	.	.	.
11.000	6.4836	12.52	. Q V	.	.	.	.
11.083	6.5705	12.61	. Q V	.	.	.	.
11.167	6.6579	12.69	. Q V	.	.	.	.
11.250	6.7459	12.78	. Q V	.	.	.	.
11.333	6.8345	12.87	. Q V	.	.	.	.
11.417	6.9237	12.95	. Q V	.	.	.	.
11.500	7.0135	13.05	. Q V	.	.	.	.
11.583	7.1040	13.14	. Q V	.	.	.	.
11.667	7.1952	13.23	. Q V	.	.	.	.
11.750	7.2870	13.33	. Q V	.	.	.	.
11.833	7.3794	13.43	. Q V	.	.	.	.
11.917	7.4726	13.53	. Q V	.	.	.	.
12.000	7.5665	13.63	. Q V	.	.	.	.
12.083	7.6612	13.74	. Q V	.	.	.	.
12.167	7.7567	13.87	. Q V	.	.	.	.
12.250	7.8530	13.99	. Q V	.	.	.	.
12.333	7.9502	14.12	. Q V	.	.	.	.
12.417	8.0483	14.24	. Q V	.	.	.	.
12.500	8.1473	14.38	. Q V	.	.	.	.
12.583	8.2473	14.51	. Q V	.	.	.	.
12.667	8.3482	14.66	. Q V	.	.	.	.
12.750	8.4502	14.80	. Q V	.	.	.	.
12.833	8.5532	14.96	. Q V	.	.	.	.
12.917	8.6573	15.11	. Q V	.	.	.	.
13.000	8.7626	15.29	. Q V	.	.	.	.
13.083	8.8691	15.47	. Q V	.	.	.	.
13.167	8.9770	15.66	. Q V	.	.	.	.
13.250	9.0862	15.86	. Q V	.	.	.	.
13.333	9.1969	16.08	. Q V	.	.	.	.
13.417	9.3092	16.30	. Q V	.	.	.	.
13.500	9.4230	16.52	. Q V	.	.	.	.
13.583	9.5384	16.75	. Q V	.	.	.	.

13.667	9.6555	17.01	. Q V	.	.	.	.
13.750	9.7744	17.26	. Q V	.	.	.	.
13.833	9.8949	17.50	. Q V	.	.	.	.
13.917	10.0172	17.76	. Q V	.	.	.	.
14.000	10.1415	18.04	. Q V	.	.	.	.
14.083	10.2679	18.35	. Q V	.	.	.	.
14.167	10.3964	18.66	. Q V	.	.	.	.
14.250	10.5271	18.98	. Q V	.	.	.	.
14.333	10.6601	19.32	. Q V	.	.	.	.
14.417	10.7956	19.67	. Q V	.	.	.	.
14.500	10.9338	20.05	. Q V	.	.	.	.
14.583	11.0744	20.43	. Q V	.	.	.	.
14.667	11.2178	20.81	. Q V	.	.	.	.
14.750	11.3641	21.25	. Q V	.	.	.	.
14.833	11.5135	21.69	. Q V	.	.	.	.
14.917	11.6660	22.15	. Q V	.	.	.	.
15.000	11.8221	22.67	. Q V	.	.	.	.
15.083	11.9818	23.19	. Q V	.	.	.	.
15.167	12.1452	23.73	. Q V	.	.	.	.
15.250	12.3125	24.29	. Q V	.	.	.	.
15.333	12.4840	24.90	. Q V	.	.	.	.
15.417	12.6596	25.50	. Q V	.	.	.	.
15.500	12.8394	26.10	. Q V	.	.	.	.
15.583	13.0233	26.71	. Q V	.	.	.	.
15.667	13.2120	27.40	. Q V.	.	.	.	.
15.750	13.4054	28.08	. Q V.	.	.	.	.
15.833	13.6040	28.83	. Q V.	.	.	.	.
15.917	13.8081	29.64	. Q V.	.	.	.	.
16.000	14.0189	30.61	. Q V.	.	.	.	.
16.083	14.2662	35.90	. Q V.	.	.	.	.
16.167	14.5490	41.06	. QV.	.	.	.	.
16.250	14.8373	41.86	. Q V	.	.	.	.
16.333	15.1307	42.61	. Q V	.	.	.	.
16.417	15.4295	43.39	. Q V	.	.	.	.
16.500	15.7346	44.30	. Q V	.	.	.	.
16.583	16.0539	46.35	. QV	.	.	.	.
16.667	16.4005	50.33	. QV	.	.	.	.
16.750	16.7550	51.47	. QV	.	.	.	.
16.833	17.1170	52.57	. QV	.	.	.	.
16.917	17.5007	55.71	. .Q	.	.	.	.
17.000	17.9484	65.01	. . VQ	.	.	.	.
17.083	18.4140	67.61	. . VQ	.	.	.	.
17.167	18.9253	74.24	. . V Q	.	.	.	.
17.250	19.4666	78.60	. . V Q	.	.	.	.
17.333	20.0552	85.47	. . V Q	.	.	.	.
17.417	20.6405	84.99	. . V Q	.	.	.	.
17.500	21.2284	85.37	. . V Q	.	.	.	.
17.583	21.8371	88.38	. . V Q	.	.	.	.
17.667	22.5454	102.84	. . V Q	.	.	.	.
17.750	23.1794	92.06	. . V Q .	.	.	.	.
17.833	23.8013	90.29	. . V Q .	.	.	.	.
17.917	24.4519	94.47	. . V Q .	.	.	.	.
18.000	25.1709	104.41	. . V Q	.	.	.	.
18.083	25.8943	105.03	. . V .Q	.	.	.	.
18.167	26.5480	94.92	. . Q .	.	.	.	.
18.250	27.2104	96.18	. . VQ.	.	.	.	.
18.333	27.9538	107.94	. . V.Q	.	.	.	.
18.417	28.6861	106.33	. . V.Q	.	.	.	.

18.500	29.5119	119.91	. . V Q . .
18.583	30.2570	108.20	. . VQ . .
18.667	30.9370	98.73	. . Q.V . .
18.750	31.8119	127.04	. . .V Q . .
18.833	32.6436	120.77	. . . V Q . .
18.917	33.4782	121.18	. . . V Q . .
19.000	34.3808	131.06	. . . V Q . .
19.083	35.2117	120.64	. . . Q . .
19.167	35.9392	105.63	. . .Q V . .
19.250	36.6450	102.48	. . Q V . .
19.333	37.3774	106.34	. . .Q V . .
19.417	38.1756	115.90	. . . Q V . .
19.500	39.0380	125.23	. . . QV . .
19.583	39.7822	108.05	. . .Q V . .
19.667	40.4587	98.23	. . Q. V . .
19.750	41.1379	98.62	. . Q. V . .
19.833	41.8236	99.56	. . Q. V . .
19.917	42.4368	89.03	. . Q . V. .
20.000	43.0632	90.96	. . Q . V. .
20.083	43.6631	87.11	. . Q . V. .
20.167	44.1889	76.33	. . Q . V .
20.250	44.6901	72.78	. . Q . V .
20.333	45.1856	71.95	. . Q . V .
20.417	45.6835	72.30	. . Q . .V .
20.500	46.1741	71.24	. . Q . .V .
20.583	46.6388	67.46	. . Q . .V .
20.667	47.0858	64.92	. . Q . . V .
20.750	47.5133	62.07	. . Q . . V .
20.833	47.9137	58.13	. .Q . . V .
20.917	48.2889	54.48	. Q . . V .
21.000	48.6482	52.18	. Q . . V .
21.083	48.9746	47.38	. Q. . . V .
21.167	49.2934	46.30	. Q. . . V .
21.250	49.6046	45.17	. Q. . . V .
21.333	49.9014	43.11	. Q . . . V .
21.417	50.1923	42.24	. Q . . . V .
21.500	50.4777	41.44	. Q . . . V .
21.583	50.7513	39.72	. Q . . . V .
21.667	51.0171	38.59	. Q . . . V .
21.750	51.2781	37.91	. Q . . . V .
21.833	51.5308	36.69	. Q . . . V .
21.917	51.7545	32.48	. Q . . . V .
22.000	51.9693	31.19	. Q . . . V .
22.083	52.1804	30.65	. Q . . . V .
22.167	52.3879	30.14	. Q . . . V .
22.250	52.5917	29.59	. Q . . . V .
22.333	52.7833	27.82	. Q . . . V .
22.417	52.9549	24.92	. Q . . . V .
22.500	53.1231	24.42	. Q . . . V .
22.583	53.2886	24.03	. Q . . . V .
22.667	53.4515	23.66	. Q . . . V .
22.750	53.6118	23.27	. Q . . . V .
22.833	53.7694	22.88	. Q . . . V .
22.917	53.9244	22.51	. Q . . . V .
23.000	54.0764	22.08	. Q . . . V .
23.083	54.2187	20.66	. Q . . . V .
23.167	54.3360	17.03	. Q . . . V .
23.250	54.4491	16.42	. Q . . . V .

23.333	54.5603	16.15	. Q . . . V .
23.417	54.6698	15.90	. Q . . . V .
23.500	54.7776	15.65	. Q . . . V .
23.583	54.8835	15.38	. Q . . . V .
23.667	54.9880	15.18	. Q . . . V .
23.750	55.0911	14.96	. Q . . . V .
23.833	55.1925	14.73	. Q . . . V .
23.917	55.2926	14.54	. Q . . . V .
24.000	55.3915	14.36	. Q . . . V .
24.083	55.4889	14.15	. Q . . . V .
24.167	55.5851	13.95	. Q . . . V .
24.250	55.6800	13.79	. Q . . . V .
24.333	55.7736	13.59	. Q . . . V .
24.417	55.8662	13.44	. Q . . . V .
24.500	55.9574	13.25	. Q . . . V .
24.583	56.0476	13.10	. Q . . . V .
24.667	56.1365	12.90	. Q . . . V .
24.750	56.2242	12.73	. Q . . . V .
24.833	56.3107	12.56	. Q . . . V .
24.917	56.3960	12.39	. Q . . . V .
25.000	56.4800	12.19	. Q . . . V .
25.083	56.5626	12.00	. Q . . . V .
25.167	56.6439	11.80	. Q . . . V .
25.250	56.7236	11.58	. Q . . . V .
25.333	56.8019	11.36	. Q . . . V .
25.417	56.8785	11.14	. Q . . . V .
25.500	56.9537	10.92	. Q . . . V .
25.583	57.0274	10.69	. Q . . . V.
25.667	57.0993	10.44	. Q . . . V.
25.750	57.1697	10.22	. Q . . . V.
25.833	57.2386	10.01	. Q . . . V.
25.917	57.3060	9.79	.Q . . . V.
26.000	57.3717	9.54	.Q . . . V.
26.083	57.4356	9.28	.Q . . . V.
26.167	57.4978	9.04	.Q . . . V.
26.250	57.5583	8.78	.Q . . . V.
26.333	57.6098	7.48	.Q . . . V.
26.417	57.6569	6.83	.Q . . . V.
26.500	57.7020	6.55	.Q . . . V.
26.583	57.7454	6.31	.Q . . . V.
26.667	57.7875	6.10	.Q . . . V.
26.750	57.8275	5.81	.Q . . . V.
26.833	57.8656	5.54	.Q . . . V.
26.917	57.9019	5.27	.Q . . . V.
27.000	57.9362	4.98	Q . . . V.
27.083	57.9687	4.71	Q . . . V.
27.167	57.9997	4.50	Q . . . V.
27.250	58.0292	4.29	Q . . . V.
27.333	58.0573	4.08	Q . . . V.
27.417	58.0837	3.84	Q . . . V.
27.500	58.1083	3.57	Q . . . V.
27.583	58.1314	3.36	Q . . . V.
27.667	58.1533	3.17	Q . . . V.
27.750	58.1738	2.98	Q . . . V.
27.833	58.1930	2.79	Q . . . V.
27.917	58.2110	2.62	Q . . . V.
28.000	58.2279	2.45	Q . . . V.
28.083	58.2437	2.29	Q . . . V.

28.167	58.2586	2.16	Q	.	.	.	V.
28.250	58.2726	2.04	Q	.	.	.	V.
28.333	58.2858	1.92	Q	.	.	.	V.
28.417	58.2982	1.80	Q	.	.	.	V.
28.500	58.3097	1.68	Q	.	.	.	V.
28.583	58.3205	1.56	Q	.	.	.	V.
28.667	58.3305	1.46	Q	.	.	.	V.
28.750	58.3399	1.36	Q	.	.	.	V.
28.833	58.3486	1.27	Q	.	.	.	V.
28.917	58.3568	1.19	Q	.	.	.	V.
29.000	58.3645	1.11	Q	.	.	.	V.
29.083	58.3717	1.05	Q	.	.	.	V.
29.167	58.3785	0.99	Q	.	.	.	V.
29.250	58.3849	0.93	Q	.	.	.	V.
29.333	58.3909	0.87	Q	.	.	.	V.
29.417	58.3965	0.82	Q	.	.	.	V.
29.500	58.4018	0.76	Q	.	.	.	V.
29.583	58.4066	0.71	Q	.	.	.	V.
29.667	58.4112	0.66	Q	.	.	.	V.
29.750	58.4154	0.61	Q	.	.	.	V.
29.833	58.4193	0.57	Q	.	.	.	V.
29.917	58.4230	0.53	Q	.	.	.	V.
30.000	58.4264	0.50	Q	.	.	.	V.
30.083	58.4296	0.46	Q	.	.	.	V.
30.167	58.4325	0.43	Q	.	.	.	V.
30.250	58.4353	0.40	Q	.	.	.	V.
30.333	58.4378	0.37	Q	.	.	.	V.
30.417	58.4402	0.35	Q	.	.	.	V.
30.500	58.4425	0.33	Q	.	.	.	V.
30.583	58.4446	0.31	Q	.	.	.	V.
30.667	58.4465	0.29	Q	.	.	.	V.
30.750	58.4484	0.27	Q	.	.	.	V.
30.833	58.4501	0.25	Q	.	.	.	V.
30.917	58.4516	0.23	Q	.	.	.	V.
31.000	58.4531	0.21	Q	.	.	.	V.
31.083	58.4544	0.19	Q	.	.	.	V.
31.167	58.4556	0.18	Q	.	.	.	V.
31.250	58.4569	0.18	Q	.	.	.	V.
31.333	58.4580	0.17	Q	.	.	.	V.
31.417	58.4592	0.17	Q	.	.	.	V.
31.500	58.4603	0.16	Q	.	.	.	V.
31.583	58.4614	0.16	Q	.	.	.	V.
31.667	58.4624	0.15	Q	.	.	.	V.
31.750	58.4634	0.14	Q	.	.	.	V.
31.833	58.4643	0.14	Q	.	.	.	V.
31.917	58.4653	0.13	Q	.	.	.	V.
32.000	58.4661	0.13	Q	.	.	.	V.
32.083	58.4670	0.12	Q	.	.	.	V.
32.167	58.4678	0.12	Q	.	.	.	V.
32.250	58.4686	0.11	Q	.	.	.	V.
32.333	58.4693	0.11	Q	.	.	.	V.
32.417	58.4700	0.10	Q	.	.	.	V.
32.500	58.4707	0.10	Q	.	.	.	V.
32.583	58.4713	0.09	Q	.	.	.	V.
32.667	58.4719	0.09	Q	.	.	.	V.
32.750	58.4725	0.08	Q	.	.	.	V.
32.833	58.4731	0.08	Q	.	.	.	V.
32.917	58.4736	0.07	Q	.	.	.	V.

33.000	58.4740	0.07	Q	.	.	.	V.
33.083	58.4745	0.06	Q	.	.	.	V.
33.167	58.4749	0.06	Q	.	.	.	V.
33.250	58.4753	0.05	Q	.	.	.	V.
33.333	58.4756	0.05	Q	.	.	.	V.
33.417	58.4759	0.05	Q	.	.	.	V.
33.500	58.4762	0.04	Q	.	.	.	V.
33.583	58.4764	0.04	Q	.	.	.	V.
33.667	58.4767	0.03	Q	.	.	.	V.
33.750	58.4768	0.03	Q	.	.	.	V.
33.833	58.4770	0.02	Q	.	.	.	V.
33.917	58.4771	0.02	Q	.	.	.	V.
34.000	58.4772	0.01	Q	.	.	.	V.
34.083	58.4773	0.01	Q	.	.	.	V.

TIME DURATION(minutes) OF PERCENTILES OF ESTIMATED PEAK FLOW RATE:
(Note: 100% of Peak Flow Rate estimate assumed to have
an instantaneous time duration)

Percentile of Estimated Peak Flow Rate	Duration (minutes)
0%	2045.0
10%	780.0
20%	410.0
30%	330.0
40%	250.0
50%	215.0
60%	170.0
70%	130.0
80%	75.0
90%	35.0

END OF FLOODSCx ROUTING ANALYSIS

```
**************************************************************************

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             USING COUNTY HYDROLOGY MANUAL OF ORANGE(1986)
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             Ver. 20.0  Release Date: 06/01/2013  License ID 1237

                        Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RMV PA-3 ROMP AMENDMENT 2022 - NODE 134U                              *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL             *
* 2-YR EV NOV 2022 ROKAMOTO                                             *
 ************************************************************************

  FILE NAME: EV0234US.DAT
  TIME/DATE OF STUDY: 04:14 11/08/2022


                       ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    134.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =   62698.000 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    6.120 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.570; LOW LOSS FRACTION = 0.907
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.15; 30-MINUTE =  0.29;  1-HOUR =  0.41
    3-HOUR =  0.74;    6-HOUR =  1.09; 24-HOUR =  1.90
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.304; 30-MINUTE = 0.358;  1-HOUR = 0.405
    3-HOUR = 0.750;    6-HOUR = 0.890; 24-HOUR = 0.936
==========================================================================
```



```
 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV0234US.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 10100.00     134.00| Subarea (UH) Added to Stream #1|       0.0       774.1|
21.000 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
-------------------------------------+

   END OF FLOODSCx ROUTING ANALYSIS
```

```
**************************************************************************

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                        Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RMV PA-3 ROMP AMENDMENT 2022 - NODE 133C                              *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL             *
* 5-YR EV NOV 2022 ROKAMOTO                                             *
 ************************************************************************

  FILE NAME: EV0533CS.DAT
  TIME/DATE OF STUDY: 03:53 11/08/2022


                       ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    133.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =   60992.301 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    3.690 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.477; LOW LOSS FRACTION = 0.831
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.22; 30-MINUTE =  0.44;  1-HOUR =  0.60
    3-HOUR =  1.11;    6-HOUR =  1.63; 24-HOUR =  2.85
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.308; 30-MINUTE = 0.363;  1-HOUR = 0.408
    3-HOUR = 0.754;    6-HOUR = 0.891; 24-HOUR = 0.936
==========================================================================
```



```
 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV0533CS.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 10100.00     133.00| Subarea (UH) Added to Stream #1|       0.0      2715.2|
19.083 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
-------------------------------------+

   END OF FLOODSCx ROUTING ANALYSIS
```

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**************************************************************************

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                          Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RMV PA-3 ROMP AMENDMENT 2022 - NODE 133T                              *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL             *
* 5-YR EV OCT 2022 ROKAMOTO                                             *
 ************************************************************************

  FILE NAME: EV0533TS.DAT
  TIME/DATE OF STUDY: 11:09 10/25/2022


**************************************************************************
  FLOW PROCESS FROM NODE  13010.00 TO NODE    133.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS)<<<<<
==========================================================================

      (UNIT-HYDROGRAPH ADDED TO STREAM #1)

         WATERSHED AREA =    6638.200 ACRES
         BASEFLOW =   0.000 CFS/SQUARE-MILE
         *USER ENTERED "LAG" TIME =    1.476 HOURS
         VALLEY(DEVELOPED) S-GRAPH SELECTED
         MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.398
         LOW LOSS FRACTION = 0.764
         *HYDROGRAPH MODEL #1 SPECIFIED*

         SPECIFIED PEAK  5-MINUTES RAINFALL(INCH)=  0.18
         SPECIFIED PEAK 30-MINUTES RAINFALL(INCH)=  0.41
         SPECIFIED PEAK  1-HOUR RAINFALL(INCH) =  0.55
         SPECIFIED PEAK  3-HOUR RAINFALL(INCH) =  0.92
         SPECIFIED PEAK  6-HOUR RAINFALL(INCH) =  1.27
         SPECIFIED PEAK 24-HOUR RAINFALL(INCH) =  2.12

         *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
           5-MINUTE FACTOR = 0.744
          30-MINUTE FACTOR = 0.744
           1-HOUR FACTOR = 0.744
           3-HOUR FACTOR = 0.959
           6-HOUR FACTOR = 0.978
          24-HOUR FACTOR = 0.986

         UNIT HYDROGRAPH TIME UNIT =   5.000 MINUTES
         UNIT INTERVAL PERCENTAGE OF LAG-TIME =   5.646
```


UNIT HYDROGRAPH DETERMINATION

INTERVAL NUMBER	"S" GRAPH MEAN VALUES	UNIT HYDROGRAPH ORDINATES(CFS)
1	0.323	259.003
2	0.968	518.007
3	1.613	518.007
4	2.395	627.561
5	3.375	786.931
6	4.664	1035.145
7	6.627	1575.320
8	9.247	2103.244
9	12.120	2306.832
10	15.417	2646.715
11	18.685	2623.797
12	22.220	2837.612
13	25.899	2953.907
14	29.528	2913.452
15	33.973	3568.024
16	38.060	3281.204
17	43.093	4040.775
18	48.517	4353.888
19	53.219	3774.959
20	57.323	3294.676
21	62.494	4151.480
22	66.744	3412.430
23	70.701	3176.293
24	74.245	2845.430
25	77.255	2416.385
26	79.777	2024.205
27	82.348	2064.231
28	84.667	1861.980
29	86.661	1600.647
30	88.292	1309.248
31	89.632	1075.612
32	90.862	987.854
33	92.034	940.710
34	93.121	872.950
35	94.113	796.223
36	94.848	590.162
37	95.565	575.572
38	96.173	487.545
39	96.617	356.869
40	97.060	355.344
41	97.503	355.620
42	97.921	336.185
43	98.093	137.609
44	98.199	84.843
45	98.305	85.259
46	98.411	84.983
47	98.516	84.983
48	98.623	85.259

49	98.728	84.708
50	98.834	84.983
51	98.940	84.983
52	99.046	85.259
53	99.152	84.983
54	99.258	84.983
55	99.364	84.983
56	99.469	84.983
57	99.575	84.983
58	99.681	84.983
59	99.787	84.983
60	99.893	84.983
61	99.999	84.983
62	100.000	0.980

TOTAL SOIL-LOSS VOLUME(ACRE-FEET) = 842.4324

TOTAL STORM RUNOFF VOLUME(ACRE-FEET) = 314.8659

==========

2 4 - H O U R S T O R M
R U N O F F H Y D R O G R A P H

==========

HYDROGRAPH IN FIVE-MINUTE UNIT INTERVALS(CFS)
(Note: Time indicated is at END of Each Unit Intervals)

TIME(HRS)	VOLUME(AF)	Q(CFS)	0.	225.0	450.0	675.0	900.0
0.083	0.0012	0.17	Q	.	.	.	.
0.167	0.0046	0.50	Q	.	.	.	.
0.250	0.0104	0.84	Q	.	.	.	.
0.333	0.0190	1.25	Q	.	.	.	.
0.417	0.0312	1.76	Q	.	.	.	.
0.500	0.0480	2.44	Q	.	.	.	.
0.583	0.0719	3.47	Q	.	.	.	.
0.667	0.1053	4.84	Q	.	.	.	.
0.750	0.1490	6.36	Q	.	.	.	.
0.833	0.2048	8.09	Q	.	.	.	.
0.917	0.2724	9.82	Q	.	.	.	.
1.000	0.3529	11.69	Q	.	.	.	.
1.083	0.4469	13.64	Q	.	.	.	.
1.167	0.5541	15.58	Q	.	.	.	.
1.250	0.6777	17.94	Q	.	.	.	.
1.333	0.8163	20.13	Q	.	.	.	.
1.417	0.9734	22.81	VQ	.	.	.	.
1.500	1.1505	25.71	VQ	.	.	.	.
1.583	1.3450	28.24	VQ	.	.	.	.
1.667	1.5548	30.47	VQ	.	.	.	.
1.750	1.7839	33.27	VQ	.	.	.	.
1.833	2.0290	35.59	VQ	.	.	.	.
1.917	2.2891	37.77	VQ	.	.	.	.
2.000	2.5628	39.74	VQ	.	.	.	.
2.083	2.8482	41.44	VQ	.	.	.	.
2.167	3.1436	42.89	VQ	.	.	.	.
2.250	3.4493	44.38	VQ	.	.	.	.
2.333	3.7643	45.74	V Q	.	.	.	.
2.417	4.0875	46.94	V Q	.	.	.	.
2.500	4.4177	47.95	V Q	.	.	.	.
2.583	4.7539	48.81	V Q	.	.	.	.
2.667	5.0957	49.62	V Q	.	.	.	.
2.750	5.4428	50.41	V Q	.	.	.	.
2.833	5.7951	51.15	V Q	.	.	.	.
2.917	6.1522	51.85	V Q	.	.	.	.
3.000	6.5132	52.42	V Q	.	.	.	.
3.083	6.8781	52.98	V Q	.	.	.	.
3.167	7.2464	53.49	V Q	.	.	.	.
3.250	7.6177	53.91	V Q	.	.	.	.
3.333	7.9920	54.34	.VQ	.	.	.	.
3.417	8.3692	54.77	.VQ	.	.	.	.
3.500	8.7493	55.19	.VQ	.	.	.	.
3.583	9.1314	55.48	.VQ	.	.	.	.
3.667	9.5153	55.75	.VQ	.	.	.	.
3.750	9.9011	56.01	.VQ	.	.	.	.
3.833	10.2887	56.28	.VQ	.	.	.	.
3.917	10.6781	56.55	.VQ	.	.	.	.

4.000	11.0695	56.82	.VQ	.	.	.	.	.
4.083	11.4627	57.09	.VQ	.	.	.	.	.
4.167	11.8578	57.37	.VQ	.	.	.	.	.
4.250	12.2548	57.65	.VQ	.	.	.	.	.
4.333	12.6537	57.93	.VQ	.	.	.	.	.
4.417	13.0547	58.21	.VQ	.	.	.	.	.
4.500	13.4575	58.50	.VQ	.	.	.	.	.
4.583	13.8624	58.79	.VQ	.	.	.	.	.
4.667	14.2693	59.08	.VQ	.	.	.	.	.
4.750	14.6782	59.37	.VQ	.	.	.	.	.
4.833	15.0891	59.67	.VQ	.	.	.	.	.
4.917	15.5021	59.97	.VQ	.	.	.	.	.
5.000	15.9172	60.27	. Q	.	.	.	.	.
5.083	16.3344	60.58	. Q	.	.	.	.	.
5.167	16.7534	60.83	. Q	.	.	.	.	.
5.250	17.1741	61.09	. Q	.	.	.	.	.
5.333	17.5966	61.34	. Q	.	.	.	.	.
5.417	18.0209	61.61	. Q	.	.	.	.	.
5.500	18.4470	61.87	. Q	.	.	.	.	.
5.583	18.8749	62.14	. Q	.	.	.	.	.
5.667	19.3047	62.41	. Q	.	.	.	.	.
5.750	19.7365	62.68	. Q	.	.	.	.	.
5.833	20.1701	62.96	. Q	.	.	.	.	.
5.917	20.6056	63.24	. Q	.	.	.	.	.
6.000	21.0431	63.52	. Q	.	.	.	.	.
6.083	21.4826	63.81	. Q	.	.	.	.	.
6.167	21.9240	64.10	. Q	.	.	.	.	.
6.250	22.3675	64.39	. Q	.	.	.	.	.
6.333	22.8130	64.69	. Q	.	.	.	.	.
6.417	23.2606	64.99	. Q	.	.	.	.	.
6.500	23.7103	65.30	. QV	.	.	.	.	.
6.583	24.1622	65.61	. QV	.	.	.	.	.
6.667	24.6161	65.92	. QV	.	.	.	.	.
6.750	25.0723	66.23	. QV	.	.	.	.	.
6.833	25.5306	66.55	. QV	.	.	.	.	.
6.917	25.9912	66.88	. QV	.	.	.	.	.
7.000	26.4541	67.20	. QV	.	.	.	.	.
7.083	26.9192	67.54	. Q	.	.	.	.	.
7.167	27.3866	67.87	. Q	.	.	.	.	.
7.250	27.8564	68.22	. Q	.	.	.	.	.
7.333	28.3286	68.56	. Q	.	.	.	.	.
7.417	28.8032	68.91	. Q	.	.	.	.	.
7.500	29.2803	69.27	. Q	.	.	.	.	.
7.583	29.7598	69.63	. Q	.	.	.	.	.
7.667	30.2418	69.99	. Q	.	.	.	.	.
7.750	30.7264	70.36	. Q	.	.	.	.	.
7.833	31.2136	70.74	. Q	.	.	.	.	.
7.917	31.7034	71.12	. QV	.	.	.	.	.
8.000	32.1958	71.50	. QV	.	.	.	.	.
8.083	32.6910	71.90	. QV	.	.	.	.	.
8.167	33.1888	72.29	. QV	.	.	.	.	.
8.250	33.6895	72.70	. QV	.	.	.	.	.
8.333	34.1930	73.10	. QV	.	.	.	.	.
8.417	34.6993	73.52	. QV	.	.	.	.	.
8.500	35.2085	73.94	. QV	.	.	.	.	.
8.583	35.7207	74.37	. QV	.	.	.	.	.
8.667	36.2358	74.80	. QV	.	.	.	.	.
8.750	36.7540	75.24	. QV	.	.	.	.	.

8.833	37.2753	75.69	. QV	.	.	.	.	.
8.917	37.7997	76.15	. QV	.	.	.	.	.
9.000	38.3273	76.61	. QV	.	.	.	.	.
9.083	38.8581	77.08	. QV	.	.	.	.	.
9.167	39.3922	77.55	. Q V	.	.	.	.	.
9.250	39.9297	78.04	. Q V	.	.	.	.	.
9.333	40.4705	78.53	. Q V	.	.	.	.	.
9.417	41.0149	79.03	. Q V	.	.	.	.	.
9.500	41.5626	79.54	. Q V	.	.	.	.	.
9.583	42.1140	80.06	. Q V	.	.	.	.	.
9.667	42.6690	80.59	. Q V	.	.	.	.	.
9.750	43.2278	81.13	. Q V	.	.	.	.	.
9.833	43.7902	81.67	. Q V	.	.	.	.	.
9.917	44.3565	82.23	. Q V	.	.	.	.	.
10.000	44.9267	82.79	. Q V	.	.	.	.	.
10.083	45.5009	83.37	. Q V	.	.	.	.	.
10.167	46.0791	83.95	. Q V	.	.	.	.	.
10.250	46.6614	84.56	. Q V	.	.	.	.	.
10.333	47.2480	85.16	. Q V	.	.	.	.	.
10.417	47.8388	85.79	. Q V	.	.	.	.	.
10.500	48.4339	86.42	. Q V	.	.	.	.	.
10.583	49.0336	87.07	. Q V	.	.	.	.	.
10.667	49.6377	87.72	. Q V	.	.	.	.	.
10.750	50.2465	88.40	. Q V	.	.	.	.	.
10.833	50.8600	89.08	. Q V	.	.	.	.	.
10.917	51.4783	89.78	. Q V	.	.	.	.	.
11.000	52.1015	90.49	. Q V	.	.	.	.	.
11.083	52.7298	91.23	. Q V	.	.	.	.	.
11.167	53.3632	91.97	. Q V	.	.	.	.	.
11.250	54.0018	92.73	. Q V	.	.	.	.	.
11.333	54.6458	93.51	. Q V	.	.	.	.	.
11.417	55.2953	94.31	. Q V	.	.	.	.	.
11.500	55.9504	95.12	. Q V	.	.	.	.	.
11.583	56.6113	95.96	. Q V	.	.	.	.	.
11.667	57.2780	96.80	. Q V	.	.	.	.	.
11.750	57.9507	97.68	. Q V	.	.	.	.	.
11.833	58.6296	98.57	. Q V	.	.	.	.	.
11.917	59.3148	99.49	. Q V	.	.	.	.	.
12.000	60.0064	100.43	. Q V	.	.	.	.	.
12.083	60.7056	101.52	. Q V	.	.	.	.	.
12.167	61.4132	102.75	. Q V	.	.	.	.	.
12.250	62.1296	104.02	. Q V	.	.	.	.	.
12.333	62.8552	105.36	. Q V	.	.	.	.	.
12.417	63.5908	106.81	. Q V	.	.	.	.	.
12.500	64.3374	108.40	. Q V	.	.	.	.	.
12.583	65.0970	110.30	. Q V	.	.	.	.	.
12.667	65.8716	112.47	. Q V	.	.	.	.	.
12.750	66.6621	114.78	. Q V	.	.	.	.	.
12.833	67.4698	117.29	. Q V	.	.	.	.	.
12.917	68.2951	119.83	. Q V	.	.	.	.	.
13.000	69.1388	122.51	. Q V	.	.	.	.	.
13.083	70.0018	125.30	. Q V	.	.	.	.	.
13.167	70.8841	128.11	. Q V.	.	.	.	.	.
13.250	71.7883	131.29	. Q V.	.	.	.	.	.
13.333	72.7138	134.38	. Q V.	.	.	.	.	.
13.417	73.6635	137.89	. Q V.	.	.	.	.	.
13.500	74.6387	141.60	. Q V.	.	.	.	.	.
13.583	75.6381	145.11	. Q V.	.	.	.	.	.

13.667	76.6604	148.44	. Q V. . . .
13.750	77.7091	152.27	. Q V. . . .
13.833	78.7821	155.79	. Q V . . .
13.917	79.8792	159.30	. Q V . . .
14.000	80.9997	162.71	. Q V . . .
14.083	82.1452	166.33	. Q V . . .
14.167	83.3169	170.13	. Q V . . .
14.250	84.5158	174.07	. Q V . . .
14.333	85.7425	178.12	. Q V . . .
14.417	86.9985	182.36	. Q .V . . .
14.500	88.2852	186.84	. Q .V . . .
14.583	89.6075	191.99	. Q .V . . .
14.667	90.9699	197.82	. Q .V . . .
14.750	92.3750	204.02	. Q.V . . .
14.833	93.8260	210.69	. Q.V . . .
14.917	95.3237	217.47	. Q. V . . .
15.000	96.8700	224.52	. Q. V . . .
15.083	98.4671	231.89	. Q V . . .
15.167	100.1153	239.32	. Q V . . .
15.250	101.8212	247.70	. .QV . . .
15.333	103.5837	255.91	. .Q V . . .
15.417	105.4067	264.70	. .Q V . . .
15.500	107.2901	273.47	. . QV . . .
15.583	109.2312	281.85	. . QV . . .
15.667	111.2266	289.73	. . Q V . . .
15.750	113.2861	299.04	. . QV . . .
15.833	115.4053	307.70	. . QV . . .
15.917	117.5817	316.02	. . Q . . .
16.000	119.8272	326.05	. . QV . . .
16.083	122.3072	360.09	. . VQ . . .
16.167	125.0031	391.45	. . V Q . . .
16.250	127.7602	400.32	. . VQ . . .
16.333	130.6527	419.99	. . V Q . . .
16.417	133.7293	446.73	. . V Q. . . .
16.500	137.0741	485.67	. . V .Q . . .
16.583	140.8598	549.69	. . V . Q . . .
16.667	145.0597	609.82	. . V . Q . . .
16.750	149.4471	637.06	. . V . Q . . .
16.833	154.0719	671.51	. . V. Q. . .
16.917	158.7265	675.85	. . V Q . .
17.000	163.5582	701.57	. . V .Q . .
17.083	168.4892	715.97	. . .V .Q . .
17.167	173.4606	721.85	. . . V . Q . .
17.250	178.8666	784.95	. . . V . Q .
17.333	184.1549	767.86	. . . V . Q .
17.417	189.9587	842.71	. . . V . Q .
17.500	195.9175	865.22	. . . V . Q .
17.583	201.4521	803.61	. . . V . Q .
17.667	206.6686	757.44	. . . V . Q .
17.750	212.3445	824.14	. . . V . Q .
17.833	217.4760	745.08	. . . V . Q .
17.917	222.3559	708.57	. . . V .Q .
18.000	226.9090	661.11	. . . VQ. .
18.083	231.0908	607.20	. . . Q V. .
18.167	234.9413	559.09	. . . Q V. .
18.250	238.7211	548.82	. . . Q V .
18.333	242.2736	515.82	. . . Q V .
18.417	245.5452	475.04	. . .Q .V .

18.500	248.5165	431.44	. . Q. .V .
18.583	251.2467	396.42	. . Q . .V .
18.667	253.8377	376.22	. . Q . . V .
18.750	256.3086	358.78	. . Q . . V .
18.833	258.6474	339.59	. . Q . . V .
18.917	260.8447	319.05	. . Q . . V .
19.000	262.8324	288.61	. . Q . . V .
19.083	264.7348	276.22	. . Q . . V .
19.167	266.5095	257.69	. .Q . . V .
19.250	268.1350	236.03	. .Q . . V .
19.333	269.6974	226.86	. .Q . . V .
19.417	271.1975	217.81	. .Q. . V .
19.500	272.6140	205.67	. .Q. . V .
19.583	273.8443	178.64	. Q . . V .
19.667	274.9916	166.59	. Q . . V .
19.750	276.0935	159.99	. Q . . V .
19.833	277.1559	154.26	. Q . . V .
19.917	278.1793	148.60	. Q . . V .
20.000	279.1674	143.48	. Q . . V .
20.083	280.1228	138.72	. Q . . V .
20.167	281.0491	134.50	. Q . . V .
20.250	281.9482	130.54	. Q . . V .
20.333	282.8216	126.83	. Q . . V .
20.417	283.6709	123.31	. Q . . V .
20.500	284.4993	120.28	. Q . . V .
20.583	285.3098	117.68	. Q . . V .
20.667	286.1035	115.25	. Q . . V .
20.750	286.8811	112.91	. Q . . V .
20.833	287.6425	110.55	. Q . . V .
20.917	288.3880	108.25	. Q . . V .
21.000	289.1173	105.90	. Q . . V .
21.083	289.8261	102.91	. Q . . V .
21.167	290.4659	92.90	. Q . . V .
21.250	291.0917	90.87	. Q . . V .
21.333	291.7062	89.23	. Q . . V .
21.417	292.3102	87.71	. Q . . V .
21.500	292.9031	86.09	. Q . . V .
21.583	293.4860	84.63	. Q . . V .
21.667	294.0594	83.26	. Q . . V .
21.750	294.6238	81.95	. Q . . V .
21.833	295.1794	80.68	. Q . . V .
21.917	295.7266	79.46	. Q . . V .
22.000	296.2657	78.27	. Q . . V .
22.083	296.7969	77.13	. Q . . V .
22.167	297.3211	76.12	. Q . . V .
22.250	297.8387	75.15	. Q . . V .
22.333	298.3498	74.21	. Q . . V .
22.417	298.8547	73.30	. Q . . V .
22.500	299.3535	72.42	. Q . . V .
22.583	299.8463	71.57	. Q . . V .
22.667	300.3335	70.74	. Q . . V .
22.750	300.8152	69.94	. Q . . V .
22.833	301.2914	69.15	. Q . . V .
22.917	301.7625	68.39	. Q . . V .
23.000	302.2284	67.65	. Q . . V .
23.083	302.6894	66.93	. Q . . V .
23.167	303.1458	66.27	. Q . . V .
23.250	303.5978	65.63	. Q . . V .

23.333	304.0455	65.00	. Q	.	.	.	V	.
23.417	304.4890	64.39	. Q	.	.	.	V	.
23.500	304.9283	63.80	. Q	.	.	.	V	.
23.583	305.3637	63.22	. Q	.	.	.	V	.
23.667	305.7951	62.65	. Q	.	.	.	V	.
23.750	306.2228	62.10	. Q	.	.	.	V	.
23.833	306.6467	61.56	. Q	.	.	.	V	.
23.917	307.0670	61.03	. Q	.	.	.		V.
24.000	307.4838	60.51	. Q	.	.	.		V.
24.083	307.8959	59.84	. Q	.	.	.		V.
24.167	308.3024	59.01	. Q	.	.	.		V.
24.250	308.7032	58.20	. Q	.	.	.		V.
24.333	309.0980	57.33	. Q	.	.	.		V.
24.417	309.4862	56.36	. Q	.	.	.		V.
24.500	309.8667	55.25	. Q	.	.	.		V.
24.583	310.2372	53.81	. Q	.	.	.		V.
24.667	310.5956	52.03	. Q	.	.	.		V.
24.750	310.9409	50.14	. Q	.	.	.		V.
24.833	311.2719	48.05	. Q	.	.	.		V.
24.917	311.5886	46.00	. Q	.	.	.		V.
25.000	311.8904	43.82	.Q	.	.	.		V.
25.083	312.1768	41.58	.Q	.	.	.		V.
25.167	312.4481	39.39	.Q	.	.	.		V.
25.250	312.7015	36.80	.Q	.	.	.		V.
25.333	312.9385	34.41	.Q	.	.	.		V.
25.417	313.1558	31.55	.Q	.	.	.		V.
25.500	313.3521	28.50	.Q	.	.	.		V.
25.583	313.5302	25.86	.Q	.	.	.		V.
25.667	313.6923	23.54	.Q	.	.	.		V.
25.750	313.8348	20.69	Q	.	.	.		V.
25.833	313.9610	18.33	Q	.	.	.		V.
25.917	314.0722	16.15	Q	.	.	.		V.
26.000	314.1700	14.19	Q	.	.	.		V.
26.083	314.2563	12.53	Q	.	.	.		V.
26.167	314.3329	11.13	Q	.	.	.		V.
26.250	314.3998	9.72	Q	.	.	.		V.
26.333	314.4579	8.44	Q	.	.	.		V.
26.417	314.5085	7.35	Q	.	.	.		V.
26.500	314.5529	6.45	Q	.	.	.		V.
26.583	314.5923	5.71	Q	.	.	.		V.
26.667	314.6269	5.03	Q	.	.	.		V.
26.750	314.6570	4.38	Q	.	.	.		V.
26.833	314.6831	3.79	Q	.	.	.		V.
26.917	314.7054	3.24	Q	.	.	.		V.
27.000	314.7250	2.84	Q	.	.	.		V.
27.083	314.7419	2.45	Q	.	.	.		V.
27.167	314.7564	2.11	Q	.	.	.		V.
27.250	314.7693	1.87	Q	.	.	.		V.
27.333	314.7805	1.63	Q	.	.	.		V.
27.417	314.7900	1.38	Q	.	.	.		V.
27.500	314.7980	1.16	Q	.	.	.		V.
27.583	314.8053	1.06	Q	.	.	.		V.
27.667	314.8121	1.00	Q	.	.	.		V.
27.750	314.8186	0.93	Q	.	.	.		V.
27.833	314.8246	0.87	Q	.	.	.		V.
27.917	314.8302	0.81	Q	.	.	.		V.
28.000	314.8353	0.75	Q	.	.	.		V.
28.083	314.8401	0.69	Q	.	.	.		V.

28.167	314.8444	0.63	Q	.	.	.		V.
28.250	314.8484	0.57	Q	.	.	.		V.
28.333	314.8519	0.51	Q	.	.	.		V.
28.417	314.8550	0.45	Q	.	.	.		V.
28.500	314.8577	0.40	Q	.	.	.		V.
28.583	314.8600	0.34	Q	.	.	.		V.
28.667	314.8620	0.28	Q	.	.	.		V.
28.750	314.8635	0.22	Q	.	.	.		V.
28.833	314.8647	0.17	Q	.	.	.		V.
28.917	314.8654	0.11	Q	.	.	.		V.
29.000	314.8658	0.06	Q	.	.	.		V.
29.083	314.8658	0.00	Q	.	.	.		V.

TIME DURATION(minutes) OF PERCENTILES OF ESTIMATED PEAK FLOW RATE:
(Note: 100% of Peak Flow Rate estimate assumed to have
an instantaneous time duration)

Percentile of Estimated Peak Flow Rate	Duration (minutes)
0%	1745.0
10%	655.0
20%	325.0
30%	225.0
40%	165.0
50%	125.0
60%	105.0
70%	90.0
80%	60.0
90%	25.0

END OF FLOODSCx ROUTING ANALYSIS

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             USING COUNTY HYDROLOGY MANUAL OF ORANGE(1986)
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                        Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RMV PA-3 ROMP AMENDMENT 2022 - NODE 133U                              *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL             *
* 5-YR EV NOV 2022 ROKAMOTO                                             *
 **************************************************************************

  FILE NAME: EV0533US.DAT
  TIME/DATE OF STUDY: 03:52 11/08/2022


                         ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    133.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =   54354.000 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    3.690 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.486; LOW LOSS FRACTION = 0.838
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.22; 30-MINUTE =  0.44;  1-HOUR =  0.61
    3-HOUR =  1.13;    6-HOUR =  1.67; 24-HOUR =  2.94
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.328; 30-MINUTE = 0.381;  1-HOUR = 0.422
    3-HOUR = 0.771;    6-HOUR = 0.897; 24-HOUR = 0.940
==========================================================================
```



```
 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV0533US.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 10100.00     133.00| Subarea (UH) Added to Stream #1|       0.0      2473.0|
19.083 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
-------------------------------------+

   END OF FLOODSCx ROUTING ANALYSIS
```

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**************************************************************************

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                        Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RMV PA-3 ROMP AMENDMENT 2022 - NODE 134C                              *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL             *
* 5-YR EV NOV 2022 ROKAMOTO                                             *
 ************************************************************************

  FILE NAME: EV0534CS.DAT
  TIME/DATE OF STUDY: 03:56 11/08/2022


                         ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    134.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =   66557.602 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    3.827 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.475; LOW LOSS FRACTION = 0.829
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.22; 30-MINUTE =  0.44;  1-HOUR =  0.60
    3-HOUR =  1.09;    6-HOUR =  1.60; 24-HOUR =  2.79
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.294; 30-MINUTE = 0.352;  1-HOUR = 0.397
    3-HOUR = 0.741;    6-HOUR = 0.887; 24-HOUR = 0.933
==========================================================================
```



```
 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV0534CS.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 10100.00     134.00| Subarea (UH) Added to Stream #1|       0.0      2857.1|
19.500 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
-------------------------------------+

   END OF FLOODSCx ROUTING ANALYSIS
```

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******************************************************************************

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                          Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RMV PA-3 ROMP AMENDMENT 2022 - NODE 134T                              *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL             *
* 5-YR EV OCT 2022 ROKAMOTO                                             *
 ************************************************************************

  FILE NAME: EV0534TS.DAT
  TIME/DATE OF STUDY: 11:10 10/25/2022


******************************************************************************
  FLOW PROCESS FROM NODE  13500.00 TO NODE    134.00 IS CODE =   1
------------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS)<<<<<
==============================================================================

      (UNIT-HYDROGRAPH ADDED TO STREAM #1)

         WATERSHED AREA =    3859.700 ACRES
         BASEFLOW =   0.000 CFS/SQUARE-MILE
         *USER ENTERED "LAG" TIME =    2.180 HOURS
         VALLEY(DEVELOPED) S-GRAPH SELECTED
         MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.473
         LOW LOSS FRACTION = 0.843
         *HYDROGRAPH MODEL #1 SPECIFIED*

         SPECIFIED PEAK  5-MINUTES RAINFALL(INCH)=  0.18
         SPECIFIED PEAK 30-MINUTES RAINFALL(INCH)=  0.41
         SPECIFIED PEAK  1-HOUR RAINFALL(INCH) =  0.55
         SPECIFIED PEAK  3-HOUR RAINFALL(INCH) =  0.92
         SPECIFIED PEAK  6-HOUR RAINFALL(INCH) =  1.27
         SPECIFIED PEAK 24-HOUR RAINFALL(INCH) =  2.12

         *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
           5-MINUTE FACTOR = 0.828
          30-MINUTE FACTOR = 0.828
           1-HOUR FACTOR = 0.828
           3-HOUR FACTOR = 0.974
           6-HOUR FACTOR = 0.987
          24-HOUR FACTOR = 0.992

         UNIT HYDROGRAPH TIME UNIT =   5.000 MINUTES
         UNIT INTERVAL PERCENTAGE OF LAG-TIME =   3.823
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UNIT HYDROGRAPH DETERMINATION

INTERVAL NUMBER	"S" GRAPH MEAN VALUES	UNIT HYDROGRAPH ORDINATES(CFS)
1	0.218	101.962
2	0.655	203.924
3	1.092	203.924
4	1.529	203.924
5	1.986	213.398
6	2.613	292.547
7	3.278	310.320
8	3.990	332.614
9	5.118	526.172
10	6.458	625.643
11	8.120	775.661
12	10.093	920.919
13	12.016	898.059
14	14.050	949.349
15	16.610	1194.656
16	18.667	960.400
17	20.889	1037.271
18	23.644	1286.023
19	25.982	1091.230
20	28.312	1087.328
21	31.086	1295.291
22	34.292	1496.455
23	36.937	1234.690
24	40.030	1443.382
25	43.540	1638.799
26	47.122	1671.906
27	50.921	1773.104
28	53.707	1300.404
29	56.394	1254.148
30	59.639	1515.081
31	63.313	1714.791
32	66.090	1296.348
33	68.775	1253.182
34	71.351	1202.708
35	73.748	1118.818
36	76.025	1062.860
37	77.789	823.411
38	79.490	794.013
39	81.256	824.362
40	82.945	788.116
41	84.500	725.804
42	85.927	666.121
43	87.142	567.324
44	88.236	510.679
45	89.143	423.214
46	90.028	413.257
47	90.843	380.162
48	91.647	375.632

49	92.409	355.600
50	93.137	339.859
51	93.853	334.132
52	94.395	253.163
53	94.881	226.692
54	95.366	226.571
55	95.849	225.022
56	96.208	167.900
57	96.508	140.001
58	96.808	139.997
59	97.108	139.876
60	97.408	140.001
61	97.707	139.876
62	97.976	125.332
63	98.073	45.552
64	98.145	33.390
65	98.217	33.625
66	98.288	33.273
67	98.360	33.387
68	98.432	33.512
69	98.504	33.625
70	98.575	33.390
71	98.647	33.390
72	98.719	33.629
73	98.790	33.387
74	98.862	33.390
75	98.933	33.390
76	99.005	33.625
77	99.077	33.390
78	99.148	33.390
79	99.220	33.390
80	99.292	33.390
81	99.363	33.390
82	99.435	33.390
83	99.506	33.390
84	99.578	33.390
85	99.649	33.390
86	99.721	33.390
87	99.792	33.390
88	99.864	33.390
89	99.935	33.390
90	100.000	30.196

TOTAL SOIL-LOSS VOLUME(ACRE-FEET) = 539.9012

TOTAL STORM RUNOFF VOLUME(ACRE-FEET) = 136.9404

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2 4 - H O U R S T O R M
R U N O F F H Y D R O G R A P H

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HYDROGRAPH IN FIVE-MINUTE UNIT INTERVALS(CFS)
(Note: Time indicated is at END of Each Unit Intervals)

TIME(HRS)	VOLUME(AF)	Q(CFS)	0.	100.0	200.0	300.0	400.0
0.083	0.0003	0.04	Q	.	.	.	.
0.167	0.0012	0.13	Q	.	.	.	.
0.250	0.0027	0.22	Q	.	.	.	.
0.333	0.0049	0.31	Q	.	.	.	.
0.417	0.0076	0.40	Q	.	.	.	.
0.500	0.0113	0.53	Q	.	.	.	.
0.583	0.0158	0.66	Q	.	.	.	.
0.667	0.0214	0.81	Q	.	.	.	.
0.750	0.0286	1.04	Q	.	.	.	.
0.833	0.0376	1.31	Q	.	.	.	.
0.917	0.0490	1.65	Q	.	.	.	.
1.000	0.0632	2.05	Q	.	.	.	.
1.083	0.0800	2.45	Q	.	.	.	.
1.167	0.0997	2.87	Q	.	.	.	.
1.250	0.1231	3.39	Q	.	.	.	.
1.333	0.1494	3.81	Q	.	.	.	.
1.417	0.1788	4.27	Q	.	.	.	.
1.500	0.2122	4.84	Q	.	.	.	.
1.583	0.2489	5.33	Q	.	.	.	.
1.667	0.2889	5.82	Q	.	.	.	.
1.750	0.3330	6.39	Q	.	.	.	.
1.833	0.3816	7.06	Q	.	.	.	.
1.917	0.4340	7.62	Q	.	.	.	.
2.000	0.4910	8.26	Q	.	.	.	.
2.083	0.5529	9.00	Q	.	.	.	.
2.167	0.6201	9.75	Q	.	.	.	.
2.250	0.6927	10.55	VQ	.	.	.	.
2.333	0.7695	11.14	VQ	.	.	.	.
2.417	0.8502	11.72	VQ	.	.	.	.
2.500	0.9358	12.42	VQ	.	.	.	.
2.583	1.0267	13.20	VQ	.	.	.	.
2.667	1.1217	13.80	VQ	.	.	.	.
2.750	1.2208	14.39	VQ	.	.	.	.
2.833	1.3239	14.96	VQ	.	.	.	.
2.917	1.4306	15.49	VQ	.	.	.	.
3.000	1.5408	16.01	VQ	.	.	.	.
3.083	1.6539	16.42	VQ	.	.	.	.
3.167	1.7697	16.82	VQ	.	.	.	.
3.250	1.8884	17.23	VQ	.	.	.	.
3.333	2.0099	17.63	VQ	.	.	.	.
3.417	2.1339	18.01	VQ	.	.	.	.
3.500	2.2604	18.36	VQ	.	.	.	.
3.583	2.3890	18.67	VQ	.	.	.	.
3.667	2.5196	18.96	VQ	.	.	.	.
3.750	2.6519	19.21	VQ	.	.	.	.
3.833	2.7859	19.46	VQ	.	.	.	.
3.917	2.9216	19.70	VQ	.	.	.	.

4.000	3.0588	19.93	VQ	.	.	.	.
4.083	3.1977	20.16	V Q	.	.	.	.
4.167	3.3380	20.38	V Q	.	.	.	.
4.250	3.4799	20.60	.VQ	.	.	.	.
4.333	3.6231	20.79	.VQ	.	.	.	.
4.417	3.7675	20.96	.VQ	.	.	.	.
4.500	3.9131	21.14	.VQ	.	.	.	.
4.583	4.0599	21.32	.VQ	.	.	.	.
4.667	4.2078	21.48	.VQ	.	.	.	.
4.750	4.3567	21.62	.VQ	.	.	.	.
4.833	4.5066	21.76	.VQ	.	.	.	.
4.917	4.6575	21.91	.VQ	.	.	.	.
5.000	4.8094	22.06	.VQ	.	.	.	.
5.083	4.9623	22.20	.VQ	.	.	.	.
5.167	5.1162	22.35	.VQ	.	.	.	.
5.250	5.2709	22.46	.VQ	.	.	.	.
5.333	5.4262	22.56	.VQ	.	.	.	.
5.417	5.5824	22.67	.VQ	.	.	.	.
5.500	5.7392	22.78	.VQ	.	.	.	.
5.583	5.8968	22.88	.VQ	.	.	.	.
5.667	6.0552	22.99	.VQ	.	.	.	.
5.750	6.2143	23.10	.VQ	.	.	.	.
5.833	6.3742	23.22	.VQ	.	.	.	.
5.917	6.5348	23.33	.VQ	.	.	.	.
6.000	6.6963	23.44	.VQ	.	.	.	.
6.083	6.8585	23.56	. Q	.	.	.	.
6.167	7.0216	23.67	. Q	.	.	.	.
6.250	7.1854	23.79	. Q	.	.	.	.
6.333	7.3501	23.91	. Q	.	.	.	.
6.417	7.5156	24.03	. Q	.	.	.	.
6.500	7.6819	24.15	. Q	.	.	.	.
6.583	7.8491	24.27	. Q	.	.	.	.
6.667	8.0171	24.40	. Q	.	.	.	.
6.750	8.1860	24.52	. Q	.	.	.	.
6.833	8.3557	24.65	. Q	.	.	.	.
6.917	8.5264	24.78	. Q	.	.	.	.
7.000	8.6979	24.91	. Q	.	.	.	.
7.083	8.8703	25.04	. Q	.	.	.	.
7.167	9.0437	25.17	. Q	.	.	.	.
7.250	9.2179	25.30	. Q	.	.	.	.
7.333	9.3931	25.44	. Q	.	.	.	.
7.417	9.5693	25.58	. Q	.	.	.	.
7.500	9.7464	25.71	. Q	.	.	.	.
7.583	9.9243	25.84	. Q	.	.	.	.
7.667	10.1032	25.97	. Q	.	.	.	.
7.750	10.2829	26.10	. QV	.	.	.	.
7.833	10.4635	26.23	. QV	.	.	.	.
7.917	10.6450	26.36	. QV	.	.	.	.
8.000	10.8275	26.49	. QV	.	.	.	.
8.083	11.0109	26.63	. QV	.	.	.	.
8.167	11.1953	26.77	. QV	.	.	.	.
8.250	11.3806	26.91	. QV	.	.	.	.
8.333	11.5669	27.05	. QV	.	.	.	.
8.417	11.7541	27.19	. QV	.	.	.	.
8.500	11.9424	27.34	. QV	.	.	.	.
8.583	12.1317	27.49	. QV	.	.	.	.
8.667	12.3221	27.64	. QV	.	.	.	.
8.750	12.5135	27.79	. QV	.	.	.	.

8.833	12.7059	27.94	. QV	.	.	.	.
8.917	12.8994	28.10	. QV	.	.	.	.
9.000	13.0941	28.26	. QV	.	.	.	.
9.083	13.2898	28.42	. QV	.	.	.	.
9.167	13.4867	28.59	. QV	.	.	.	.
9.250	13.6847	28.75	. QV	.	.	.	.
9.333	13.8839	28.92	. Q V	.	.	.	.
9.417	14.0843	29.09	. Q V	.	.	.	.
9.500	14.2858	29.27	. Q V	.	.	.	.
9.583	14.4886	29.44	. Q V	.	.	.	.
9.667	14.6926	29.62	. Q V	.	.	.	.
9.750	14.8979	29.81	. Q V	.	.	.	.
9.833	15.1045	29.99	. Q V	.	.	.	.
9.917	15.3124	30.18	. QV	.	.	.	.
10.000	15.5216	30.38	. QV	.	.	.	.
10.083	15.7321	30.57	. QV	.	.	.	.
10.167	15.9440	30.77	. QV	.	.	.	.
10.250	16.1574	30.97	. QV	.	.	.	.
10.333	16.3721	31.18	. QV	.	.	.	.
10.417	16.5883	31.39	. QV	.	.	.	.
10.500	16.8059	31.60	. QV	.	.	.	.
10.583	17.0251	31.82	. QV	.	.	.	.
10.667	17.2457	32.04	. Q V	.	.	.	.
10.750	17.4679	32.27	. Q V	.	.	.	.
10.833	17.6917	32.50	. Q V	.	.	.	.
10.917	17.9172	32.73	. Q V	.	.	.	.
11.000	18.1442	32.97	. Q V	.	.	.	.
11.083	18.3730	33.21	. Q V	.	.	.	.
11.167	18.6034	33.46	. Q V	.	.	.	.
11.250	18.8356	33.71	. Q V	.	.	.	.
11.333	19.0696	33.97	. Q V	.	.	.	.
11.417	19.3054	34.24	. Q V	.	.	.	.
11.500	19.5430	34.51	. Q V	.	.	.	.
11.583	19.7825	34.78	. Q V	.	.	.	.
11.667	20.0240	35.06	. Q V	.	.	.	.
11.750	20.2675	35.35	. Q V	.	.	.	.
11.833	20.5129	35.64	. Q V	.	.	.	.
11.917	20.7605	35.94	. Q V	.	.	.	.
12.000	21.0101	36.25	. Q V	.	.	.	.
12.083	21.2622	36.59	. Q V	.	.	.	.
12.167	21.5168	36.98	. Q V	.	.	.	.
12.250	21.7742	37.37	. Q V	.	.	.	.
12.333	22.0343	37.77	. Q V	.	.	.	.
12.417	22.2972	38.18	. Q V	.	.	.	.
12.500	22.5632	38.62	. Q V	.	.	.	.
12.583	22.8323	39.08	. Q V	.	.	.	.
12.667	23.1047	39.55	. Q V	.	.	.	.
12.750	23.3808	40.09	. Q V	.	.	.	.
12.833	23.6609	40.67	. Q V	.	.	.	.
12.917	23.9454	41.31	. Q V	.	.	.	.
13.000	24.2348	42.01	. Q V	.	.	.	.
13.083	24.5289	42.71	. Q V	.	.	.	.
13.167	24.8280	43.44	. Q V	.	.	.	.
13.250	25.1328	44.25	. Q V	.	.	.	.
13.333	25.4428	45.01	. Q V	.	.	.	.
13.417	25.7583	45.81	. Q V	.	.	.	.
13.500	26.0800	46.70	. Q V	.	.	.	.
13.583	26.4074	47.55	. Q V	.	.	.	.

13.667	26.7408	48.41	. Q V . . . .
13.750	27.0808	49.36	. Q V . . . .
13.833	27.4278	50.38	. Q V . . . .
13.917	27.7814	51.35	. Q V . . . .
14.000	28.1423	52.40	. Q V . . . .
14.083	28.5114	53.59	. Q V . . . .
14.167	28.8893	54.87	. Q V . . . .
14.250	29.2763	56.20	. Q V . . . .
14.333	29.6718	57.42	. Q V . . . .
14.417	30.0758	58.66	. Q V . . . .
14.500	30.4893	60.05	. Q V . . . .
14.583	30.9131	61.54	. Q V. . . . .
14.667	31.3467	62.95	. Q V. . . . .
14.750	31.7909	64.50	. Q V. . . . .
14.833	32.2462	66.11	. Q V. . . . .
14.917	32.7133	67.83	. Q V. . . . .
15.000	33.1930	69.65	. Q V. . . . .
15.083	33.6850	71.44	. Q V. . . . .
15.167	34.1898	73.30	. Q V. . . . .
15.250	34.7089	75.36	. Q V . . . .
15.333	35.2416	77.36	. Q V . . . .
15.417	35.7879	79.32	. Q V . . . .
15.500	36.3482	81.35	. Q V . . . .
15.583	36.9222	83.35	. Q V . . . .
15.667	37.5107	85.45	. Q V . . . .
15.750	38.1156	87.83	. Q .V . . . .
15.833	38.7386	90.45	. Q.V . . . .
15.917	39.3807	93.24	. Q.V . . . .
16.000	40.0516	97.42	. Q.V . . . .
16.083	40.8248	112.26	. .Q . . . .
16.167	41.6927	126.02	. . Q . . . .
16.250	42.5803	128.87	. . Q . . . .
16.333	43.4852	131.40	. . VQ . . . .
16.417	44.4220	136.02	. . VQ . . . .
16.500	45.4396	147.77	. . VQ . . . .
16.583	46.4962	153.41	. . V Q . . . .
16.667	47.6088	161.55	. . V Q . . . .
16.750	48.8951	186.77	. . V Q . . . .
16.833	50.2891	202.41	. . V Q . . . .
16.917	51.8261	223.17	. . V . Q . . .
17.000	53.4872	241.19	. . V . Q . . .
17.083	55.1535	241.95	. . V . Q . . .
17.167	56.8862	251.59	. . V . Q . . .
17.250	58.7937	276.97	. . V . Q . . .
17.333	60.5507	255.11	. . V . Q . . .
17.417	62.3872	266.67	. . V . Q . . .
17.500	64.3982	291.99	. . V . Q. . .
17.583	66.2765	272.73	. . V. Q . . .
17.667	68.1762	275.84	. . V. Q . . .
17.750	70.2489	300.96	. . V Q . . .
17.833	72.4571	320.62	. . .V . Q . .
17.917	74.4933	295.66	. . .V Q. . .
18.000	76.6932	319.42	. . . V .Q . .
18.083	79.0369	340.31	. . . V . Q .
18.167	81.4043	343.75	. . . V . Q .
18.250	83.7976	347.51	. . . V . Q .
18.333	85.8330	295.53	. . . V Q. . .
18.417	87.8431	291.87	. . . V Q. . .

18.500	90.0432	319.46	. . . V .Q .
18.583	92.3445	334.14	. . . V . Q .
18.667	94.3169	286.39	. . . VQ . .
18.750	96.2250	277.06	. . . QV . .
18.833	98.0654	267.23	. . . Q V . .
18.917	99.8178	254.44	. . . Q V. .
19.000	101.4857	242.18	. . . Q V. .
19.083	102.9527	213.01	. . .Q V .
19.167	104.3753	206.56	. . Q V .
19.250	105.7922	205.74	. . Q V .
19.333	107.1552	197.90	. . Q. .V .
19.417	108.4422	186.88	. . Q . .V .
19.500	109.6511	175.53	. . Q . . V .
19.583	110.7568	160.56	. . Q . . V .
19.667	111.7914	150.22	. . Q . . V .
19.750	112.7392	137.63	. . Q . . V .
19.833	113.6558	133.08	. . Q . . V .
19.917	114.5280	126.65	. . Q . . V .
20.000	115.3757	123.08	. . Q . . V .
20.083	116.1885	118.02	. .Q . . V .
20.167	116.9699	113.46	. .Q . . V .
20.250	117.7218	109.17	. Q . . V .
20.333	118.3951	97.76	. Q. . V .
20.417	119.0318	92.45	. Q. . V .
20.500	119.6514	89.97	. Q . . V .
20.583	120.2503	86.96	. Q . . V .
20.667	120.7916	78.59	. Q . . V .
20.750	121.2991	73.70	. Q . . V .
20.833	121.7944	71.91	. Q . . V .
20.917	122.2780	70.21	. Q . . V .
21.000	122.7497	68.49	. Q . . V .
21.083	123.2081	66.56	. Q . . V .
21.167	123.6386	62.51	. Q . . V .
21.250	123.9993	52.38	. Q . . V .
21.333	124.3414	49.66	. Q . . V .
21.417	124.6753	48.49	. Q . . V .
21.500	125.0017	47.39	. Q . . V .
21.583	125.3206	46.31	. Q . . V .
21.667	125.6328	45.33	. Q . . V .
21.750	125.9388	44.43	. Q . . V .
21.833	126.2387	43.54	. Q . . V .
21.917	126.5329	42.72	. Q . . V .
22.000	126.8218	41.95	. Q . . V .
22.083	127.1053	41.17	. Q . . V .
22.167	127.3839	40.45	. Q . . V .
22.250	127.6580	39.79	. Q . . V .
22.333	127.9280	39.21	. Q . . V .
22.417	128.1938	38.60	. Q . . V .
22.500	128.4558	38.04	. Q . . V .
22.583	128.7140	37.49	. Q . . V .
22.667	128.9686	36.97	. Q . . V .
22.750	129.2197	36.46	. Q . . V .
22.833	129.4674	35.97	. Q . . V .
22.917	129.7121	35.53	. Q . . V .
23.000	129.9538	35.09	. Q . . V .
23.083	130.1925	34.65	. Q . . V .
23.167	130.4281	34.22	. Q . . V .
23.250	130.6608	33.79	. Q . . V .

23.333	130.8905	33.34	. Q	.	.	.	V	.
23.417	131.1165	32.82	. Q	.	.	.	V	.
23.500	131.3349	31.70	. Q	.	.	.	V	.
23.583	131.5282	28.07	. Q	.	.	.	V	.
23.667	131.7186	27.65	. Q	.	.	.	V	.
23.750	131.9066	27.30	. Q	.	.	.	V	.
23.833	132.0924	26.98	. Q	.	.	.	V	.
23.917	132.2758	26.63	. Q	.	.	.	V	.
24.000	132.4570	26.31	. Q	.	.	.	V	.
24.083	132.6357	25.95	. Q	.	.	.	V	.
24.167	132.8117	25.56	. Q	.	.	.	V	.
24.250	132.9851	25.18	. Q	.	.	.	V	.
24.333	133.1559	24.81	. Q	.	.	.	V	.
24.417	133.3243	24.44	. Q	.	.	.	V	.
24.500	133.4899	24.05	. Q	.	.	.	V	.
24.583	133.6530	23.68	. Q	.	.	.	V	.
24.667	133.8134	23.30	. Q	.	.	.	V	.
24.750	133.9708	22.85	. Q	.	.	.	V	.
24.833	134.1248	22.36	. Q	.	.	.	V	.
24.917	134.2751	21.82	. Q	.	.	.	V	.
25.000	134.4212	21.22	. Q	.	.	.	V	.
25.083	134.5634	20.64	. Q	.	.	.	V	.
25.167	134.7014	20.04	. Q	.	.	.	V	.
25.250	134.8346	19.35	.Q	.	.	.	V	.
25.333	134.9638	18.76	.Q	.	.	.	V	.
25.417	135.0888	18.15	.Q	.	.	.	V	.
25.500	135.2089	17.43	.Q	.	.	.	V	.
25.583	135.3248	16.82	.Q	.	.	.	V	.
25.667	135.4364	16.22	.Q	.	.	.	V	.
25.750	135.5434	15.53	.Q	.	.	.	V	.
25.833	135.6451	14.76	.Q	.	.	.	V	.
25.917	135.7422	14.11	.Q	.	.	.	V	.
26.000	135.8344	13.38	.Q	.	.	.	V	.
26.083	135.9210	12.57	.Q	.	.	.	V	.
26.167	136.0019	11.75	.Q	.	.	.	V	.
26.250	136.0770	10.90	.Q	.	.	.	V	.
26.333	136.1476	10.25	.Q	.	.	.	V	.
26.417	136.2139	9.63	Q	.	.	.	V	.
26.500	136.2753	8.91	Q	.	.	.	V	.
26.583	136.3311	8.10	Q	.	.	.	V	.
26.667	136.3826	7.48	Q	.	.	.	V	.
26.750	136.4300	6.89	Q	.	.	.	V	.
26.833	136.4735	6.32	Q	.	.	.	V	.
26.917	136.5134	5.79	Q	.	.	.	V	.
27.000	136.5498	5.28	Q	.	.	.	V	.
27.083	136.5834	4.89	Q	.	.	.	V	.
27.167	136.6145	4.51	Q	.	.	.	V	.
27.250	136.6429	4.12	Q	.	.	.	V	.
27.333	136.6687	3.75	Q	.	.	.	V	.
27.417	136.6922	3.41	Q	.	.	.	V	.
27.500	136.7135	3.10	Q	.	.	.	V	.
27.583	136.7330	2.83	Q	.	.	.	V	.
27.667	136.7508	2.59	Q	.	.	.	V	.
27.750	136.7673	2.39	Q	.	.	.	V	.
27.833	136.7824	2.19	Q	.	.	.	V	.
27.917	136.7962	2.01	Q	.	.	.	V	.
28.000	136.8089	1.83	Q	.	.	.	V	.
28.083	136.8203	1.67	Q	.	.	.	V	.

28.167	136.8307	1.51	Q	.	.	.	V	.
28.250	136.8401	1.35	Q	.	.	.	V	.
28.333	136.8486	1.23	Q	.	.	.	V	.
28.417	136.8563	1.13	Q	.	.	.	V	.
28.500	136.8634	1.02	Q	.	.	.	V	.
28.583	136.8697	0.92	Q	.	.	.	V	.
28.667	136.8754	0.84	Q	.	.	.	V	.
28.750	136.8808	0.77	Q	.	.	.	V	.
28.833	136.8856	0.70	Q	.	.	.	V	.
28.917	136.8900	0.64	Q	.	.	.	V	.
29.000	136.8940	0.57	Q	.	.	.	V	.
29.083	136.8975	0.51	Q	.	.	.	V	.
29.167	136.9006	0.45	Q	.	.	.	V	.
29.250	136.9035	0.43	Q	.	.	.	V	.
29.333	136.9064	0.41	Q	.	.	.	V	.
29.417	136.9091	0.39	Q	.	.	.	V	.
29.500	136.9117	0.38	Q	.	.	.	V	.
29.583	136.9141	0.36	Q	.	.	.	V	.
29.667	136.9165	0.34	Q	.	.	.	V	.
29.750	136.9187	0.32	Q	.	.	.	V	.
29.833	136.9209	0.31	Q	.	.	.	V	.
29.917	136.9229	0.29	Q	.	.	.	V	.
30.000	136.9248	0.27	Q	.	.	.	V	.
30.083	136.9265	0.26	Q	.	.	.	V	.
30.167	136.9282	0.24	Q	.	.	.	V	.
30.250	136.9298	0.23	Q	.	.	.	V	.
30.333	136.9312	0.21	Q	.	.	.	V	.
30.417	136.9326	0.19	Q	.	.	.	V	.
30.500	136.9338	0.18	Q	.	.	.	V	.
30.583	136.9349	0.16	Q	.	.	.	V	.
30.667	136.9359	0.15	Q	.	.	.	V	.
30.750	136.9369	0.13	Q	.	.	.	V	.
30.833	136.9377	0.12	Q	.	.	.	V	.
30.917	136.9384	0.10	Q	.	.	.	V	.
31.000	136.9390	0.09	Q	.	.	.	V	.
31.083	136.9395	0.07	Q	.	.	.	V	.
31.167	136.9398	0.06	Q	.	.	.	V	.
31.250	136.9401	0.04	Q	.	.	.	V	.
31.333	136.9403	0.03	Q	.	.	.	V	.
31.417	136.9404	0.01	Q	.	.	.	V	.

TIME DURATION(minutes) OF PERCENTILES OF ESTIMATED PEAK FLOW RATE:
(Note: 100% of Peak Flow Rate estimate assumed to have
an instantaneous time duration)

Percentile of Estimated Peak Flow Rate	Duration (minutes)
0%	1885.0
10%	690.0
20%	360.0
30%	255.0
40%	195.0
50%	170.0
60%	135.0
70%	110.0
80%	65.0
90%	35.0

==========

END OF FLOODSCx ROUTING ANALYSIS

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                        Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RMV PA-3 ROMP AMENDMENT 2022 - NODE 134U                              *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL             *
* 5-YR EV NOV 2022 ROKAMOTO                                             *
 ************************************************************************

  FILE NAME: EV0534US.DAT
  TIME/DATE OF STUDY: 03:54 11/08/2022


                         ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    134.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =   62698.000 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    3.827 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.475; LOW LOSS FRACTION = 0.829
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.22; 30-MINUTE =  0.44;  1-HOUR =  0.60
    3-HOUR =  1.10;    6-HOUR =  1.62; 24-HOUR =  2.83
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.304; 30-MINUTE = 0.358;  1-HOUR = 0.405
    3-HOUR = 0.750;    6-HOUR = 0.890; 24-HOUR = 0.936
==========================================================================
```



```
 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV0534US.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 10100.00     134.00| Subarea (UH) Added to Stream #1|       0.0      2777.5|
19.500 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
-------------------------------------+

   END OF FLOODSCx ROUTING ANALYSIS
```

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*****************************************************************************

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                         Analysis prepared by:




 ************************** DESCRIPTION OF STUDY **************************
* RMV PA-3 ROMP AMENDMENT 2022 - NODE 133C                                  *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL                 *
* 10-YR EV NOV 2022 ROKAMOTO                                                *
 **************************************************************************

  FILE NAME: EV1033CS.DAT
  TIME/DATE OF STUDY: 18:21 11/07/2022


                        ** INPUT SUMMARY **


*****************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    133.00 IS CODE =   1
----------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
============================================================================
  WATERSHED AREA =   60992.301 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.727 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.286; LOW LOSS FRACTION = 0.738
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.31; 30-MINUTE =  0.62;  1-HOUR =  0.86
    3-HOUR =  1.58;    6-HOUR =  2.33; 24-HOUR =  4.07
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.308; 30-MINUTE = 0.363;  1-HOUR = 0.408
    3-HOUR = 0.754;    6-HOUR = 0.891; 24-HOUR = 0.936
============================================================================
```



```
 +--------------------------------------------------------------------------
------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV1033CS.DAT   ]
Page:   1 of    |
 +---------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +---------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 10100.00     133.00| Subarea (UH) Added to Stream #1|       0.0      7510.1|
18.750 |             |           |
 +---------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                          |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                  |
 +--------------------------------------------------------------------------
------------------------------------+


   END OF FLOODSCx ROUTING ANALYSIS
```

```
**************************************************************************

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                          Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RMV PA-3 ROMP AMENDMENT 2022 - NODE 133T                              *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL             *
* 10-YR EV OCT 2022 ROKAMOTO                                            *
 ************************************************************************

  FILE NAME: EV1033TS.DAT
  TIME/DATE OF STUDY: 10:47 10/25/2022


**************************************************************************
  FLOW PROCESS FROM NODE  13010.00 TO NODE    133.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS)<<<<<
==========================================================================

      (UNIT-HYDROGRAPH ADDED TO STREAM #1)

         WATERSHED AREA =    6638.200 ACRES
         BASEFLOW =   0.000 CFS/SQUARE-MILE
         *USER ENTERED "LAG" TIME =    1.329 HOURS
         VALLEY(DEVELOPED) S-GRAPH SELECTED
         MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.239
         LOW LOSS FRACTION = 0.699
         *HYDROGRAPH MODEL #1 SPECIFIED*

         SPECIFIED PEAK  5-MINUTES RAINFALL(INCH)=  0.26
         SPECIFIED PEAK 30-MINUTES RAINFALL(INCH)=  0.59
         SPECIFIED PEAK  1-HOUR RAINFALL(INCH) =  0.78
         SPECIFIED PEAK  3-HOUR RAINFALL(INCH) =  1.31
         SPECIFIED PEAK  6-HOUR RAINFALL(INCH) =  1.81
         SPECIFIED PEAK 24-HOUR RAINFALL(INCH) =  3.03

         *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
           5-MINUTE FACTOR = 0.744
          30-MINUTE FACTOR = 0.744
           1-HOUR FACTOR = 0.744
           3-HOUR FACTOR = 0.959
           6-HOUR FACTOR = 0.978
          24-HOUR FACTOR = 0.986

         UNIT HYDROGRAPH TIME UNIT =   5.000 MINUTES
         UNIT INTERVAL PERCENTAGE OF LAG-TIME =   6.270
```


UNIT HYDROGRAPH DETERMINATION

INTERVAL NUMBER	"S" GRAPH MEAN VALUES	UNIT HYDROGRAPH ORDINATES(CFS)
1	0.358	287.652
2	1.075	575.304
3	1.800	581.865
4	2.773	781.584
5	3.928	927.191
6	5.801	1503.663
7	8.455	2130.111
8	11.639	2556.440
9	15.197	2856.815
10	18.846	2929.289
11	22.862	3223.490
12	26.795	3157.661
13	31.145	3492.522
14	36.053	3940.381
15	41.024	3990.661
16	46.914	4728.452
17	52.511	4493.491
18	57.048	3642.370
19	62.703	4539.345
20	67.376	3751.681
21	71.660	3439.383
22	75.495	3078.355
23	78.482	2397.967
24	81.331	2287.694
25	84.018	2157.281
26	86.329	1855.022
27	88.187	1491.495
28	89.684	1201.988
29	91.043	1091.206
30	92.326	1029.381
31	93.521	959.863
32	94.479	768.440
33	95.275	639.161
34	96.018	596.893
35	96.536	415.356
36	97.028	394.973
37	97.519	394.721
38	97.960	353.837
39	98.120	128.783
40	98.238	94.275
41	98.355	94.397
42	98.473	94.520
43	98.590	94.152
44	98.708	94.520
45	98.826	94.275
46	98.943	94.526
47	99.061	94.269
48	99.178	94.269

49	99.296	94.269
50	99.413	94.269
51	99.530	94.269
52	99.648	94.269
53	99.765	94.269
54	99.883	94.269
55	100.000	94.152

TOTAL SOIL-LOSS VOLUME(ACRE-FEET) = 1043.2162
TOTAL STORM RUNOFF VOLUME(ACRE-FEET) = 609.9843

==========

2 4 - H O U R S T O R M
R U N O F F H Y D R O G R A P H

==========

HYDROGRAPH IN FIVE-MINUTE UNIT INTERVALS(CFS)
(Note: Time indicated is at END of Each Unit Intervals)

TIME(HRS)	VOLUME(AF)	Q(CFS)	0.	500.0	1000.0	1500.0	2000.0
0.083	0.0023	0.34	Q	.	.	.	.
0.167	0.0094	1.02	Q	.	.	.	.
0.250	0.0211	1.71	Q	.	.	.	.
0.333	0.0393	2.64	Q	.	.	.	.
0.417	0.0651	3.74	Q	.	.	.	.
0.500	0.1032	5.53	Q	.	.	.	.
0.583	0.1587	8.06	Q	.	.	.	.
0.667	0.2352	11.11	Q	.	.	.	.
0.750	0.3352	14.52	Q	.	.	.	.
0.833	0.4593	18.02	Q	.	.	.	.
0.917	0.6101	21.89	Q	.	.	.	.
1.000	0.7870	25.69	Q	.	.	.	.
1.083	0.9929	29.90	Q	.	.	.	.
1.167	1.2316	34.65	Q	.	.	.	.
1.250	1.5035	39.48	Q	.	.	.	.
1.333	1.8147	45.19	Q	.	.	.	.
1.417	2.1635	50.65	VQ	.	.	.	.
1.500	2.5431	55.12	VQ	.	.	.	.
1.583	2.9609	60.66	VQ	.	.	.	.
1.667	3.4106	65.30	VQ	.	.	.	.
1.750	3.8898	69.58	VQ	.	.	.	.
1.833	4.3956	73.45	VQ	.	.	.	.
1.917	4.9227	76.53	VQ	.	.	.	.
2.000	5.4701	79.49	VQ	.	.	.	.
2.083	6.0370	82.31	VQ	.	.	.	.
2.167	6.6209	84.78	VQ	.	.	.	.
2.250	7.2190	86.84	VQ	.	.	.	.
2.333	7.8289	88.56	VQ	.	.	.	.
2.417	8.4498	90.15	VQ	.	.	.	.
2.500	9.0812	91.68	VQ	.	.	.	.
2.583	9.7227	93.14	VQ	.	.	.	.
2.667	10.3726	94.38	VQ	.	.	.	.
2.750	11.0301	95.47	VQ	.	.	.	.
2.833	11.6948	96.51	VQ	.	.	.	.
2.917	12.3653	97.35	VQ	.	.	.	.
3.000	13.0413	98.17	VQ	.	.	.	.
3.083	13.7231	98.99	VQ	.	.	.	.
3.167	14.4101	99.77	VQ	.	.	.	.
3.250	15.1008	100.28	V Q	.	.	.	.
3.333	15.7948	100.76	.VQ	.	.	.	.
3.417	16.4921	101.25	.VQ	.	.	.	.
3.500	17.1928	101.74	.VQ	.	.	.	.
3.583	17.8968	102.23	.VQ	.	.	.	.
3.667	18.6043	102.73	.VQ	.	.	.	.
3.750	19.3153	103.23	.VQ	.	.	.	.
3.833	20.0297	103.73	.VQ	.	.	.	.
3.917	20.7476	104.25	.VQ	.	.	.	.

4.000	21.4691	104.76	.VQ	.	.	.	.
4.083	22.1942	105.28	.VQ	.	.	.	.
4.167	22.9228	105.80	.VQ	.	.	.	.
4.250	23.6551	106.33	.VQ	.	.	.	.
4.333	24.3911	106.86	.VQ	.	.	.	.
4.417	25.1307	107.40	.VQ	.	.	.	.
4.500	25.8741	107.94	.VQ	.	.	.	.
4.583	26.6213	108.49	.VQ	.	.	.	.
4.667	27.3714	108.93	.VQ	.	.	.	.
4.750	28.1247	109.37	.VQ	.	.	.	.
4.833	28.8811	109.82	.VQ	.	.	.	.
4.917	29.6405	110.28	.VQ	.	.	.	.
5.000	30.4032	110.74	.VQ	.	.	.	.
5.083	31.1690	111.20	. Q	.	.	.	.
5.167	31.9381	111.67	. Q	.	.	.	.
5.250	32.7105	112.15	. Q	.	.	.	.
5.333	33.4862	112.63	. Q	.	.	.	.
5.417	34.2652	113.11	. Q	.	.	.	.
5.500	35.0476	113.61	. Q	.	.	.	.
5.583	35.8334	114.10	. Q	.	.	.	.
5.667	36.6227	114.61	. Q	.	.	.	.
5.750	37.4155	115.12	. Q	.	.	.	.
5.833	38.2119	115.63	. Q	.	.	.	.
5.917	39.0118	116.15	. Q	.	.	.	.
6.000	39.8154	116.68	. Q	.	.	.	.
6.083	40.6226	117.21	. Q	.	.	.	.
6.167	41.4336	117.75	. Q	.	.	.	.
6.250	42.2483	118.30	. Q	.	.	.	.
6.333	43.0668	118.85	. Q	.	.	.	.
6.417	43.8892	119.41	. Q	.	.	.	.
6.500	44.7154	119.97	. Q	.	.	.	.
6.583	45.5457	120.55	. Q	.	.	.	.
6.667	46.3799	121.13	. QV	.	.	.	.
6.750	47.2182	121.72	. QV	.	.	.	.
6.833	48.0606	122.31	. QV	.	.	.	.
6.917	48.9071	122.92	. QV	.	.	.	.
7.000	49.7578	123.53	. QV	.	.	.	.
7.083	50.6129	124.15	. QV	.	.	.	.
7.167	51.4722	124.78	. QV	.	.	.	.
7.250	52.3359	125.41	. QV	.	.	.	.
7.333	53.2041	126.06	. QV	.	.	.	.
7.417	54.0767	126.71	. QV	.	.	.	.
7.500	54.9540	127.37	. QV	.	.	.	.
7.583	55.8358	128.04	. QV	.	.	.	.
7.667	56.7223	128.72	. QV	.	.	.	.
7.750	57.6136	129.42	. QV	.	.	.	.
7.833	58.5097	130.11	. QV	.	.	.	.
7.917	59.4107	130.83	. QV	.	.	.	.
8.000	60.3167	131.54	. QV	.	.	.	.
8.083	61.2277	132.28	. Q V	.	.	.	.
8.167	62.1438	133.02	. Q V	.	.	.	.
8.250	63.0651	133.77	. Q V	.	.	.	.
8.333	63.9916	134.53	. Q V	.	.	.	.
8.417	64.9235	135.31	. Q V	.	.	.	.
8.500	65.8608	136.10	. Q V	.	.	.	.
8.583	66.8036	136.90	. Q V	.	.	.	.
8.667	67.7520	137.71	. Q V	.	.	.	.
8.750	68.7061	138.53	. Q V	.	.	.	.

8.833	69.6659	139.37	. Q V	.	.	.	.
8.917	70.6317	140.22	. Q V	.	.	.	.
9.000	71.6033	141.08	. Q V	.	.	.	.
9.083	72.5810	141.97	. Q V	.	.	.	.
9.167	73.5649	142.86	. Q V	.	.	.	.
9.250	74.5550	143.77	. Q V	.	.	.	.
9.333	75.5515	144.69	. Q V	.	.	.	.
9.417	76.5545	145.63	. Q V	.	.	.	.
9.500	77.5640	146.58	. Q V	.	.	.	.
9.583	78.5802	147.56	. Q V	.	.	.	.
9.667	79.6033	148.55	. Q V	.	.	.	.
9.750	80.6332	149.55	. Q V	.	.	.	.
9.833	81.6703	150.58	. Q V	.	.	.	.
9.917	82.7145	151.62	. Q V	.	.	.	.
10.000	83.7661	152.68	. Q V	.	.	.	.
10.083	84.8251	153.77	. Q V	.	.	.	.
10.167	85.8917	154.87	. Q V	.	.	.	.
10.250	86.9660	156.00	. Q V	.	.	.	.
10.333	88.0482	157.14	. Q V	.	.	.	.
10.417	89.1385	158.31	. Q V	.	.	.	.
10.500	90.2370	159.50	. Q V	.	.	.	.
10.583	91.3439	160.72	. Q V	.	.	.	.
10.667	92.4593	161.95	. Q V	.	.	.	.
10.750	93.5834	163.22	. Q V	.	.	.	.
10.833	94.7164	164.51	. Q V	.	.	.	.
10.917	95.8585	165.83	. Q V	.	.	.	.
11.000	97.0099	167.18	. Q V	.	.	.	.
11.083	98.1707	168.56	. Q V	.	.	.	.
11.167	99.3413	169.96	. Q V	.	.	.	.
11.250	100.5217	171.40	. Q V	.	.	.	.
11.333	101.7123	172.87	. Q V	.	.	.	.
11.417	102.9133	174.38	. Q V	.	.	.	.
11.500	104.1248	175.91	. Q V	.	.	.	.
11.583	105.3472	177.49	. Q V	.	.	.	.
11.667	106.5807	179.10	. Q V	.	.	.	.
11.750	107.8256	180.76	. Q V	.	.	.	.
11.833	109.0822	182.45	. Q V	.	.	.	.
11.917	110.3507	184.19	. Q V	.	.	.	.
12.000	111.6315	185.97	. Q V	.	.	.	.
12.083	112.9266	188.05	. Q V	.	.	.	.
12.167	114.2381	190.42	. Q V	.	.	.	.
12.250	115.5663	192.86	. Q V	.	.	.	.
12.333	116.9129	195.52	. Q V	.	.	.	.
12.417	118.2791	198.37	. Q V	.	.	.	.
12.500	119.6688	201.78	. Q V	.	.	.	.
12.583	121.0862	205.80	. Q V	.	.	.	.
12.667	122.5343	210.26	. Q V	.	.	.	.
12.750	124.0154	215.06	. Q V	.	.	.	.
12.833	125.5304	219.99	. Q V	.	.	.	.
12.917	127.0818	225.26	. Q V	.	.	.	.
13.000	128.6696	230.55	. Q V	.	.	.	.
13.083	130.2966	236.23	. Q V	.	.	.	.
13.167	131.9659	242.38	. Q V	.	.	.	.
13.250	133.6786	248.69	. Q V	.	.	.	.
13.333	135.4398	255.73	. Q V	.	.	.	.
13.417	137.2490	262.69	. Q V.	.	.	.	.
13.500	139.1017	269.01	. Q V.	.	.	.	.
13.583	141.0043	276.25	. Q V.	.	.	.	.

13.667	142.9527	282.91	. Q V. . . .
13.750	144.9462	289.45	. Q V. . . .
13.833	146.9834	295.80	. Q V. . . .
13.917	149.0614	301.73	. Q V. . . .
14.000	151.1805	307.70	. Q V. . . .
14.083	153.3455	314.36	. Q V . . .
14.167	155.5600	321.54	. Q V . . .
14.250	157.8232	328.62	. Q V . . .
14.333	160.1377	336.06	. Q V . . .
14.417	162.5063	343.93	. Q V . . .
14.500	164.9388	353.20	. Q V . . .
14.583	167.4458	364.01	. Q V . . .
14.667	170.0339	375.79	. Q .V . . .
14.750	172.7087	388.37	. Q .V . . .
14.833	175.4725	401.30	. Q .V . . .
14.917	178.3313	415.11	. Q .V . . .
15.000	181.2873	429.21	. Q .V . . .
15.083	184.3498	444.67	. Q . V . . .
15.167	187.5301	461.77	. Q. V . . .
15.250	190.8336	479.67	. Q. V . . .
15.333	194.2792	500.31	. Q V . . .
15.417	197.8572	519.53	. Q V . . .
15.500	201.5506	536.27	. Q V . . .
15.583	205.3850	556.76	. .Q V . . .
15.667	209.3525	576.09	. .Q V . . .
15.750	213.4697	597.80	. .Q V . . .
15.833	217.7351	619.34	. . Q V . . .
15.917	222.1560	641.92	. . Q V . . .
16.000	226.7948	673.55	. . QV . . .
16.083	231.9359	746.49	. . QV . . .
16.167	237.5821	819.83	. . VQ . . .
16.250	243.4872	857.42	. . V Q . . .
16.333	249.8962	930.58	. . V Q . . .
16.417	256.8848	1014.75	. . V Q . . .
16.500	264.8823	1161.23	. . V . Q . . .
16.583	273.8942	1308.53	. . V . Q . . .
16.667	283.5728	1405.33	. . V . Q . . .
16.750	293.7156	1472.73	. . V. Q. . .
16.833	304.1376	1513.28	. . V. Q . .
16.917	314.9688	1572.69	. . V .Q . .
17.000	325.9932	1600.74	. . .V . Q . .
17.083	337.5858	1683.24	. . . V . Q . .
17.167	349.8003	1773.55	. . . V . Q . .
17.250	362.2908	1813.62	. . . V . Q . .
17.333	375.4088	1904.73	. . . V . Q .
17.417	388.1396	1848.51	. . . V . Q .
17.500	399.9385	1713.20	. . . V . Q .
17.583	412.2568	1788.61	. . . V . Q .
17.667	423.5421	1638.63	. . . V . Q .
17.750	434.0847	1530.79	. . . V Q .
17.833	443.8102	1412.13	. . . QV. .
17.917	452.5499	1269.01	. . . Q V. .
18.000	460.8420	1204.01	. . . Q V .
18.083	468.6682	1136.37	. . . Q V .
18.167	475.8246	1039.11	. . Q .V .
18.250	482.2631	934.86	. . Q . .V .
18.333	488.1131	849.42	. . Q . . V .
18.417	493.6004	796.76	. . Q . . V .

18.500	498.7932	754.00	. . Q . . V .
18.583	503.6490	705.05	. . Q . . V .
18.667	508.0661	641.37	. . Q . . V .
18.750	512.1246	589.30	. .Q . . V .
18.833	515.9280	552.24	. .Q . . V .
18.917	519.3816	501.47	. Q . . V .
19.000	522.6464	474.05	. Q. . . V .
19.083	525.7354	448.52	. Q . . . V .
19.167	528.5942	415.10	. Q . . . V .
19.250	531.0753	360.25	. Q . . . V .
19.333	533.3902	336.13	. Q . . . V .
19.417	535.6087	322.13	. Q . . . V .
19.500	537.7453	310.23	. Q . . . V .
19.583	539.7878	296.58	. Q . . . V .
19.667	541.7483	284.66	. Q . . . V .
19.750	543.6349	273.94	. Q . . . V .
19.833	545.4546	264.21	. Q . . . V .
19.917	547.2157	255.71	. Q . . . V .
20.000	548.9261	248.35	. Q . . . V .
20.083	550.5882	241.34	. Q . . . V .
20.167	552.2056	234.84	. Q . . . V .
20.250	553.7849	229.31	. Q . . . V .
20.333	555.3250	223.62	. Q . . . V .
20.417	556.8251	217.82	. Q . . . V .
20.500	558.2772	210.85	. Q . . . V .
20.583	559.6709	202.37	. Q . . . V .
20.667	560.9299	182.80	. Q . . . V .
20.750	562.1520	177.45	. Q . . . V .
20.833	563.3491	173.82	. Q . . . V .
20.917	564.5242	170.62	. Q . . . V .
21.000	565.6736	166.89	. Q . . . V .
21.083	566.7993	163.45	. Q . . . V .
21.167	567.9031	160.28	. Q . . . V .
21.250	568.9880	157.52	. Q . . . V .
21.333	570.0547	154.90	. Q . . . V .
21.417	571.1041	152.37	. Q . . . V .
21.500	572.1368	149.94	. Q . . . V .
21.583	573.1533	147.59	. Q . . . V .
21.667	574.1555	145.53	. Q . . . V .
21.750	575.1440	143.53	. Q . . . V .
21.833	576.1193	141.61	. Q . . . V .
21.917	577.0818	139.76	. Q . . . V .
22.000	578.0320	137.96	. Q . . . V .
22.083	578.9703	136.23	. Q . . . V .
22.167	579.8969	134.55	. Q . . . V .
22.250	580.8123	132.92	. Q . . . V .
22.333	581.7168	131.33	. Q . . . V .
22.417	582.6107	129.80	. Q . . . V .
22.500	583.4944	128.31	. Q . . . V .
22.583	584.3680	126.85	. Q . . . V .
22.667	585.2325	125.53	. Q . . . V .
22.750	586.0881	124.23	. Q . . . V .
22.833	586.9351	122.98	. Q . . . V .
22.917	587.7736	121.75	. Q . . . V .
23.000	588.6039	120.56	. Q . . . V .
23.083	589.4262	119.40	. Q . . . V .
23.167	590.2408	118.27	. Q . . . V .
23.250	591.0477	117.17	. Q . . . V .

23.333	591.8473	116.10	. Q	.	.	.	V	.
23.417	592.6396	115.05	. Q	.	.	.	V	.
23.500	593.4249	114.02	. Q	.	.	.	V	.
23.583	594.2033	113.02	. Q	.	.	.	V	.
23.667	594.9750	112.05	. Q	.	.	.	V.	
23.750	595.7401	111.09	. Q	.	.	.	V.	
23.833	596.4987	110.16	. Q	.	.	.	V.	
23.917	597.2511	109.25	. Q	.	.	.	V.	
24.000	597.9973	108.35	. Q	.	.	.	V.	
24.083	598.7352	107.14	. Q	.	.	.	V.	
24.167	599.4626	105.61	. Q	.	.	.	V.	
24.250	600.1795	104.09	. Q	.	.	.	V.	
24.333	600.8845	102.36	. Q	.	.	.	V.	
24.417	601.5765	100.48	. Q	.	.	.	V.	
24.500	602.2510	97.95	.Q	.	.	.	V.	
24.583	602.9033	94.70	.Q	.	.	.	V.	
24.667	603.5298	90.98	.Q	.	.	.	V.	
24.750	604.1286	86.94	.Q	.	.	.	V.	
24.833	604.6992	82.85	.Q	.	.	.	V.	
24.917	605.2394	78.44	.Q	.	.	.	V.	
25.000	605.7501	74.15	.Q	.	.	.	V.	
25.083	606.2287	69.50	.Q	.	.	.	V.	
25.167	606.6719	64.36	.Q	.	.	.	V.	
25.250	607.0796	59.19	.Q	.	.	.	V.	
25.333	607.4460	53.20	.Q	.	.	.	V.	
25.417	607.7733	47.53	Q	.	.	.	V.	
25.500	608.0688	42.90	Q	.	.	.	V.	
25.583	608.3253	37.25	Q	.	.	.	V.	
25.667	608.5496	32.56	Q	.	.	.	V.	
25.750	608.7443	28.28	Q	.	.	.	V.	
25.833	608.9127	24.45	Q	.	.	.	V.	
25.917	609.0605	21.45	Q	.	.	.	V.	
26.000	609.1886	18.61	Q	.	.	.	V.	
26.083	609.2983	15.93	Q	.	.	.	V.	
26.167	609.3922	13.63	Q	.	.	.	V.	
26.250	609.4733	11.78	Q	.	.	.	V.	
26.333	609.5441	10.28	Q	.	.	.	V.	
26.417	609.6056	8.92	Q	.	.	.	V.	
26.500	609.6583	7.65	Q	.	.	.	V.	
26.583	609.7028	6.46	Q	.	.	.	V.	
26.667	609.7407	5.51	Q	.	.	.	V.	
26.750	609.7732	4.72	Q	.	.	.	V.	
26.833	609.8006	3.98	Q	.	.	.	V.	
26.917	609.8245	3.46	Q	.	.	.	V.	
27.000	609.8450	2.97	Q	.	.	.	V.	
27.083	609.8621	2.49	Q	.	.	.	V.	
27.167	609.8763	2.05	Q	.	.	.	V.	
27.250	609.8893	1.89	Q	.	.	.	V.	
27.333	609.9014	1.76	Q	.	.	.	V.	
27.417	609.9127	1.64	Q	.	.	.	V.	
27.500	609.9232	1.52	Q	.	.	.	V.	
27.583	609.9327	1.39	Q	.	.	.	V.	
27.667	609.9415	1.27	Q	.	.	.	V.	
27.750	609.9495	1.15	Q	.	.	.	V.	
27.833	609.9566	1.03	Q	.	.	.	V.	
27.917	609.9629	0.92	Q	.	.	.	V.	
28.000	609.9684	0.80	Q	.	.	.	V.	
28.083	609.9731	0.68	Q	.	.	.	V.	

28.167	609.9770	0.57	Q	.	.	.	V.	
28.250	609.9801	0.45	Q	.	.	.	V.	
28.333	609.9824	0.34	Q	.	.	.	V.	
28.417	609.9839	0.22	Q	.	.	.	V.	
28.500	609.9847	0.11	Q	.	.	.	V	

TIME DURATION(minutes) OF PERCENTILES OF ESTIMATED PEAK FLOW RATE:
(Note: 100% of Peak Flow Rate estimate assumed to have
an instantaneous time duration)

Percentile of Estimated Peak Flow Rate	Duration (minutes)
0%	1710.0
10%	505.0
20%	270.0
30%	190.0
40%	140.0
50%	110.0
60%	95.0
70%	75.0
80%	55.0
90%	25.0

END OF FLOODSCx ROUTING ANALYSIS

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             F L O O D    R O U T I N G    A N A L Y S I S
             USING COUNTY HYDROLOGY MANUAL OF ORANGE(1986)
         (c) Copyright 1989-2013 Advanced Engineering Software (aes)
             Ver. 20.0  Release Date: 06/01/2013  License ID 1237

                        Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RMV PA-3 ROMP AMENDMENT 2022 - NODE 133U                              *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL             *
* 10-YR EV NOV 2022 ROKAMOTO                                            *
 ************************************************************************

  FILE NAME: EV1033US.DAT
  TIME/DATE OF STUDY: 18:22 11/07/2022


                       ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    133.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =   54354.000 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.727 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.292; LOW LOSS FRACTION = 0.742
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.32; 30-MINUTE =  0.63;  1-HOUR =  0.87
    3-HOUR =  1.62;    6-HOUR =  2.39; 24-HOUR =  4.20
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.328; 30-MINUTE = 0.381;  1-HOUR = 0.422
    3-HOUR = 0.771;    6-HOUR = 0.897; 24-HOUR = 0.940
==========================================================================
```



```
 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV1033US.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 10100.00     133.00| Subarea (UH) Added to Stream #1|       0.0      7145.6|
18.750 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
-------------------------------------+

   END OF FLOODSCx ROUTING ANALYSIS
```

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             F L O O D    R O U T I N G    A N A L Y S I S
             USING COUNTY HYDROLOGY MANUAL OF ORANGE(1986)
         (c) Copyright 1989-2010 Advanced Engineering Software (aes)
             Ver. 17.0  Release Date: 07/01/2010  License ID 1527

                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RMV PA-3 ROMP AMENDMENT 2022 - NODE 134C                              *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL             *
* 10-YR EV AUG 2023 ROKAMOTO                                            *
 ************************************************************************

  FILE NAME: EV1034CS.DAT
  TIME/DATE OF STUDY: 08:32 08/10/2023


                        ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    134.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =   66557.602 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.845 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.285; LOW LOSS FRACTION = 0.736
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.31; 30-MINUTE =  0.62;  1-HOUR =  0.86
    3-HOUR =  1.56;    6-HOUR =  2.29; 24-HOUR =  3.99
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.294; 30-MINUTE = 0.352;  1-HOUR = 0.397
    3-HOUR = 0.741;    6-HOUR = 0.887; 24-HOUR = 0.933
==========================================================================
```



```
 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV1034CS.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 10100.00     134.00| Subarea (UH) Added to Stream #1|       0.0      7538.0|
18.833 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
-------------------------------------+

   END OF FLOODSCx ROUTING ANALYSIS
```

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*****************************************************************************

             F L O O D    R O U T I N G    A N A L Y S I S
             USING COUNTY HYDROLOGY MANUAL OF ORANGE(1986)
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              Ver. 20.0  Release Date: 06/01/2013  License ID 1237

                          Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RMV PA-3 ROMP AMENDMENT 2022 - NODE 134T                              *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL             *
* 10-YR EV OCT 2022 ROKAMOTO                                            *
 ************************************************************************

  FILE NAME: EV1034TS.DAT
  TIME/DATE OF STUDY: 10:47 10/25/2022


*****************************************************************************
  FLOW PROCESS FROM NODE  13500.00 TO NODE    134.00 IS CODE =   1
-----------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS)<<<<<
=============================================================================

      (UNIT-HYDROGRAPH ADDED TO STREAM #1)

         WATERSHED AREA =    3859.700 ACRES
         BASEFLOW =   0.000 CFS/SQUARE-MILE
         *USER ENTERED "LAG" TIME =    1.489 HOURS
         VALLEY(DEVELOPED) S-GRAPH SELECTED
         MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.284
         LOW LOSS FRACTION = 0.760
         *HYDROGRAPH MODEL #1 SPECIFIED*

         SPECIFIED PEAK  5-MINUTES RAINFALL(INCH)=  0.26
         SPECIFIED PEAK 30-MINUTES RAINFALL(INCH)=  0.59
         SPECIFIED PEAK  1-HOUR RAINFALL(INCH) =  0.78
         SPECIFIED PEAK  3-HOUR RAINFALL(INCH) =  1.31
         SPECIFIED PEAK  6-HOUR RAINFALL(INCH) =  1.81
         SPECIFIED PEAK 24-HOUR RAINFALL(INCH) =  3.03

         *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
           5-MINUTE FACTOR = 0.828
          30-MINUTE FACTOR = 0.828
           1-HOUR FACTOR = 0.828
           3-HOUR FACTOR = 0.974
           6-HOUR FACTOR = 0.987
          24-HOUR FACTOR = 0.992

         UNIT HYDROGRAPH TIME UNIT =   5.000 MINUTES
         UNIT INTERVAL PERCENTAGE OF LAG-TIME =   5.597
```


UNIT HYDROGRAPH DETERMINATION

INTERVAL NUMBER	"S" GRAPH MEAN VALUES	UNIT HYDROGRAPH ORDINATES(CFS)
1	0.320	149.280
2	0.959	298.559
3	1.599	298.559
4	2.366	357.932
5	3.336	453.075
6	4.584	582.097
7	6.500	894.625
8	9.057	1193.403
9	11.911	1332.098
10	15.115	1495.822
11	18.408	1536.896
12	21.810	1588.237
13	25.547	1744.283
14	29.058	1639.011
15	33.372	2013.783
16	37.479	1917.036
17	42.372	2283.987
18	47.656	2466.089
19	52.569	2293.323
20	56.570	1867.605
21	61.560	2329.397
22	66.023	2083.366
23	69.956	1835.759
24	73.512	1659.907
25	76.697	1486.808
26	79.208	1172.145
27	81.768	1194.912
28	84.134	1104.499
29	86.204	966.200
30	87.909	795.480
31	89.282	640.889
32	90.535	585.216
33	91.710	548.282
34	92.807	512.075
35	93.847	485.643
36	94.626	363.513
37	95.337	331.746
38	96.004	311.301
39	96.468	216.899
40	96.907	204.848
41	97.346	204.848
42	97.785	205.008
43	98.053	125.189
44	98.159	49.195
45	98.264	48.871
46	98.368	48.868
47	98.473	48.871
48	98.578	49.032

49	98.683	49.035
50	98.788	49.032
51	98.893	48.871
52	98.998	49.032
53	99.103	49.032
54	99.208	49.032
55	99.313	49.032
56	99.418	49.032
57	99.523	49.032
58	99.628	49.032
59	99.733	49.032
60	99.838	49.032
61	99.943	49.032
62	100.000	26.528

TOTAL SOIL-LOSS VOLUME(ACRE-FEET) = 660.5923

TOTAL STORM RUNOFF VOLUME(ACRE-FEET) = 306.2667

==========

2 4 - H O U R S T O R M
R U N O F F H Y D R O G R A P H

==========

HYDROGRAPH IN FIVE-MINUTE UNIT INTERVALS(CFS)
(Note: Time indicated is at END of Each Unit Intervals)

TIME(HRS)	VOLUME(AF)	Q(CFS)	0.	275.0	550.0	825.0	1100.0
0.083	0.0010	0.14	Q	.	.	.	.
0.167	0.0039	0.42	Q	.	.	.	.
0.250	0.0087	0.70	Q	.	.	.	.
0.333	0.0159	1.04	Q	.	.	.	.
0.417	0.0261	1.47	Q	.	.	.	.
0.500	0.0400	2.03	Q	.	.	.	.
0.583	0.0598	2.87	Q	.	.	.	.
0.667	0.0874	4.01	Q	.	.	.	.
0.750	0.1237	5.27	Q	.	.	.	.
0.833	0.1699	6.70	Q	.	.	.	.
0.917	0.2261	8.17	Q	.	.	.	.
1.000	0.2929	9.69	Q	.	.	.	.
1.083	0.3711	11.36	Q	.	.	.	.
1.167	0.4603	12.94	Q	.	.	.	.
1.250	0.5628	14.88	Q	.	.	.	.
1.333	0.6781	16.74	Q	.	.	.	.
1.417	0.8085	18.94	Q	.	.	.	.
1.500	0.9554	21.33	Q	.	.	.	.
1.583	1.1177	23.56	Q	.	.	.	.
1.667	1.2926	25.39	Q	.	.	.	.
1.750	1.4831	27.67	VQ	.	.	.	.
1.833	1.6879	29.73	VQ	.	.	.	.
1.917	1.9052	31.56	VQ	.	.	.	.
2.000	2.1341	33.23	VQ	.	.	.	.
2.083	2.3733	34.74	VQ	.	.	.	.
2.167	2.6210	35.96	VQ	.	.	.	.
2.250	2.8773	37.21	VQ	.	.	.	.
2.333	3.1416	38.38	VQ	.	.	.	.
2.417	3.4131	39.42	VQ	.	.	.	.
2.500	3.6907	40.31	VQ	.	.	.	.
2.583	3.9734	41.05	VQ	.	.	.	.
2.667	4.2609	41.75	VQ	.	.	.	.
2.750	4.5530	42.41	VQ	.	.	.	.
2.833	4.8495	43.04	VQ	.	.	.	.
2.917	5.1501	43.66	VQ	.	.	.	.
3.000	5.4542	44.15	VQ	.	.	.	.
3.083	5.7616	44.63	VQ	.	.	.	.
3.167	6.0720	45.08	VQ	.	.	.	.
3.250	6.3851	45.45	VQ	.	.	.	.
3.333	6.7005	45.81	VQ	.	.	.	.
3.417	7.0185	46.17	VQ	.	.	.	.
3.500	7.3390	46.53	VQ	.	.	.	.
3.583	7.6615	46.83	.Q	.	.	.	.
3.667	7.9855	47.05	.Q	.	.	.	.
3.750	8.3111	47.27	.Q	.	.	.	.
3.833	8.6382	47.50	.Q	.	.	.	.
3.917	8.9668	47.72	.Q	.	.	.	.

4.000	9.2971	47.95	.Q	.	.	.	.
4.083	9.6289	48.18	.Q	.	.	.	.
4.167	9.9624	48.42	.Q	.	.	.	.
4.250	10.2974	48.65	.Q	.	.	.	.
4.333	10.6341	48.89	.Q	.	.	.	.
4.417	10.9725	49.13	.Q	.	.	.	.
4.500	11.3125	49.37	.Q	.	.	.	.
4.583	11.6542	49.62	.Q	.	.	.	.
4.667	11.9976	49.86	.Q	.	.	.	.
4.750	12.3427	50.11	.Q	.	.	.	.
4.833	12.6896	50.36	.Q	.	.	.	.
4.917	13.0381	50.61	.Q	.	.	.	.
5.000	13.3885	50.87	.Q	.	.	.	.
5.083	13.7406	51.13	.Q	.	.	.	.
5.167	14.0943	51.37	.Q	.	.	.	.
5.250	14.4496	51.58	.Q	.	.	.	.
5.333	14.8063	51.80	.Q	.	.	.	.
5.417	15.1646	52.02	.Q	.	.	.	.
5.500	15.5245	52.25	.QV	.	.	.	.
5.583	15.8859	52.47	.QV	.	.	.	.
5.667	16.2488	52.70	.QV	.	.	.	.
5.750	16.6134	52.94	.QV	.	.	.	.
5.833	16.9796	53.17	.QV	.	.	.	.
5.917	17.3474	53.41	.QV	.	.	.	.
6.000	17.7168	53.64	.QV	.	.	.	.
6.083	18.0880	53.89	.QV	.	.	.	.
6.167	18.4608	54.13	.QV	.	.	.	.
6.250	18.8353	54.38	.QV	.	.	.	.
6.333	19.2116	54.63	.QV	.	.	.	.
6.417	19.5896	54.89	.QV	.	.	.	.
6.500	19.9694	55.15	. Q	.	.	.	.
6.583	20.3510	55.41	. Q	.	.	.	.
6.667	20.7344	55.67	. Q	.	.	.	.
6.750	21.1197	55.94	. Q	.	.	.	.
6.833	21.5068	56.21	. Q	.	.	.	.
6.917	21.8958	56.49	. Q	.	.	.	.
7.000	22.2867	56.76	. Q	.	.	.	.
7.083	22.6796	57.05	. Q	.	.	.	.
7.167	23.0744	57.33	. QV	.	.	.	.
7.250	23.4713	57.62	. QV	.	.	.	.
7.333	23.8701	57.91	. QV	.	.	.	.
7.417	24.2710	58.21	. QV	.	.	.	.
7.500	24.6739	58.51	. QV	.	.	.	.
7.583	25.0790	58.81	. QV	.	.	.	.
7.667	25.4862	59.12	. QV	.	.	.	.
7.750	25.8955	59.44	. QV	.	.	.	.
7.833	26.3070	59.75	. QV	.	.	.	.
7.917	26.7208	60.08	. QV	.	.	.	.
8.000	27.1368	60.40	. QV	.	.	.	.
8.083	27.5550	60.73	. QV	.	.	.	.
8.167	27.9756	61.07	. QV	.	.	.	.
8.250	28.3986	61.41	. QV	.	.	.	.
8.333	28.8239	61.76	. QV	.	.	.	.
8.417	29.2516	62.11	. QV	.	.	.	.
8.500	29.6818	62.46	. QV	.	.	.	.
8.583	30.1145	62.83	. QV	.	.	.	.
8.667	30.5498	63.19	. QV	.	.	.	.
8.750	30.9876	63.57	. Q V	.	.	.	.

8.833	31.4280	63.95	. Q V	.	.	.	.
8.917	31.8710	64.33	. Q V	.	.	.	.
9.000	32.3168	64.72	. Q V	.	.	.	.
9.083	32.7653	65.12	. Q V	.	.	.	.
9.167	33.2165	65.52	. Q V	.	.	.	.
9.250	33.6707	65.94	. Q V	.	.	.	.
9.333	34.1276	66.35	. Q V	.	.	.	.
9.417	34.5875	66.78	. Q V	.	.	.	.
9.500	35.0504	67.21	. Q V	.	.	.	.
9.583	35.5163	67.65	. Q V	.	.	.	.
9.667	35.9853	68.09	. Q V	.	.	.	.
9.750	36.4574	68.55	. Q V	.	.	.	.
9.833	36.9327	69.01	. Q V	.	.	.	.
9.917	37.4112	69.48	. Q V	.	.	.	.
10.000	37.8930	69.96	. Q V	.	.	.	.
10.083	38.3782	70.45	. Q V	.	.	.	.
10.167	38.8668	70.95	. Q V	.	.	.	.
10.250	39.3590	71.46	. Q V	.	.	.	.
10.333	39.8546	71.97	. Q V	.	.	.	.
10.417	40.3539	72.50	. Q V	.	.	.	.
10.500	40.8569	73.03	. Q V	.	.	.	.
10.583	41.3636	73.58	. Q V	.	.	.	.
10.667	41.8742	74.13	. Q V	.	.	.	.
10.750	42.3887	74.71	. Q V	.	.	.	.
10.833	42.9072	75.28	. Q V	.	.	.	.
10.917	43.4298	75.88	. Q V	.	.	.	.
11.000	43.9565	76.48	. Q V	.	.	.	.
11.083	44.4875	77.10	. Q V	.	.	.	.
11.167	45.0229	77.73	. Q V	.	.	.	.
11.250	45.5627	78.38	. Q V	.	.	.	.
11.333	46.1070	79.04	. Q V	.	.	.	.
11.417	46.6560	79.71	. Q V	.	.	.	.
11.500	47.2097	80.40	. Q V	.	.	.	.
11.583	47.7683	81.11	. Q V	.	.	.	.
11.667	48.3319	81.83	. Q V	.	.	.	.
11.750	48.9005	82.57	. Q V	.	.	.	.
11.833	49.4744	83.32	. Q V	.	.	.	.
11.917	50.0536	84.10	. Q V	.	.	.	.
12.000	50.6383	84.89	. Q V	.	.	.	.
12.083	51.2293	85.81	. Q V	.	.	.	.
12.167	51.8273	86.84	. Q V	.	.	.	.
12.250	52.4327	87.90	. Q V	.	.	.	.
12.333	53.0457	89.01	. Q V	.	.	.	.
12.417	53.6671	90.22	. Q V	.	.	.	.
12.500	54.2975	91.53	. Q V	.	.	.	.
12.583	54.9386	93.08	. Q V	.	.	.	.
12.667	55.5918	94.85	. Q V	.	.	.	.
12.750	56.2581	96.75	. Q V	.	.	.	.
12.833	56.9384	98.78	. Q V	.	.	.	.
12.917	57.6332	100.88	. Q V	.	.	.	.
13.000	58.3428	103.04	. Q V	.	.	.	.
13.083	59.0684	105.35	. Q V	.	.	.	.
13.167	59.8095	107.62	. Q V	.	.	.	.
13.250	60.5684	110.19	. Q V	.	.	.	.
13.333	61.3448	112.73	. Q V	.	.	.	.
13.417	62.1407	115.57	. Q V	.	.	.	.
13.500	62.9572	118.56	. Q V	.	.	.	.
13.583	63.7941	121.51	. Q V	.	.	.	.

13.667	64.6496	124.22	. Q V . . . .
13.750	65.5263	127.30	. Q V . . . .
13.833	66.4235	130.27	. Q V . . . .
13.917	67.3406	133.16	. Q V . . . .
14.000	68.2772	135.99	. Q V . . . .
14.083	69.2342	138.96	. Q V. . . . .
14.167	70.2118	141.96	. Q V. . . . .
14.250	71.2109	145.07	. Q V. . . . .
14.333	72.2320	148.25	. Q V. . . . .
14.417	73.2758	151.57	. Q V. . . . .
14.500	74.3433	155.00	. Q V. . . . .
14.583	75.4371	158.81	. Q V. . . . .
14.667	76.5598	163.02	. Q V. . . . .
14.750	77.7134	167.51	. Q V . . . .
14.833	78.8997	172.25	. Q V . . . .
14.917	80.1202	177.21	. Q V . . . .
15.000	81.3754	182.25	. Q V . . . .
15.083	82.6678	187.67	. Q V . . . .
15.167	83.9976	193.09	. Q V . . . .
15.250	85.3690	199.13	. Q .V . . . .
15.333	86.7830	205.32	. Q .V . . . .
15.417	88.2419	211.82	. Q .V . . . .
15.500	89.7452	218.28	. Q .V . . . .
15.583	91.2943	224.94	. Q .V . . . .
15.667	92.8871	231.28	. Q . V . . . .
15.750	94.5371	239.58	. Q . V . . . .
15.833	96.2559	249.56	. Q. V . . . .
15.917	98.0603	261.99	. Q. V . . . .
16.000	99.9861	279.64	. Q V . . . .
16.083	102.2002	321.48	. .Q V . . . .
16.167	104.6851	360.81	. . Q . . . .
16.250	107.2954	379.01	. . QV . . . .
16.333	110.1196	410.08	. . Q . . . .
16.417	113.2478	454.21	. . V Q . . . .
16.500	116.7786	512.67	. . V Q . . . .
16.583	120.8959	597.84	. . V .Q . . . .
16.667	125.5490	675.63	. . V . Q . . . .
16.750	130.5166	721.30	. . V . Q . . . .
16.833	135.7562	760.78	. . V . Q . . . .
16.917	141.1480	782.89	. . V . Q . . . .
17.000	146.6966	805.66	. . V. Q. . . .
17.083	152.5096	844.05	. . V. Q . . .
17.167	158.3651	850.22	. . V Q . . .
17.250	164.7322	924.50	. . .V . Q . .
17.333	171.1456	931.22	. . . V . Q . .
17.417	178.0260	999.03	. . . V . Q .
17.500	185.0560	1020.77	. . . V . Q .
17.583	191.7929	978.19	. . . V . Q .
17.667	198.0139	903.29	. . . V . Q .
17.750	204.5797	953.36	. . . V . Q .
17.833	210.7119	890.39	. . . V . Q .
17.917	216.3439	817.78	. . . VQ. . .
18.000	221.5442	755.07	. . . QV . . .
18.083	226.3447	697.04	. . . Q V. . .
18.167	230.6412	623.85	. . . Q V . .
18.250	234.7860	601.82	. . .Q V . .
18.333	238.6652	563.26	. . Q .V . .
18.417	242.2030	513.69	. . Q . .V . .

18.500	245.3708	459.97	. . Q . . V .
18.583	248.2297	415.11	. . Q . . V .
18.667	250.9109	389.31	. . Q . . V .
18.750	253.4454	368.02	. . Q . . V .
18.833	255.8301	346.26	. . Q . . V .
18.917	258.0633	324.25	. .Q . . V .
19.000	260.0611	290.08	. Q . . V .
19.083	261.9247	270.59	. Q. . . V .
19.167	263.6761	254.31	. Q. . . V .
19.250	265.2491	228.41	. Q . . . V .
19.333	266.7363	215.93	. Q . . . V .
19.417	268.1537	205.81	. Q . . . V .
19.500	269.4864	193.51	. Q . . . V .
19.583	270.6511	169.12	. Q . . . V .
19.667	271.6727	148.33	. Q . . . V .
19.750	272.6472	141.50	. Q . . . V .
19.833	273.5884	136.66	. Q . . . V .
19.917	274.4977	132.04	. Q . . . V .
20.000	275.3774	127.73	. Q . . . V .
20.083	276.2303	123.85	. Q . . . V .
20.167	277.0592	120.35	. Q . . . V .
20.250	277.8655	117.07	. Q . . . V .
20.333	278.6508	114.04	. Q . . . V .
20.417	279.4164	111.16	. Q . . . V .
20.500	280.1639	108.54	. Q . . . V .
20.583	280.8959	106.28	. Q . . . V .
20.667	281.6135	104.20	. Q . . . V .
20.750	282.3173	102.19	. Q . . . V .
20.833	283.0066	100.08	. Q . . . V .
20.917	283.6796	97.72	. Q . . . V .
21.000	284.3339	95.01	. Q . . . V .
21.083	284.9639	91.48	. Q . . . V .
21.167	285.5454	84.44	. Q . . . V .
21.250	286.0802	77.65	. Q . . . V .
21.333	286.6017	75.72	. Q . . . V .
21.417	287.1138	74.36	. Q . . . V .
21.500	287.6167	73.01	. Q . . . V .
21.583	288.1105	71.71	. Q . . . V .
21.667	288.5964	70.55	. Q . . . V .
21.750	289.0746	69.44	. Q . . . V .
21.833	289.5456	68.38	. Q . . . V .
21.917	290.0095	67.36	. Q . . . V .
22.000	290.4666	66.38	. Q . . . V .
22.083	290.9172	65.43	. Q . . . V .
22.167	291.3616	64.54	. Q . . . V .
22.250	291.8004	63.71	. Q . . . V .
22.333	292.2336	62.90	. Q . . . V .
22.417	292.6615	62.13	. Q . . . V .
22.500	293.0842	61.38	. Q . . . V .
22.583	293.5019	60.65	. Q . . . V .
22.667	293.9147	59.94	. Q . . . V .
22.750	294.3228	59.26	. Q . . . V .
22.833	294.7264	58.59	. Q . . . V .
22.917	295.1255	57.95	. Q . . . V .
23.000	295.5202	57.32	. Q . . . V .
23.083	295.9107	56.71	. Q . . . V .
23.167	296.2973	56.12	. Q . . . V .
23.250	296.6800	55.57	. Q . . . V .

23.333	297.0591	55.04	. Q	.	.	.	V	.
23.417	297.4346	54.52	.Q	.	.	.	V	.
23.500	297.8065	54.01	.Q	.	.	.	V	.
23.583	298.1751	53.52	.Q	.	.	.	V	.
23.667	298.5403	53.03	.Q	.	.	.	V	.
23.750	298.9023	52.56	.Q	.	.	.	V.	
23.833	299.2612	52.10	.Q	.	.	.	V.	
23.917	299.6169	51.65	.Q	.	.	.	V.	
24.000	299.9696	51.21	.Q	.	.	.	V.	
24.083	300.3184	50.64	.Q	.	.	.	V.	
24.167	300.6623	49.94	.Q	.	.	.	V.	
24.250	301.0015	49.25	.Q	.	.	.	V.	
24.333	301.3357	48.52	.Q	.	.	.	V.	
24.417	301.6642	47.71	.Q	.	.	.	V.	
24.500	301.9865	46.78	.Q	.	.	.	V.	
24.583	302.3004	45.58	.Q	.	.	.	V.	
24.667	302.6041	44.11	.Q	.	.	.	V.	
24.750	302.8969	42.52	.Q	.	.	.	V.	
24.833	303.1779	40.79	.Q	.	.	.	V.	
24.917	303.4467	39.04	.Q	.	.	.	V.	
25.000	303.7033	37.25	.Q	.	.	.	V.	
25.083	303.9467	35.34	.Q	.	.	.	V.	
25.167	304.1776	33.54	.Q	.	.	.	V.	
25.250	304.3939	31.40	.Q	.	.	.	V.	
25.333	304.5961	29.37	.Q	.	.	.	V.	
25.417	304.7821	27.01	Q	.	.	.	V.	
25.500	304.9508	24.50	Q	.	.	.	V.	
25.583	305.1035	22.17	Q	.	.	.	V.	
25.667	305.2430	20.25	Q	.	.	.	V.	
25.750	305.3664	17.92	Q	.	.	.	V.	
25.833	305.4754	15.83	Q	.	.	.	V.	
25.917	305.5718	13.99	Q	.	.	.	V.	
26.000	305.6567	12.34	Q	.	.	.	V.	
26.083	305.7315	10.85	Q	.	.	.	V.	
26.167	305.7981	9.67	Q	.	.	.	V.	
26.250	305.8565	8.48	Q	.	.	.	V.	
26.333	305.9073	7.38	Q	.	.	.	V.	
26.417	305.9516	6.42	Q	.	.	.	V.	
26.500	305.9903	5.63	Q	.	.	.	V.	
26.583	306.0247	4.99	Q	.	.	.	V.	
26.667	306.0550	4.40	Q	.	.	.	V.	
26.750	306.0815	3.85	Q	.	.	.	V.	
26.833	306.1046	3.35	Q	.	.	.	V.	
26.917	306.1243	2.87	Q	.	.	.	V.	
27.000	306.1415	2.50	Q	.	.	.	V.	
27.083	306.1565	2.17	Q	.	.	.	V.	
27.167	306.1694	1.87	Q	.	.	.	V.	
27.250	306.1807	1.65	Q	.	.	.	V.	
27.333	306.1907	1.44	Q	.	.	.	V.	
27.417	306.1992	1.24	Q	.	.	.	V.	
27.500	306.2064	1.04	Q	.	.	.	V.	
27.583	306.2127	0.91	Q	.	.	.	V.	
27.667	306.2186	0.86	Q	.	.	.	V.	
27.750	306.2242	0.81	Q	.	.	.	V.	
27.833	306.2294	0.76	Q	.	.	.	V.	
27.917	306.2343	0.71	Q	.	.	.	V.	
28.000	306.2388	0.66	Q	.	.	.	V.	
28.083	306.2430	0.61	Q	.	.	.	V.	

28.167	306.2468	0.55	Q	.	.	.	V.	
28.250	306.2503	0.51	Q	.	.	.	V.	
28.333	306.2534	0.46	Q	.	.	.	V.	
28.417	306.2562	0.41	Q	.	.	.	V.	
28.500	306.2587	0.36	Q	.	.	.	V.	
28.583	306.2608	0.31	Q	.	.	.	V.	
28.667	306.2626	0.26	Q	.	.	.	V.	
28.750	306.2641	0.21	Q	.	.	.	V.	
28.833	306.2652	0.17	Q	.	.	.	V.	
28.917	306.2661	0.12	Q	.	.	.	V.	
29.000	306.2665	0.07	Q	.	.	.	V.	
29.083	306.2667	0.03	Q	.	.	.	V	

TIME DURATION(minutes) OF PERCENTILES OF ESTIMATED PEAK FLOW RATE:
(Note: 100% of Peak Flow Rate estimate assumed to have
an instantaneous time duration)

Percentile of Estimated Peak Flow Rate	Duration (minutes)
0%	1745.0
10%	470.0
20%	250.0
30%	175.0
40%	140.0
50%	120.0
60%	95.0
70%	80.0
80%	55.0
90%	30.0

==========

END OF FLOODSCx ROUTING ANALYSIS

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_____
*****************************************************************************

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             USING COUNTY HYDROLOGY MANUAL OF ORANGE(1986)
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                        Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RMV PA-3 ROMP AMENDMENT 2022 - NODE 134U                              *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL             *
* 10-YR EV AUG 2023 ROKAMOTO                                            *
 *************************************************************************

  FILE NAME: EV1034US.DAT
  TIME/DATE OF STUDY: 08:32 08/10/2023


                       ** INPUT SUMMARY **


*****************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    134.00 IS CODE =   1
-----------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
=============================================================================
  WATERSHED AREA =   62698.000 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.845 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.285; LOW LOSS FRACTION = 0.736
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.31; 30-MINUTE =  0.62;  1-HOUR =  0.86
    3-HOUR =  1.58;    6-HOUR =  2.31; 24-HOUR =  4.05
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.304; 30-MINUTE = 0.358;  1-HOUR = 0.405
    3-HOUR = 0.750;    6-HOUR = 0.890; 24-HOUR = 0.936
=============================================================================
```



```
 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV1034US.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 10100.00     134.00| Subarea (UH) Added to Stream #1|       0.0      7432.6|
18.833 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
-------------------------------------+

   END OF FLOODSCx ROUTING ANALYSIS
```

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**************************************************************************

            F L O O D    R O U T I N G    A N A L Y S I S
            USING COUNTY HYDROLOGY MANUAL OF ORANGE(1986)
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                        Analysis prepared by:

                      Michael Baker International
                    5 Hutton Centre Drive Suite 500
                          Santa Ana, CA92707


 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO - SINGLE AREA UH                                 *
* PHASE CONDITION NO PA5 - REGIONAL NODE 119                            *
* 2-YR EV JANUARY 2019 CCHIU                                            *
 ************************************************************************

  FILE NAME: EV02119S.DAT
  TIME/DATE OF STUDY: 07:20 01/04/2019


**************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    119.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS)<<<<<
==========================================================================

      (UNIT-HYDROGRAPH ADDED TO STREAM #1)

         WATERSHED AREA =   49495.699 ACRES
         BASEFLOW =   0.000 CFS/SQUARE-MILE
         *USER ENTERED "LAG" TIME =    5.382 HOURS
         VALLEY(DEVELOPED) S-GRAPH SELECTED
         MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.595
         LOW LOSS FRACTION = 0.931
         *HYDROGRAPH MODEL #1 SPECIFIED*

         SPECIFIED PEAK  5-MINUTES RAINFALL(INCH)=  0.16
         SPECIFIED PEAK 30-MINUTES RAINFALL(INCH)=  0.30
         SPECIFIED PEAK  1-HOUR RAINFALL(INCH) =  0.41
         SPECIFIED PEAK  3-HOUR RAINFALL(INCH) =  0.77
         SPECIFIED PEAK  6-HOUR RAINFALL(INCH) =  1.15
         SPECIFIED PEAK 24-HOUR RAINFALL(INCH) =  2.03

         *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
           5-MINUTE FACTOR = 0.345
          30-MINUTE FACTOR = 0.395
           1-HOUR FACTOR = 0.435
           3-HOUR FACTOR = 0.785
           6-HOUR FACTOR = 0.904
          24-HOUR FACTOR = 0.944

         UNIT HYDROGRAPH TIME UNIT =   5.000 MINUTES
         UNIT INTERVAL PERCENTAGE OF LAG-TIME =   1.548
```


UNIT HYDROGRAPH DETERMINATION

INTERVAL NUMBER	"S" GRAPH MEAN VALUES	UNIT HYDROGRAPH ORDINATES(CFS)
1	0.088	529.621
2	0.265	1059.242
3	0.442	1059.242
4	0.619	1059.249
5	0.796	1059.239
6	0.973	1059.246
7	1.150	1059.234
8	1.327	1059.253
9	1.504	1059.238
10	1.681	1059.242
11	1.858	1059.242
12	2.057	1193.797
13	2.323	1586.643
14	2.592	1611.883
15	2.861	1611.898
16	3.130	1611.885
17	3.400	1611.898
18	3.669	1611.883
19	3.947	1661.494
20	4.382	2605.706
21	4.877	2965.924
22	5.373	2965.836
23	5.873	2991.584
24	6.479	3627.758
25	7.131	3902.466
26	7.785	3916.892
27	8.550	4581.554
28	9.376	4943.127
29	10.188	4857.481
30	10.963	4644.289
31	11.738	4634.202
32	12.512	4634.139
33	13.286	4634.202
34	14.138	5098.275
35	15.335	7166.907
36	16.382	6268.090
37	17.208	4944.834
38	18.034	4943.190
39	18.860	4943.190
40	19.687	4951.913
41	20.639	5699.669
42	21.675	6199.787
43	22.845	7000.610
44	24.026	7074.000
45	24.944	5494.502
46	25.829	5296.300
47	26.714	5296.061
48	27.599	5298.664

49	28.677	6451.307
50	29.896	7299.340
51	30.962	6378.637
52	32.057	6556.299
53	33.533	8834.950
54	34.870	8004.146
55	36.038	6987.652
56	36.898	5152.821
57	37.739	5032.507
58	39.269	9155.613
59	40.806	9204.707
60	42.135	7950.804
61	43.579	8644.078
62	44.957	8247.171
63	46.364	8423.201
64	47.983	9695.006
65	49.773	10715.312
66	51.031	7529.853
67	52.158	6741.315
68	53.284	6740.356
69	54.375	6531.285
70	55.408	6183.518
71	56.529	6708.730
72	57.774	7452.468
73	59.117	8043.329
74	60.638	9105.104
75	62.281	9834.706
76	63.600	7896.070
77	64.750	6882.408
78	65.822	6414.258
79	66.848	6140.566
80	67.876	6158.468
81	69.093	7283.562
82	70.249	6921.090
83	71.161	5454.394
84	72.081	5507.233
85	73.080	5980.086
86	74.079	5979.173
87	75.036	5732.836
88	75.958	5514.768
89	76.680	4325.601
90	77.369	4120.731
91	78.057	4118.905
92	78.745	4118.859
93	79.433	4118.859
94	80.131	4175.488
95	80.857	4347.294
96	81.586	4362.364
97	82.281	4162.290
98	82.933	3903.668
99	83.585	3903.714
100	84.214	3762.095
101	84.804	3535.578
102	85.394	3529.916
103	85.971	3454.425
104	86.463	2946.635
105	86.940	2852.238
106	87.416	2852.283

107	87.888	2825.796
108	88.282	2357.692
109	88.647	2180.269
110	89.011	2180.223
111	89.375	2182.141
112	89.739	2178.351
113	90.092	2112.314
114	90.419	1955.579
115	90.745	1951.834
116	91.071	1951.880
117	91.397	1949.916
118	91.723	1951.834
119	92.042	1912.194
120	92.339	1776.329
121	92.634	1764.958
122	92.929	1766.830
123	93.224	1763.085
124	93.519	1766.830
125	93.814	1766.876
126	94.071	1540.313
127	94.269	1185.468
128	94.465	1174.096
129	94.662	1177.887
130	94.859	1177.932
131	95.055	1174.096
132	95.253	1181.677
133	95.449	1174.142
134	95.645	1174.096
135	95.842	1181.677
136	96.020	1064.674
137	96.146	751.250
138	96.267	724.899
139	96.388	724.853
140	96.510	728.644
141	96.631	728.598
142	96.752	724.899
143	96.873	724.853
144	96.995	728.644
145	97.116	724.853
146	97.239	732.389
147	97.360	724.853
148	97.481	724.899
149	97.603	728.598
150	97.724	724.899
151	97.845	728.598
152	97.965	717.318
153	98.021	336.030
154	98.050	173.632
155	98.079	169.888
156	98.108	173.678
157	98.137	177.423
158	98.166	173.678
159	98.195	173.678
160	98.224	173.678
161	98.253	173.632
162	98.282	169.888
163	98.311	177.469
164	98.340	173.632

165	98.370	173.678
166	98.399	177.423
167	98.428	169.888
168	98.457	173.678
169	98.486	173.678
170	98.515	173.678
171	98.544	173.632
172	98.573	177.469
173	98.602	169.888
174	98.631	173.632
175	98.660	177.469
176	98.689	169.888
177	98.718	173.678
178	98.747	173.632
179	98.776	173.678
180	98.805	173.678
181	98.834	173.632
182	98.864	181.213
183	98.892	166.143
184	98.922	181.213
185	98.950	166.097
186	98.979	173.678
187	99.008	173.678
188	99.037	173.678
189	99.066	173.678
190	99.095	173.678
191	99.124	173.678
192	99.153	173.678
193	99.182	173.678
194	99.211	173.678
195	99.240	173.678
196	99.269	173.678
197	99.298	173.678
198	99.327	173.678
199	99.356	173.678
200	99.385	173.678
201	99.414	173.678
202	99.443	173.678
203	99.472	173.678
204	99.501	173.678
205	99.530	173.678
206	99.559	173.678
207	99.588	173.678
208	99.617	173.678
209	99.646	173.678
210	99.675	173.678
211	99.704	173.678
212	99.733	173.678
213	99.762	173.678
214	99.791	173.678
215	99.820	173.678
216	99.849	173.678
217	99.878	173.678
218	99.907	173.678
219	99.936	173.678
220	99.965	173.678
221	99.994	173.678
222	100.000	34.252

TOTAL SOIL-LOSS VOLUME(ACRE-FEET) = 7342.6523
TOTAL STORM RUNOFF VOLUME(ACRE-FEET) = 547.4572

---

2 4 - H O U R S T O R M
R U N O F F H Y D R O G R A P H

HYDROGRAPH IN FIVE-MINUTE UNIT INTERVALS(CFS)
(Note: Time indicated is at END of Each Unit Intervals)

TIME(HRS)	VOLUME(AF)	Q(CFS)	0. 150.0 300.0 450.0 600.0
0.083	0.0007	0.11	Q . . . .
0.167	0.0030	0.32	Q . . . .
0.250	0.0067	0.54	Q . . . .
0.333	0.0119	0.75	Q . . . .
0.417	0.0185	0.97	Q . . . .
0.500	0.0267	1.19	Q . . . .
0.583	0.0364	1.41	Q . . . .
0.667	0.0476	1.63	Q . . . .
0.750	0.0603	1.84	Q . . . .
0.833	0.0745	2.07	Q . . . .
0.917	0.0903	2.29	Q . . . .
1.000	0.1077	2.53	Q . . . .
1.083	0.1275	2.86	Q . . . .
1.167	0.1495	3.20	Q . . . .
1.250	0.1738	3.54	Q . . . .
1.333	0.2005	3.87	Q . . . .
1.417	0.2295	4.21	Q . . . .
1.500	0.2609	4.55	Q . . . .
1.583	0.2946	4.90	Q . . . .
1.667	0.3321	5.44	Q . . . .
1.750	0.3739	6.06	Q . . . .
1.833	0.4199	6.68	Q . . . .
1.917	0.4702	7.31	Q . . . .
2.000	0.5257	8.07	Q . . . .
2.083	0.5869	8.88	Q . . . .
2.167	0.6537	9.70	Q . . . .
2.250	0.7271	10.66	Q . . . .
2.333	0.8077	11.69	Q . . . .
2.417	0.8953	12.71	Q . . . .
2.500	0.9896	13.70	Q . . . .
2.583	1.0907	14.68	Q . . . .
2.667	1.1985	15.66	VQ . . . .
2.750	1.3132	16.65	VQ . . . .
2.833	1.4353	17.73	VQ . . . .
2.917	1.5678	19.24	VQ . . . .
3.000	1.7095	20.57	VQ . . . .
3.083	1.8585	21.64	VQ . . . .
3.167	2.0149	22.71	VQ . . . .
3.250	2.1787	23.78	VQ . . . .
3.333	2.3498	24.86	VQ . . . .
3.417	2.5295	26.09	VQ . . . .
3.500	2.7184	27.43	VQ . . . .
3.583	2.9177	28.93	VQ . . . .
3.667	3.1275	30.46	V Q . . . .
3.750	3.3456	31.67	V Q . . . .
3.833	3.5718	32.84	V Q . . . .
3.917	3.8061	34.02	V Q . . . .

4.000	4.0486	35.20	V Q . . . .
4.083	4.3008	36.62	V Q . . . .
4.167	4.5640	38.22	V Q . . . .
4.250	4.8370	39.64	V Q . . . .
4.333	5.1200	41.09	V Q . . . .
4.417	5.4163	43.02	V Q . . . .
4.500	5.7247	44.78	V Q . . . .
4.583	6.0438	46.34	V Q . . . .
4.667	6.3712	47.54	V Q . . . .
4.750	6.7067	48.71	V Q . . . .
4.833	7.0561	50.73	V Q . . . .
4.917	7.4194	52.76	V Q . . . .
5.000	7.7951	54.54	V Q . . . .
5.083	8.1840	56.48	V Q . . . .
5.167	8.5858	58.33	V Q . . . .
5.250	9.0006	60.23	V Q . . . .
5.333	9.4304	62.40	V Q . . . .
5.417	9.8765	64.78	V Q . . . .
5.500	10.3346	66.52	V Q . . . .
5.583	10.8037	68.11	V Q . . . .
5.667	11.2838	69.71	V Q . . . .
5.750	11.7746	71.26	V Q . . . .
5.833	12.2757	72.76	V Q . . . .
5.917	12.7878	74.37	V Q . . . .
6.000	13.3121	76.13	V Q . . . .
6.083	13.8495	78.02	.V Q . . . .
6.167	14.4013	80.13	.V Q . . . .
6.250	14.9688	82.40	.V Q . . . .
6.333	15.5493	84.29	.V Q . . . .
6.417	16.1414	85.97	.V Q . . . .
6.500	16.7445	87.57	.V Q . . . .
6.583	17.3583	89.12	.V Q . . . .
6.667	17.9828	90.68	.V Q . . . .
6.750	18.6197	92.48	.V Q . . . .
6.833	19.2685	94.20	.V Q . . . .
6.917	19.9272	95.64	.V Q . . . .
7.000	20.5959	97.10	.V Q . . . .
7.083	21.2754	98.66	.V Q . . . .
7.167	21.9657	100.23	.V Q . . . .
7.250	22.6664	101.75	.V Q . . . .
7.333	23.3774	103.23	.V Q . . . .
7.417	24.0970	104.49	.V Q . . . .
7.500	24.8250	105.70	.V Q . . . .
7.583	25.5614	106.93	.V Q . . . .
7.667	26.3063	108.16	.V Q . . . .
7.750	27.0597	109.39	.V Q . . . .
7.833	27.8217	110.65	. V Q . . . .
7.917	28.5927	111.95	. V Q . . . .
8.000	29.3727	113.25	. V Q . . . .
8.083	30.1614	114.53	. V Q . . . .
8.167	30.9586	115.75	. V Q . . . .
8.250	31.7643	116.99	. V Q . . . .
8.333	32.5784	118.20	. V Q . . . .
8.417	33.4005	119.38	. V Q . . . .
8.500	34.2308	120.56	. V Q . . . .
8.583	35.0692	121.73	. V Q . . . .
8.667	35.9150	122.81	. V Q . . . .
8.750	36.7681	123.87	. V Q . . . .

8.833	37.6286	124.95	. V Q . . . .
8.917	38.4965	126.02	. V Q . . . .
9.000	39.3713	127.01	. V Q . . . .
9.083	40.2526	127.97	. V Q . . . .
9.167	41.1406	128.94	. V Q . . . .
9.250	42.0353	129.91	. V Q . . . .
9.333	42.9367	130.89	. V Q . . . .
9.417	43.8449	131.87	. V Q . . . .
9.500	44.7597	132.82	. V Q . . . .
9.583	45.6810	133.78	. V Q . . . .
9.667	46.6090	134.75	. V Q . . . .
9.750	47.5438	135.72	. V Q. . . . .
9.833	48.4853	136.71	. V Q. . . . .
9.917	49.4336	137.69	. V Q. . . . .
10.000	50.3885	138.66	. V Q. . . . .
10.083	51.3502	139.63	. V Q. . . . .
10.167	52.3186	140.61	. V Q. . . . .
10.250	53.2938	141.61	. V Q. . . . .
10.333	54.2760	142.61	. V Q. . . . .
10.417	55.2651	143.62	. V Q. . . . .
10.500	56.2609	144.59	. V Q. . . . .
10.583	57.2630	145.51	. V Q. . . . .
10.667	58.2714	146.43	. V Q. . . . .
10.750	59.2863	147.36	. V Q. . . . .
10.833	60.3076	148.30	. V Q. . . . .
10.917	61.3356	149.25	. V Q. . . . .
11.000	62.3701	150.22	. V Q . . . .
11.083	63.4114	151.19	. V Q . . . .
11.167	64.4594	152.18	. V Q . . . .
11.250	65.5144	153.18	. V Q . . . .
11.333	66.5761	154.16	. V Q . . . .
11.417	67.6443	155.10	. V Q . . . .
11.500	68.7190	156.04	. V Q . . . .
11.583	69.8002	157.00	. V Q . . . .
11.667	70.8882	157.97	. V Q . . . .
11.750	71.9829	158.96	. V Q . . . .
11.833	73.0845	159.95	. V Q . . . .
11.917	74.1931	160.96	. V Q . . . .
12.000	75.3087	161.99	. V Q . . . .
12.083	76.4327	163.20	. V Q . . . .
12.167	77.5664	164.61	. V Q . . . .
12.250	78.7098	166.02	. V .Q . . . .
12.333	79.8630	167.45	. V .Q . . . .
12.417	81.0262	168.90	. V .Q . . . .
12.500	82.1995	170.36	. V .Q . . . .
12.583	83.3829	171.84	. V .Q . . . .
12.667	84.5767	173.33	. V .Q . . . .
12.750	85.7803	174.76	. V .Q . . . .
12.833	86.9936	176.18	. V .Q . . . .
12.917	88.2169	177.61	. V .Q . . . .
13.000	89.4504	179.11	. V .Q . . . .
13.083	90.6953	180.76	. V . Q . . . .
13.167	91.9517	182.43	. V . Q . . . .
13.250	93.2197	184.12	. V . Q . . . .
13.333	94.4995	185.83	. V . Q . . . .
13.417	95.7912	187.56	. V . Q . . . .
13.500	97.0951	189.31	. V . Q . . . .
13.583	98.4112	191.11	. V . Q . . . .

13.667	99.7420	193.23	. V . Q . . . .
13.750	101.0884	195.50	. V . Q . . . .
13.833	102.4505	197.78	. V . Q . . . .
13.917	103.8286	200.10	. V . Q . . . .
14.000	105.2243	202.65	. V . Q . . . .
14.083	106.6397	205.52	. V . Q . . . .
14.167	108.0765	208.62	. V . Q . . . .
14.250	109.5361	211.95	. V . Q . . . .
14.333	111.0196	215.40	. V . Q . . . .
14.417	112.5267	218.83	. V . Q . . . .
14.500	114.0571	222.21	. V . Q . . . .
14.583	115.6108	225.60	. V . Q . . . .
14.667	117.1879	228.99	. V . Q . . . .
14.750	118.7884	232.40	. V . Q . . . .
14.833	120.4135	235.97	. V . Q . . . .
14.917	122.0680	240.23	. V . Q . . . .
15.000	123.7502	244.25	. V. Q . . . .
15.083	125.4583	248.01	. V. Q . . . .
15.167	127.1923	251.78	. V. Q . . . .
15.250	128.9523	255.56	. V. Q . . . .
15.333	130.7384	259.34	. V. Q . . . .
15.417	132.5505	263.11	. V. Q . . . .
15.500	134.3880	266.81	. V. Q . . . .
15.583	136.2533	270.85	. V. Q . . . .
15.667	138.1496	275.34	. V Q . . . .
15.750	140.0738	279.40	. V Q . . . .
15.833	142.0252	283.35	. V Q . . . .
15.917	144.0053	287.50	. V Q. . . . .
16.000	146.0178	292.22	. V Q. . . . .
16.083	148.0792	299.32	. V Q. . . . .
16.167	150.1894	306.40	. V Q . . . .
16.250	152.3345	311.47	. .V Q . . . .
16.333	154.5148	316.58	. .V .Q . . . .
16.417	156.7351	322.38	. .V .Q . . . .
16.500	158.9943	328.04	. .V .Q . . . .
16.583	161.2905	333.41	. .V . Q . . . .
16.667	163.6194	338.16	. .V . Q . . . .
16.750	165.9805	342.83	. . V . Q . . . .
16.833	168.3846	349.07	. . V . Q . . . .
16.917	170.8380	356.24	. . V . Q . . . .
17.000	173.3361	362.72	. . V . Q . . . .
17.083	175.8794	369.29	. . V . Q . . . .
17.167	178.4564	374.17	. . V . Q . . . .
17.250	181.0667	379.01	. . V . Q . . . .
17.333	183.7099	383.80	. . V . Q . . . .
17.417	186.3908	389.27	. . V . Q . . . .
17.500	189.1058	394.21	. . V . Q . . . .
17.583	191.8570	399.47	. . V . Q . . . .
17.667	194.6632	407.46	. . V . Q . . . .
17.750	197.5040	412.48	. . V . Q . . . .
17.833	200.3711	416.30	. . V . Q . . . .
17.917	203.2670	420.49	. . V . Q . . . .
18.000	206.2097	427.28	. . V . Q . . . .
18.083	209.1937	433.27	. . V . Q . . . .
18.167	212.2164	438.89	. . V . Q. . . . .
18.250	215.2846	445.50	. . V . Q. . . . .
18.333	218.3899	450.90	. . V . Q . . . .
18.417	221.5308	456.06	. . V . Q . . . .

18.500	224.7001	460.18	. . V . Q .
18.583	227.8983	464.38	. . V . Q .
18.667	231.1220	468.08	. . V . .Q .
18.750	234.3757	472.44	. . V . .Q .
18.833	237.6802	479.82	. . V . .Q .
18.917	241.0590	490.61	. . V . . Q .
19.000	244.4304	489.52	. . V . . Q .
19.083	247.7939	488.38	. . V . . Q .
19.167	251.1821	491.96	. . V . . Q .
19.250	254.5996	496.22	. . V . . Q .
19.333	258.0490	500.86	. . V . . Q .
19.417	261.5428	507.30	. . V. . Q .
19.500	265.0623	511.03	. . V. . Q .
19.583	268.6105	515.20	. . V. . Q .
19.667	272.1611	515.55	. . V. . Q .
19.750	275.6678	509.18	. . V . Q .
19.833	279.1684	508.28	. . V . Q .
19.917	282.6739	509.00	. . V . Q .
20.000	286.1982	511.73	. . V . Q .
20.083	289.7631	517.61	. . .V . Q .
20.167	293.3438	519.92	. . .V . Q .
20.250	296.9036	516.88	. . .V . Q .
20.333	300.4736	518.36	. . .V . Q .
20.417	304.0909	525.23	. . . V . Q .
20.500	307.6699	519.66	. . . V . Q .
20.583	311.2001	512.60	. . . V . Q .
20.667	314.6689	503.66	. . . V . Q .
20.750	318.1399	503.99	. . . V . Q .
20.833	321.7150	519.11	. . . V . Q .
20.917	325.2794	517.56	. . . V . Q .
21.000	328.7985	510.96	. . . V . Q .
21.083	332.3150	510.60	. . . V . Q .
21.167	335.8196	508.87	. . . V . Q .
21.250	339.3315	509.92	. . . V . Q .
21.333	342.8622	512.67	. . . V . Q .
21.417	346.3824	511.12	. . . V . Q .
21.500	349.7888	494.62	. . . V . Q .
21.583	353.1436	487.12	. . . V . Q .
21.667	356.4803	484.49	. . . V . Q .
21.750	359.8078	483.15	. . . V . Q .
21.833	363.1072	479.07	. . . V .Q .
21.917	366.3987	477.93	. . . V .Q .
22.000	369.6931	478.35	. . . V .Q .
22.083	372.9785	477.03	. . . V .Q .
22.167	376.2591	476.34	. . . V .Q .
22.250	379.5249	474.20	. . . V .Q .
22.333	382.7075	462.12	. . . V Q .
22.417	385.8214	452.14	. . . V Q .
22.500	388.8942	446.16	. . . VQ. .
22.583	391.9436	442.78	. . . VQ. .
22.667	394.9771	440.46	. . . VQ. .
22.750	398.0168	441.37	. . . Q. .
22.833	401.0133	435.09	. . . Q. .
22.917	403.9415	425.17	. . . QV. .
23.000	406.8395	420.80	. . . QV. .
23.083	409.7168	417.78	. . . Q V. .
23.167	412.5573	412.44	. . . Q V .
23.250	415.3448	404.75	. . . Q V .

23.333	418.0788	396.97	. . . Q V .
23.417	420.7392	386.29	. . . Q V .
23.500	423.3610	380.69	. . . Q V .
23.583	425.9509	376.06	. . . Q .V .
23.667	428.5098	371.55	. . . Q .V .
23.750	431.0329	366.35	. . . Q .V .
23.833	433.5226	361.52	. . . Q .V .
23.917	435.9835	357.32	. . . Q .V .
24.000	438.4100	352.33	. . . Q . V .
24.083	440.7936	346.09	. . . Q . V .
24.167	443.1298	339.22	. . . Q . V .
24.250	445.4240	333.11	. . . Q . V .
24.333	447.6794	327.49	. . .Q . V .
24.417	449.9000	322.43	. . .Q . V .
24.500	452.0903	318.04	. . .Q . V .
24.583	454.2473	313.19	. . Q . V .
24.667	456.3615	306.99	. . Q . V .
24.750	458.4402	301.83	. . Q . V .
24.833	460.4857	297.00	. . Q. . V .
24.917	462.4987	292.29	. . Q. . V .
25.000	464.4674	285.85	. . Q. . V .
25.083	466.3984	280.38	. . Q . . V .
25.167	468.2971	275.68	. . Q . . V .
25.250	470.1642	271.10	. . Q . . V .
25.333	471.9988	266.39	. . Q . . V .
25.417	473.8012	261.71	. . Q . . V .
25.500	475.5699	256.81	. . Q . . V .
25.583	477.3091	252.53	. . Q . . V .
25.667	479.0191	248.30	. . Q . . V .
25.750	480.6997	244.02	. . Q . . V .
25.833	482.3509	239.76	. . Q . . V .
25.917	483.9724	235.44	. . Q . . V .
26.000	485.5625	230.88	. . Q . . V .
26.083	487.1250	226.87	. . Q . . V .
26.167	488.6611	223.05	. . Q . . V .
26.250	490.1704	219.14	. . Q . . V .
26.333	491.6519	215.11	. . Q . . V .
26.417	493.1053	211.03	. . Q . . V .
26.500	494.5256	206.23	. . Q . . V .
26.583	495.9111	201.18	. . Q . . V .
26.667	497.2725	197.67	. . Q . . V .
26.750	498.6105	194.29	. . Q . . V .
26.833	499.9239	190.70	. . Q . . V .
26.917	501.2086	186.55	. . Q . . V .
27.000	502.4678	182.83	. . Q . . V .
27.083	503.7038	179.47	. .Q . . V .
27.167	504.9166	176.10	. .Q . . V .
27.250	506.1057	172.65	. .Q . . V .
27.333	507.2675	168.69	. .Q . . V .
27.417	508.3972	164.05	. Q . . V .
27.500	509.5029	160.54	. Q . . V .
27.583	510.5852	157.16	. Q . . V .
27.667	511.6444	153.79	. Q . . V .
27.750	512.6818	150.62	. Q . . V .
27.833	513.6976	147.50	. Q. . V .
27.917	514.6922	144.42	. Q. . V .
28.000	515.6663	141.43	. Q. . V .
28.083	516.6194	138.40	. Q. . V .

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28.167   517.5513   135.31  .       Q.       .        .      V  .
28.250   518.4629   132.36  .       Q .      .        .      V  .
28.333   519.3544   129.44  .       Q .      .        .      V  .
28.417   520.2239   126.26  .       Q .      .        .       V .
28.500   521.0734   123.34  .       Q .      .        .       V .
28.583   521.9044   120.67  .       Q .      .        .       V .
28.667   522.7183   118.17  .      Q  .      .        .       V .
28.750   523.5067   114.48  .      Q  .      .        .       V .
28.833   524.2703   110.88  .      Q  .      .        .       V .
28.917   525.0133   107.88  .      Q  .      .        .       V .
29.000   525.7380   105.23  .      Q  .      .        .       V .
29.083   526.4425   102.30  .     Q   .      .        .       V .
29.167   527.1268    99.36  .     Q   .      .        .       V .
29.250   527.7908    96.41  .     Q   .      .        .       V .
29.333   528.4331    93.25  .     Q   .      .        .       V .
29.417   529.0529    90.00  .     Q   .      .        .       V .
29.500   529.6549    87.41  .    Q    .      .        .       V .
29.583   530.2405    85.02  .    Q    .      .        .       V .
29.667   530.8094    82.61  .    Q    .      .        .       V .
29.750   531.3632    80.41  .    Q    .      .        .       V .
29.833   531.9030    78.38  .    Q    .      .        .       V .
29.917   532.4279    76.23  .    Q    .      .        .       V .
30.000   532.9375    73.99  .   Q     .      .        .       V .
30.083   533.4309    71.64  .   Q     .      .        .       V .
30.167   533.9068    69.10  .   Q     .      .        .        V.
30.250   534.3643    66.43  .   Q     .      .        .        V.
30.333   534.8063    64.18  .   Q     .      .        .        V.
30.417   535.2341    62.13  .   Q     .      .        .        V.
30.500   535.6486    60.18  .   Q     .      .        .        V.
30.583   536.0500    58.29  .  Q      .      .        .        V.
30.667   536.4382    56.37  .  Q      .      .        .        V.
30.750   536.8130    54.41  .  Q      .      .        .        V.
30.833   537.1750    52.57  .  Q      .      .        .        V.
30.917   537.5267    51.06  .  Q      .      .        .        V.
31.000   537.8679    49.54  .  Q      .      .        .        V.
31.083   538.1981    47.94  .  Q      .      .        .        V.
31.167   538.5175    46.38  .  Q      .      .        .        V.
31.250   538.8260    44.80  . Q       .      .        .        V.
31.333   539.1248    43.38  . Q       .      .        .        V.
31.417   539.4148    42.12  . Q       .      .        .        V.
31.500   539.6971    40.99  . Q       .      .        .        V.
31.583   539.9714    39.82  . Q       .      .        .        V.
31.667   540.2378    38.68  . Q       .      .        .        V.
31.750   540.4963    37.54  . Q       .      .        .        V.
31.833   540.7470    36.40  . Q       .      .        .        V.
31.917   540.9897    35.23  . Q       .      .        .        V.
32.000   541.2243    34.07  . Q       .      .        .        V.
32.083   541.4513    32.96  . Q       .      .        .        V.
32.167   541.6710    31.90  . Q       .      .        .        V.
32.250   541.8834    30.85  . Q       .      .        .        V.
32.333   542.0889    29.83  .Q        .      .        .        V.
32.417   542.2877    28.87  .Q        .      .        .        V.
32.500   542.4796    27.86  .Q        .      .        .        V.
32.583   542.6646    26.86  .Q        .      .        .        V.
32.667   542.8434    25.97  .Q        .      .        .        V.
32.750   543.0164    25.10  .Q        .      .        .        V.
32.833   543.1833    24.25  .Q        .      .        .        V.
32.917   543.3445    23.40  .Q        .      .        .        V.
```



```
33.000   543.5005    22.65  .Q        .      .        .        V.
33.083   543.6516    21.95  .Q        .      .        .        V.
33.167   543.7979    21.24  .Q        .      .        .        V.
33.250   543.9395    20.55  .Q        .      .        .        V.
33.333   544.0762    19.86  .Q        .      .        .        V.
33.417   544.2084    19.19  .Q        .      .        .        V.
33.500   544.3363    18.56  .Q        .      .        .        V.
33.583   544.4598    17.94  .Q        .      .        .        V.
33.667   544.5791    17.31  .Q        .      .        .        V.
33.750   544.6941    16.70  .Q        .      .        .        V.
33.833   544.8054    16.16  .Q        .      .        .        V.
33.917   544.9131    15.64  .Q        .      .        .        V.
34.000   545.0174    15.14  .Q        .      .        .        V.
34.083   545.1183    14.65  Q         .      .        .        V.
34.167   545.2159    14.17  Q         .      .        .        V.
34.250   545.3102    13.70  Q         .      .        .        V.
34.333   545.4010    13.18  Q         .      .        .        V.
34.417   545.4879    12.61  Q         .      .        .        V.
34.500   545.5679    11.63  Q         .      .        .        V.
34.583   545.6446    11.13  Q         .      .        .        V.
34.667   545.7187    10.76  Q         .      .        .        V.
34.750   545.7904    10.41  Q         .      .        .        V.
34.833   545.8593    10.00  Q         .      .        .        V.
34.917   545.9252     9.57  Q         .      .        .        V.
35.000   545.9881     9.14  Q         .      .        .        V.
35.083   546.0481     8.71  Q         .      .        .        V.
35.167   546.1051     8.28  Q         .      .        .        V.
35.250   546.1591     7.84  Q         .      .        .        V.
35.333   546.2103     7.43  Q         .      .        .        V.
35.417   546.2590     7.08  Q         .      .        .        V.
35.500   546.3058     6.79  Q         .      .        .        V.
35.583   546.3506     6.51  Q         .      .        .        V.
35.667   546.3936     6.24  Q         .      .        .        V.
35.750   546.4347     5.97  Q         .      .        .        V.
35.833   546.4739     5.70  Q         .      .        .        V.
35.917   546.5114     5.44  Q         .      .        .        V.
36.000   546.5471     5.18  Q         .      .        .        V.
```

TIME DURATION(minutes) OF PERCENTILES OF ESTIMATED PEAK FLOW RATE:
(Note: 100% of Peak Flow Rate estimate assumed to have
an instantaneous time duration)

Percentile of Estimated Peak Flow Rate	Duration (minutes)
0%	2165.0
10%	1560.0
20%	1295.0
30%	955.0
40%	735.0
50%	600.0
60%	495.0
70%	400.0
80%	310.0
90%	210.0

END OF FLOODSCx ROUTING ANALYSIS

```
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                          Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RMV PA-3 ROMP AMENDMENT 2022 - NODE 126                                *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL              *
* 2-YR EV NOV 2022 ROKAMOTO                                              *
 ************************************************************************

  FILE NAME: EV02126S.DAT
  TIME/DATE OF STUDY: 04:18 11/08/2022


                        ** INPUT SUMMARY **


*****************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    126.00 IS CODE =   1
-----------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
=============================================================================
  WATERSHED AREA =   50438.699 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    5.554 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.594; LOW LOSS FRACTION = 0.930
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.16; 30-MINUTE =  0.30;  1-HOUR =  0.41
    3-HOUR =  0.77;    6-HOUR =  1.14; 24-HOUR =  2.02
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.341; 30-MINUTE = 0.392;  1-HOUR = 0.432
    3-HOUR = 0.782;    6-HOUR = 0.902; 24-HOUR = 0.943
=============================================================================
```



```
 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV02126S.DAT   ]
Page:   1 of    |
 +-------------------+---------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                 | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+---------------------------------+----------------------+-
-----------+-------------+-----------+
 | 10100.00     126.00| Subarea (UH) Added to Stream #1|       0.0       525.2|
20.583 |             |           |
 +-------------------+---------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
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   END OF FLOODSCx ROUTING ANALYSIS
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                        Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RMV PA-3 ROMP AMENDMENT 2022 - NODE 127                                *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL              *
* 2-YR EV NOV 2022 ROKAMOTO                                              *
 **************************************************************************

  FILE NAME: EV02127S.DAT
  TIME/DATE OF STUDY: 04:18 11/08/2022


                       ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    127.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =   53506.199 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    5.777 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.573; LOW LOSS FRACTION = 0.922
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.16; 30-MINUTE =  0.30;  1-HOUR =  0.41
    3-HOUR =  0.76;    6-HOUR =  1.12; 24-HOUR =  1.98
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.331; 30-MINUTE = 0.383;  1-HOUR = 0.424
    3-HOUR = 0.773;    6-HOUR = 0.898; 24-HOUR = 0.941
==========================================================================
```



```
 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV02127S.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 10100.00     127.00| Subarea (UH) Added to Stream #1|       0.0       598.4|
20.750 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
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   END OF FLOODSCx ROUTING ANALYSIS
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                          Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RMV PA-3 ROMP AMENDMENT 2022 - NODE 137                                *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL              *
* 2-YR EV NOV 2022 ROKAMOTO                                              *
 ************************************************************************

  FILE NAME: EV02137S.DAT
  TIME/DATE OF STUDY: 04:12 11/08/2022


                        ** INPUT SUMMARY **


*****************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    137.00 IS CODE =   1
-----------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
=============================================================================
  WATERSHED AREA =   67798.297 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    6.288 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.568; LOW LOSS FRACTION = 0.904
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.15; 30-MINUTE =  0.29;  1-HOUR =  0.40
    3-HOUR =  0.73;    6-HOUR =  1.07; 24-HOUR =  1.87
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.291; 30-MINUTE = 0.350;  1-HOUR = 0.394
    3-HOUR = 0.738;    6-HOUR = 0.886; 24-HOUR = 0.933
=============================================================================
```



```
 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV02137S.DAT   ]
Page:   1 of    |
 +-------------------+---------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                 | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+---------------------------------+----------------------+-
-----------+-------------+-----------+
 | 10100.00     137.00| Subarea (UH) Added to Stream #1|       0.0       834.5|
21.167 |             |           |
 +-------------------+---------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
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   END OF FLOODSCx ROUTING ANALYSIS
```

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                        Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RMV PA-3 ROMP AMENDMENT 2022 - NODE 138                                *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL              *
* 2-YR EV NOV 2022 ROKAMOTO                                              *
 **************************************************************************

  FILE NAME: EV02138S.DAT
  TIME/DATE OF STUDY: 04:11 11/08/2022


                       ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    138.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =   69102.000 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    6.463 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.567; LOW LOSS FRACTION = 0.903
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.15; 30-MINUTE =  0.29;  1-HOUR =  0.40
    3-HOUR =  0.73;    6-HOUR =  1.06; 24-HOUR =  1.86
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.287; 30-MINUTE = 0.348;  1-HOUR = 0.392
    3-HOUR = 0.734;    6-HOUR = 0.885; 24-HOUR = 0.932
==========================================================================
```



```
 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV02138S.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+---------------------+-
----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+---------------------+-
----------+-------------+-----------+
 | 10100.00     138.00| Subarea (UH) Added to Stream #1|       0.0       842.3|
21.333 |             |           |
 +-------------------+--------------------------------+---------------------+-
----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
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   END OF FLOODSCx ROUTING ANALYSIS
```

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                        Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RMV PA-3 ROMP AMENDMENT 2022 - NODE 139                                *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL              *
* 2-YR EV NOV 2022 ROKAMOTO                                              *
 **************************************************************************

  FILE NAME: EV02139S.DAT
  TIME/DATE OF STUDY: 04:10 11/08/2022


                       ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    139.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =   69529.797 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    6.549 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.566; LOW LOSS FRACTION = 0.901
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.15; 30-MINUTE =  0.29;  1-HOUR =  0.40
    3-HOUR =  0.73;    6-HOUR =  1.06; 24-HOUR =  1.86
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.286; 30-MINUTE = 0.348;  1-HOUR = 0.391
    3-HOUR = 0.733;    6-HOUR = 0.885; 24-HOUR = 0.932
==========================================================================
```



```
 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV02139S.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 10100.00     139.00| Subarea (UH) Added to Stream #1|       0.0       857.8|
21.333 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
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   END OF FLOODSCx ROUTING ANALYSIS
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______________________________________________________________________________
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                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RMV PA-3 ROMP AMENDMENT 2022 - NODE 133C                               *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL              *
* 25-YR EV NOV 2022 ROKAMOTO                                             *
 ************************************************************************

  FILE NAME: EV2533CS.DAT
  TIME/DATE OF STUDY: 18:06 11/07/2022


                        ** INPUT SUMMARY **


******************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    133.00 IS CODE =   1
------------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==============================================================================
  WATERSHED AREA =   60992.301 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.477 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.286; LOW LOSS FRACTION = 0.448
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.40; 30-MINUTE =  0.77;  1-HOUR =  1.05
    3-HOUR =  1.94;    6-HOUR =  2.85; 24-HOUR =  4.99
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.308; 30-MINUTE = 0.363;  1-HOUR = 0.408
    3-HOUR = 0.754;    6-HOUR = 0.891; 24-HOUR = 0.936
==============================================================================
```



```
 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV2533CS.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 10100.00     133.00| Subarea (UH) Added to Stream #1|       0.0     16038.7|
18.083 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
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   END OF FLOODSCx ROUTING ANALYSIS
```

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                          Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RMV PA-3 ROMP AMENDMENT 2022 - NODE 133T                              *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL             *
* 25-YR EV OCT 2022 ROKAMOTO                                            *
 ************************************************************************

  FILE NAME: EV2533TS.DAT
  TIME/DATE OF STUDY: 10:38 10/25/2022


**************************************************************************
  FLOW PROCESS FROM NODE  13010.00 TO NODE    133.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS)<<<<<
==========================================================================

      (UNIT-HYDROGRAPH ADDED TO STREAM #1)

         WATERSHED AREA =    6638.200 ACRES
         BASEFLOW =   0.000 CFS/SQUARE-MILE
         *USER ENTERED "LAG" TIME =    1.206 HOURS
         VALLEY(DEVELOPED) S-GRAPH SELECTED
         MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.239
         LOW LOSS FRACTION = 0.526
         *HYDROGRAPH MODEL #1 SPECIFIED*

         SPECIFIED PEAK  5-MINUTES RAINFALL(INCH)=  0.34
         SPECIFIED PEAK 30-MINUTES RAINFALL(INCH)=  0.72
         SPECIFIED PEAK  1-HOUR RAINFALL(INCH) =  0.95
         SPECIFIED PEAK  3-HOUR RAINFALL(INCH) =  1.59
         SPECIFIED PEAK  6-HOUR RAINFALL(INCH) =  2.20
         SPECIFIED PEAK 24-HOUR RAINFALL(INCH) =  3.68

         *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
           5-MINUTE FACTOR = 0.744
          30-MINUTE FACTOR = 0.744
           1-HOUR FACTOR = 0.744
           3-HOUR FACTOR = 0.959
           6-HOUR FACTOR = 0.978
          24-HOUR FACTOR = 0.987

         UNIT HYDROGRAPH TIME UNIT =   5.000 MINUTES
         UNIT INTERVAL PERCENTAGE OF LAG-TIME =   6.910
```


UNIT HYDROGRAPH DETERMINATION

INTERVAL NUMBER	"S" GRAPH MEAN VALUES	UNIT HYDROGRAPH ORDINATES(CFS)
1	0.395	316.989
2	1.185	633.979
3	2.019	670.109
4	3.163	917.836
5	4.690	1226.103
6	7.181	1999.663
7	10.570	2720.600
8	14.287	2984.468
9	18.393	3296.606
10	22.722	3474.990
11	27.082	3500.271
12	32.026	3969.360
13	37.267	4207.138
14	43.209	4770.197
15	49.794	5286.578
16	55.095	4255.617
17	60.875	4640.229
18	66.431	4460.422
19	71.204	3832.200
20	75.442	3401.795
21	78.735	2644.140
22	81.874	2519.473
23	84.745	2305.094
24	87.116	1903.452
25	88.951	1473.384
26	90.515	1255.030
27	91.955	1156.486
28	93.290	1071.680
29	94.404	894.063
30	95.282	704.808
31	96.081	641.954
32	96.640	448.731
33	97.182	434.999
34	97.724	435.232
35	98.063	272.413
36	98.193	104.161
37	98.323	104.038
38	98.452	103.701
39	98.582	104.044
40	98.711	104.155
41	98.841	103.818
42	98.970	104.155
43	99.100	103.928
44	99.229	103.928
45	99.359	103.928
46	99.488	103.928
47	99.618	103.928
48	99.747	103.928

49	99.877	103.928
50	100.000	99.083

TOTAL SOIL-LOSS VOLUME(ACRE-FEET) = 964.8243
TOTAL STORM RUNOFF VOLUME(ACRE-FEET) = 1042.8773

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2 4 - H O U R S T O R M
R U N O F F H Y D R O G R A P H

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HYDROGRAPH IN FIVE-MINUTE UNIT INTERVALS(CFS)
(Note: Time indicated is at END of Each Unit Intervals)

TIME(HRS)	VOLUME(AF)	Q(CFS)	0.	725.0	1450.0	2175.0	2900.0
0.083	0.0049	0.72	Q	.	.	.	.
0.167	0.0197	2.15	Q	.	.	.	.
0.250	0.0450	3.66	Q	.	.	.	.
0.333	0.0845	5.75	Q	.	.	.	.
0.417	0.1433	8.53	Q	.	.	.	.
0.500	0.2333	13.07	Q	.	.	.	.
0.583	0.3658	19.24	Q	.	.	.	.
0.667	0.5451	26.04	Q	.	.	.	.
0.750	0.7762	33.56	Q	.	.	.	.
0.833	1.0621	41.50	Q	.	.	.	.
0.917	1.4032	49.53	Q	.	.	.	.
1.000	1.8071	58.65	Q	.	.	.	.
1.083	2.2777	68.33	Q	.	.	.	.
1.167	2.8239	79.31	VQ	.	.	.	.
1.250	3.4540	91.49	VQ	.	.	.	.
1.333	4.1523	101.39	VQ	.	.	.	.
1.417	4.9250	112.20	VQ	.	.	.	.
1.500	5.7696	122.63	VQ	.	.	.	.
1.583	6.6765	131.68	VQ	.	.	.	.
1.667	7.6393	139.80	VQ	.	.	.	.
1.750	8.6464	146.23	V Q	.	.	.	.
1.833	9.6960	152.41	V Q	.	.	.	.
1.917	10.7851	158.13	V Q	.	.	.	.
2.000	11.9074	162.96	V Q	.	.	.	.
2.083	13.0565	166.84	V Q	.	.	.	.
2.167	14.2290	170.25	V Q	.	.	.	.
2.250	15.4236	173.45	V Q	.	.	.	.
2.333	16.6389	176.47	V Q	.	.	.	.
2.417	17.8724	179.10	V Q	.	.	.	.
2.500	19.1212	181.32	V Q	.	.	.	.
2.583	20.3844	183.41	V Q	.	.	.	.
2.667	21.6590	185.08	V Q	.	.	.	.
2.750	22.9450	186.72	V Q	.	.	.	.
2.833	24.2423	188.37	V Q	.	.	.	.
2.917	25.5485	189.67	V Q	.	.	.	.
3.000	26.8612	190.59	.VQ	.	.	.	.
3.083	28.1802	191.52	.VQ	.	.	.	.
3.167	29.5057	192.46	.VQ	.	.	.	.
3.250	30.8377	193.41	.VQ	.	.	.	.
3.333	32.1762	194.36	.VQ	.	.	.	.
3.417	33.5214	195.32	.VQ	.	.	.	.
3.500	34.8733	196.29	.VQ	.	.	.	.
3.583	36.2319	197.27	.VQ	.	.	.	.
3.667	37.5972	198.25	.VQ	.	.	.	.
3.750	38.9695	199.25	.VQ	.	.	.	.
3.833	40.3486	200.25	.VQ	.	.	.	.
3.917	41.7347	201.26	.VQ	.	.	.	.

4.000	43.1278	202.28	.VQ	.	.	.	.
4.083	44.5280	203.31	.VQ	.	.	.	.
4.167	45.9352	204.33	.VQ	.	.	.	.
4.250	47.3480	205.14	.VQ	.	.	.	.
4.333	48.7665	205.96	.VQ	.	.	.	.
4.417	50.1907	206.79	.VQ	.	.	.	.
4.500	51.6207	207.63	.VQ	.	.	.	.
4.583	53.0564	208.48	. Q	.	.	.	.
4.667	54.4981	209.33	. Q	.	.	.	.
4.750	55.9457	210.20	. Q	.	.	.	.
4.833	57.3994	211.07	. Q	.	.	.	.
4.917	58.8591	211.95	. Q	.	.	.	.
5.000	60.3250	212.85	. Q	.	.	.	.
5.083	61.7971	213.75	. Q	.	.	.	.
5.167	63.2755	214.66	. Q	.	.	.	.
5.250	64.7602	215.59	. Q	.	.	.	.
5.333	66.2514	216.52	. Q	.	.	.	.
5.417	67.7491	217.46	. Q	.	.	.	.
5.500	69.2534	218.42	. VQ	.	.	.	.
5.583	70.7643	219.39	. VQ	.	.	.	.
5.667	72.2820	220.36	. VQ	.	.	.	.
5.750	73.8064	221.35	. VQ	.	.	.	.
5.833	75.3378	222.35	. VQ	.	.	.	.
5.917	76.8762	223.37	. VQ	.	.	.	.
6.000	78.4216	224.39	. Q	.	.	.	.
6.083	79.9741	225.43	. Q	.	.	.	.
6.167	81.5339	226.48	. Q	.	.	.	.
6.250	83.1010	227.54	. Q	.	.	.	.
6.333	84.6755	228.62	. Q	.	.	.	.
6.417	86.2575	229.71	. Q	.	.	.	.
6.500	87.8471	230.81	. Q	.	.	.	.
6.583	89.4444	231.93	. Q	.	.	.	.
6.667	91.0495	233.06	. Q	.	.	.	.
6.750	92.6625	234.21	. Q	.	.	.	.
6.833	94.2835	235.37	. Q	.	.	.	.
6.917	95.9125	236.54	. Q	.	.	.	.
7.000	97.5498	237.73	. Q	.	.	.	.
7.083	99.1954	238.94	. Q	.	.	.	.
7.167	100.8494	240.16	. Q	.	.	.	.
7.250	102.5120	241.40	. Q	.	.	.	.
7.333	104.1832	242.66	. Q	.	.	.	.
7.417	105.8632	243.93	. QV	.	.	.	.
7.500	107.5520	245.22	. QV	.	.	.	.
7.583	109.2499	246.53	. QV	.	.	.	.
7.667	110.9569	247.86	. QV	.	.	.	.
7.750	112.6733	249.21	. QV	.	.	.	.
7.833	114.3990	250.57	. QV	.	.	.	.
7.917	116.1343	251.96	. QV	.	.	.	.
8.000	117.8792	253.37	. QV	.	.	.	.
8.083	119.6340	254.80	. QV	.	.	.	.
8.167	121.3987	256.24	. QV	.	.	.	.
8.250	123.1736	257.71	. QV	.	.	.	.
8.333	124.9588	259.20	. QV	.	.	.	.
8.417	126.7544	260.72	. QV	.	.	.	.
8.500	128.5605	262.26	. QV	.	.	.	.
8.583	130.3775	263.82	. Q V	.	.	.	.
8.667	132.2054	265.41	. Q V	.	.	.	.
8.750	134.0444	267.02	. Q V	.	.	.	.

8.833	135.8946	268.66	. Q V	.	.	.	.
8.917	137.7564	270.32	. Q V	.	.	.	.
9.000	139.6297	272.01	. Q V	.	.	.	.
9.083	141.5150	273.74	. Q V	.	.	.	.
9.167	143.4123	275.48	. Q V	.	.	.	.
9.250	145.3218	277.26	. Q V	.	.	.	.
9.333	147.2438	279.07	. Q V	.	.	.	.
9.417	149.1784	280.91	. Q V	.	.	.	.
9.500	151.1260	282.78	. Q V	.	.	.	.
9.583	153.0867	284.69	. Q V	.	.	.	.
9.667	155.0607	286.63	. Q V	.	.	.	.
9.750	157.0483	288.60	. Q V	.	.	.	.
9.833	159.0498	290.61	. Q V	.	.	.	.
9.917	161.0654	292.66	. Q V	.	.	.	.
10.000	163.0953	294.75	. Q V	.	.	.	.
10.083	165.1399	296.87	. Q V	.	.	.	.
10.167	167.1994	299.04	. Q V	.	.	.	.
10.250	169.2741	301.25	. Q V	.	.	.	.
10.333	171.3643	303.50	. Q V	.	.	.	.
10.417	173.4704	305.80	. Q V	.	.	.	.
10.500	175.5925	308.14	. Q V	.	.	.	.
10.583	177.7311	310.53	. Q V	.	.	.	.
10.667	179.8865	312.97	. Q V	.	.	.	.
10.750	182.0591	315.46	. Q V	.	.	.	.
10.833	184.2492	318.00	. Q V	.	.	.	.
10.917	186.4572	320.60	. Q V	.	.	.	.
11.000	188.6834	323.25	. Q V	.	.	.	.
11.083	190.9284	325.97	. Q V	.	.	.	.
11.167	193.1924	328.74	. Q V	.	.	.	.
11.250	195.4760	331.58	. Q V	.	.	.	.
11.333	197.7795	334.47	. Q V	.	.	.	.
11.417	200.1035	337.45	. Q V	.	.	.	.
11.500	202.4484	340.48	. Q V	.	.	.	.
11.583	204.8148	343.60	. Q V	.	.	.	.
11.667	207.2031	346.78	. Q V	.	.	.	.
11.750	209.6140	350.06	. Q V	.	.	.	.
11.833	212.0479	353.40	. Q V	.	.	.	.
11.917	214.5055	356.84	. Q V	.	.	.	.
12.000	216.9874	360.37	. Q V	.	.	.	.
12.083	219.4979	364.53	. Q V	.	.	.	.
12.167	222.0414	369.33	. Q V	.	.	.	.
12.250	224.6192	374.30	. Q V	.	.	.	.
12.333	227.2349	379.79	. Q V	.	.	.	.
12.417	229.8928	385.93	. Q V	.	.	.	.
12.500	232.6030	393.51	. Q V	.	.	.	.
12.583	235.3747	402.46	. Q V.	.	.	.	.
12.667	238.2121	411.99	. Q V.	.	.	.	.
12.750	241.1199	422.21	. Q V.	.	.	.	.
12.833	244.1011	432.88	. Q V.	.	.	.	.
12.917	247.1573	443.76	. Q V.	.	.	.	.
13.000	250.2951	455.61	. Q V.	.	.	.	.
13.083	253.5186	468.05	. Q V.	.	.	.	.
13.167	256.8358	481.64	. Q V.	.	.	.	.
13.250	260.2540	496.32	. Q V.	.	.	.	.
13.333	263.7626	509.45	. Q V	.	.	.	.
13.417	267.3677	523.47	. Q V	.	.	.	.
13.500	271.0689	537.40	. Q V	.	.	.	.
13.583	274.8604	550.53	. Q V	.	.	.	.

13.667	278.7389	563.16	. Q V . . .
13.750	282.6975	574.79	. Q V . . .
13.833	286.7367	586.48	. Q V . . .
13.917	290.8560	598.12	. Q .V . . .
14.000	295.0529	609.39	. Q .V . . .
14.083	299.3336	621.56	. Q .V . . .
14.167	303.7068	634.99	. Q .V . . .
14.250	308.1750	648.78	. Q .V . . .
14.333	312.7467	663.81	. Q.V . . .
14.417	317.4314	680.22	. Q. V . . .
14.500	322.2514	699.86	. Q. V . . .
14.583	327.2292	722.78	. Q. V . . .
14.667	332.3731	746.88	. Q V . . .
14.750	337.6949	772.73	. Q V . . .
14.833	343.2032	799.80	. .Q V . . .
14.917	348.9007	827.28	. .Q V . . .
15.000	354.8026	856.96	. .Q V . . .
15.083	360.9204	888.30	. . QV . . .
15.167	367.2746	922.62	. . Q V . . .
15.250	373.8865	960.05	. . QV . . .
15.333	380.7354	994.47	. . QV . . .
15.417	387.8203	1028.72	. . Q . . .
15.500	395.1250	1060.64	. . QV . . .
15.583	402.6424	1091.53	. . Q . . .
15.667	410.3613	1120.78	. . Q . . .
15.750	418.2668	1147.88	. . QV . . .
15.833	426.3405	1172.31	. . Q . . .
15.917	434.5974	1198.90	. . Q . . .
16.000	443.1238	1238.03	. . VQ . . .
16.083	452.3417	1338.44	. . VQ . . .
16.167	462.2409	1437.36	. . V Q. . .
16.250	472.5172	1492.12	. . V Q . .
16.333	483.5163	1597.07	. . V . Q . .
16.417	495.4706	1735.76	. . V. Q . .
16.500	508.9476	1956.86	. . V. Q . .
16.583	523.7136	2144.02	. . V Q. .
16.667	539.1368	2239.44	. . V Q .
16.750	555.1495	2325.05	. . .V . Q .
16.833	571.5921	2387.46	. . .V . Q .
16.917	588.3792	2437.48	. . . V . Q .
17.000	606.0828	2570.57	. . . V . Q .
17.083	624.4658	2669.22	. . . V . Q .
17.167	643.7252	2796.45	. . . V . Q .
17.250	663.4760	2867.82	. . . V . Q.
17.333	681.7633	2655.32	. . . V . Q .
17.417	700.2509	2684.39	. . . V . Q .
17.500	718.1039	2592.27	. . . V . Q .
17.583	734.6346	2400.26	. . . V . Q .
17.667	749.9801	2228.16	. . . V Q .
17.750	763.8768	2017.81	. . . Q V. .
17.833	777.1641	1929.32	. . . Q V. .
17.917	789.6849	1818.02	. . . Q V .
18.000	801.1758	1668.47	. . . Q V .
18.083	811.6170	1516.07	. . Q .V .
18.167	821.3438	1412.33	. . Q. .V .
18.250	830.5394	1335.20	. . Q . .V .
18.333	839.2350	1262.60	. . Q . . V .
18.417	847.2843	1168.76	. . Q . . V .

18.500	854.6859	1074.71	. . Q . . V .
18.583	861.6268	1007.82	. . Q . . V .
18.667	867.9954	924.73	. . Q . . V .
18.750	874.0450	878.40	. . Q . . V .
18.833	879.7704	831.32	. .Q . . V .
18.917	884.9749	755.69	. Q . . V .
19.000	889.6937	685.18	. Q. . . V .
19.083	894.1957	653.68	. Q. . . V .
19.167	898.5086	626.23	. Q . . . V .
19.250	902.6307	598.53	. Q . . . V .
19.333	906.5751	572.72	. Q . . . V .
19.417	910.3496	548.06	. Q . . . V .
19.500	913.9686	525.48	. Q . . . V .
19.583	917.4519	505.77	. Q . . . V .
19.667	920.8145	488.24	. Q . . . V .
19.750	924.0688	472.53	. Q . . . V .
19.833	927.2194	457.47	. Q . . . V .
19.917	930.2734	443.45	. Q . . . V .
20.000	933.2395	430.68	. Q . . . V .
20.083	936.1125	417.16	. Q . . . V .
20.167	938.8766	401.34	. Q . . . V .
20.250	941.4275	370.39	. Q . . . V .
20.333	943.9066	359.96	. Q . . . V .
20.417	946.3284	351.65	. Q . . . V .
20.500	948.6990	344.21	. Q . . . V .
20.583	951.0154	336.35	. Q . . . V .
20.667	953.2834	329.31	. Q . . . V .
20.750	955.5052	322.61	. Q . . . V .
20.833	957.6827	316.18	. Q . . . V .
20.917	959.8196	310.28	. Q . . . V .
21.000	961.9194	304.89	. Q . . . V .
21.083	963.9835	299.70	. Q . . . V .
21.167	966.0132	294.72	. Q . . . V .
21.250	968.0126	290.31	. Q . . . V .
21.333	969.9828	286.08	. Q . . . V .
21.417	971.9250	282.00	. Q . . . V .
21.500	973.8401	278.07	. Q . . . V .
21.583	975.7291	274.28	. Q . . . V .
21.667	977.5928	270.61	. Q . . . V .
21.750	979.4321	267.06	. Q . . . V .
21.833	981.2477	263.63	. Q . . . V .
21.917	983.0404	260.30	. Q . . . V .
22.000	984.8109	257.08	. Q . . . V .
22.083	986.5599	253.95	. Q . . . V .
22.167	988.2880	250.92	. Q . . . V .
22.250	989.9971	248.15	. Q . . . V .
22.333	991.6876	245.46	. Q . . . V .
22.417	993.3600	242.84	. Q . . . V .
22.500	995.0150	240.30	. Q . . . V .
22.583	996.6530	237.83	. Q . . . V .
22.667	998.2744	235.42	. Q . . . V .
22.750	999.8796	233.08	. Q . . . V .
22.833	1001.4691	230.80	. Q . . . V .
22.917	1003.0434	228.58	. Q . . . V .
23.000	1004.6027	226.42	. Q . . . V .
23.083	1006.1475	224.31	. Q . . . V .
23.167	1007.6782	222.25	. Q . . . V .
23.250	1009.1949	220.24	. Q . . . V .

23.333	1010.6982	218.27	. Q	.	.	.	V .
23.417	1012.1883	216.36	. Q	.	.	.	V .
23.500	1013.6655	214.49	. Q	.	.	.	V .
23.583	1015.1300	212.65	. Q	.	.	.	V .
23.667	1016.5823	210.87	. Q	.	.	.	V .
23.750	1018.0225	209.12	. Q	.	.	.	V.
23.833	1019.4509	207.40	. Q	.	.	.	V.
23.917	1020.8677	205.73	. Q	.	.	.	V.
24.000	1022.2733	204.09	. Q	.	.	.	V.
24.083	1023.6629	201.77	. Q	.	.	.	V.
24.167	1025.0319	198.77	. Q	.	.	.	V.
24.250	1026.3799	195.74	. Q	.	.	.	V.
24.333	1027.7035	192.18	. Q	.	.	.	V.
24.417	1028.9982	187.98	. Q	.	.	.	V.
24.500	1030.2522	182.08	. Q	.	.	.	V.
24.583	1031.4548	174.61	. Q	.	.	.	V.
24.667	1032.6023	166.62	. Q	.	.	.	V.
24.750	1033.6903	157.99	. Q	.	.	.	V.
24.833	1034.7167	149.03	. Q	.	.	.	V.
24.917	1035.6814	140.08	.Q	.	.	.	V.
25.000	1036.5778	130.15	.Q	.	.	.	V.
25.083	1037.4025	119.76	.Q	.	.	.	V.
25.167	1038.1475	108.17	.Q	.	.	.	V.
25.250	1038.8053	95.51	.Q	.	.	.	V.
25.333	1039.3926	85.27	.Q	.	.	.	V.
25.417	1039.9038	74.22	.Q	.	.	.	V.
25.500	1040.3423	63.67	Q	.	.	.	V.
25.583	1040.7183	54.60	Q	.	.	.	V.
25.667	1041.0389	46.56	Q	.	.	.	V.
25.750	1041.3164	40.28	Q	.	.	.	V.
25.833	1041.5529	34.33	Q	.	.	.	V.
25.917	1041.7520	28.90	Q	.	.	.	V.
26.000	1041.9202	24.42	Q	.	.	.	V.
26.083	1042.0643	20.93	Q	.	.	.	V.
26.167	1042.1880	17.96	Q	.	.	.	V.
26.250	1042.2928	15.23	Q	.	.	.	V.
26.333	1042.3804	12.71	Q	.	.	.	V.
26.417	1042.4535	10.61	Q	.	.	.	V.
26.500	1042.5151	8.95	Q	.	.	.	V.
26.583	1042.5664	7.44	Q	.	.	.	V.
26.667	1042.6104	6.38	Q	.	.	.	V.
26.750	1042.6472	5.36	Q	.	.	.	V.
26.833	1042.6771	4.34	Q	.	.	.	V.
26.917	1042.7026	3.70	Q	.	.	.	V.
27.000	1042.7263	3.44	Q	.	.	.	V.
27.083	1042.7482	3.18	Q	.	.	.	V.
27.167	1042.7683	2.92	Q	.	.	.	V.
27.250	1042.7867	2.67	Q	.	.	.	V.
27.333	1042.8033	2.42	Q	.	.	.	V.
27.417	1042.8182	2.17	Q	.	.	.	V.
27.500	1042.8314	1.92	Q	.	.	.	V.
27.583	1042.8429	1.67	Q	.	.	.	V.
27.667	1042.8527	1.43	Q	.	.	.	V.
27.750	1042.8608	1.18	Q	.	.	.	V.
27.833	1042.8673	0.94	Q	.	.	.	V.
27.917	1042.8721	0.70	Q	.	.	.	V.
28.000	1042.8752	0.46	Q	.	.	.	V.
28.083	1042.8768	0.22	Q	.	.	.	V.

TIME DURATION(minutes) OF PERCENTILES OF ESTIMATED PEAK FLOW RATE:
(Note: 100% of Peak Flow Rate estimate assumed to have
an instantaneous time duration)

Percentile of Estimated Peak Flow Rate	Duration (minutes)
0%	1685.0
10%	695.0
20%	335.0
30%	225.0
40%	165.0
50%	120.0
60%	95.0
70%	75.0
80%	55.0
90%	30.0

END OF FLOODSCx ROUTING ANALYSIS

```
****************************************************************************

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              USING COUNTY HYDROLOGY MANUAL OF ORANGE(1986)
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                           Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RMV PA-3 ROMP AMENDMENT 2022 - NODE 133U                                 *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL                 *
* 25-YR EV NOV 2022 ROKAMOTO                                               *
 **************************************************************************

  FILE NAME: EV2533US.DAT
  TIME/DATE OF STUDY: 18:07 11/07/2022


                          ** INPUT SUMMARY **


****************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    133.00 IS CODE =   1
----------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
============================================================================
  WATERSHED AREA =   54354.000 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.477 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.292; LOW LOSS FRACTION = 0.439
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.41; 30-MINUTE =  0.77;  1-HOUR =  1.07
    3-HOUR =  1.98;    6-HOUR =  2.93; 24-HOUR =  5.15
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.328; 30-MINUTE = 0.381;  1-HOUR = 0.422
    3-HOUR = 0.771;    6-HOUR = 0.897; 24-HOUR = 0.940
============================================================================
```



```
 +--------------------------------------------------------------------------
------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV2533US.DAT   ]
Page:   1 of    |
 +--------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|            |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +--------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 10100.00     133.00| Subarea (UH) Added to Stream #1|       0.0     15152.4|
18.083 |             |           |
 +--------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +--------------------------------------------------------------------------
------------------------------------+


   END OF FLOODSCx ROUTING ANALYSIS
```

```
**************************************************************************

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                          Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RMV PA-3 ROMP AMENDMENT 2022 - NODE 134C                              *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL             *
* 25-YR EV OCT 2022 ROKAMOTO                                            *
 ************************************************************************

  FILE NAME: EV2534CS.DAT
  TIME/DATE OF STUDY: 10:40 10/25/2022


**************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    134.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS)<<<<<
==========================================================================

      (UNIT-HYDROGRAPH ADDED TO STREAM #1)

         WATERSHED AREA =   66607.102 ACRES
         BASEFLOW =   0.000 CFS/SQUARE-MILE
         *USER ENTERED "LAG" TIME =    2.581 HOURS
         VALLEY(DEVELOPED) S-GRAPH SELECTED
         MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.284
         LOW LOSS FRACTION = 0.449
         *HYDROGRAPH MODEL #1 SPECIFIED*

         SPECIFIED PEAK  5-MINUTES RAINFALL(INCH)=  0.40
         SPECIFIED PEAK 30-MINUTES RAINFALL(INCH)=  0.76
         SPECIFIED PEAK  1-HOUR RAINFALL(INCH) =  1.05
         SPECIFIED PEAK  3-HOUR RAINFALL(INCH) =  1.91
         SPECIFIED PEAK  6-HOUR RAINFALL(INCH) =  2.80
         SPECIFIED PEAK 24-HOUR RAINFALL(INCH) =  4.88

         *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
           5-MINUTE FACTOR = 0.293
          30-MINUTE FACTOR = 0.352
           1-HOUR FACTOR = 0.397
           3-HOUR FACTOR = 0.740
           6-HOUR FACTOR = 0.887
          24-HOUR FACTOR = 0.933

         UNIT HYDROGRAPH TIME UNIT =   5.000 MINUTES
         UNIT INTERVAL PERCENTAGE OF LAG-TIME =   3.229
```


UNIT HYDROGRAPH DETERMINATION

INTERVAL NUMBER	"S" GRAPH MEAN VALUES	UNIT HYDROGRAPH ORDINATES(CFS)
1	0.184	1486.188
2	0.553	2972.383
3	0.922	2972.376
4	1.291	2972.380
5	1.660	2972.374
6	2.062	3233.135
7	2.606	4386.331
8	3.168	4523.186
9	3.729	4523.814
10	4.535	6491.117
11	5.570	8331.600
12	6.792	9844.307
13	8.219	11496.307
14	9.903	13562.691
15	11.533	13135.419
16	13.148	13004.162
17	15.203	16554.281
18	17.201	16100.314
19	18.923	13871.099
20	20.810	15198.125
21	23.141	18774.678
22	25.239	16898.057
23	27.084	14861.801
24	29.289	17762.818
25	31.617	18759.314
26	34.433	22679.197
27	36.695	18225.422
28	39.011	18655.006
29	42.058	24542.896
30	44.978	23519.914
31	48.199	25942.611
32	51.240	24498.434
33	53.578	18831.941
34	55.808	17969.760
35	58.368	20618.773
36	61.497	25204.666
37	64.302	22597.137
38	66.537	17998.369
39	68.825	18432.686
40	71.041	17849.150
41	73.032	16036.476
42	75.072	16436.068
43	76.765	13637.808
44	78.200	11558.962
45	79.637	11579.059
46	81.133	12046.808
47	82.583	11682.613
48	83.929	10844.463

49	85.178	10061.192
50	86.327	9249.837
51	87.323	8027.948
52	88.239	7372.570
53	89.002	6149.514
54	89.760	6109.321
55	90.467	5687.787
56	91.146	5475.883
57	91.824	5459.966
58	92.457	5101.855
59	93.073	4955.649
60	93.688	4953.252
61	94.202	4141.897
62	94.612	3303.746
63	95.022	3301.349
64	95.432	3303.807
65	95.841	3294.036
66	96.156	2536.270
67	96.409	2039.267
68	96.662	2039.267
69	96.915	2041.726
70	97.168	2036.870
71	97.422	2044.122
72	97.675	2039.267
73	97.923	1997.907
74	98.044	969.669
75	98.104	487.293
76	98.165	487.293
77	98.225	487.231
78	98.286	489.751
79	98.346	484.835
80	98.407	487.293
81	98.467	487.293
82	98.528	487.293
83	98.589	494.545
84	98.649	482.438
85	98.709	487.293
86	98.770	487.293
87	98.830	487.231
88	98.891	492.209
89	98.951	482.376
90	99.012	492.148
91	99.072	482.376
92	99.132	482.376
93	99.192	482.376
94	99.252	482.376
95	99.312	482.376
96	99.372	482.376
97	99.432	482.376
98	99.491	482.376
99	99.551	482.376
100	99.611	482.376
101	99.671	482.376
102	99.731	482.376
103	99.791	482.376
104	99.851	482.376
105	99.911	482.376
106	99.971	482.376

107	100.000	237.347

TOTAL SOIL-LOSS VOLUME(ACRE-FEET) = 11199.6299

TOTAL STORM RUNOFF VOLUME(ACRE-FEET) = 14090.7256

---

2 4 - H O U R S T O R M
R U N O F F H Y D R O G R A P H

HYDROGRAPH IN FIVE-MINUTE UNIT INTERVALS(CFS)
(Note: Time indicated is at END of Each Unit Intervals)

TIME(HRS)	VOLUME(AF)	Q(CFS)	0. 4200.0 8400.0 12600.0 16800.0
0.083	0.0392	5.70	Q . . . .
0.167	0.1570	17.10	Q . . . .
0.250	0.3535	28.53	Q . . . .
0.333	0.6290	40.01	Q . . . .
0.417	0.9838	51.51	Q . . . .
0.500	1.4249	64.05	Q . . . .
0.583	1.9830	81.04	Q . . . .
0.667	2.6621	98.61	Q . . . .
0.750	3.4626	116.23	Q . . . .
0.833	4.4368	141.45	Q . . . .
0.917	5.6337	173.79	Q . . . .
1.000	7.0939	212.02	Q . . . .
1.083	8.8617	256.70	Q . . . .
1.167	10.9928	309.42	Q . . . .
1.250	13.4767	360.66	Q . . . .
1.333	16.3112	411.57	Q . . . .
1.417	19.5909	476.22	VQ . . . .
1.500	23.3053	539.33	VQ . . . .
1.583	27.3969	594.10	VQ . . . .
1.667	31.9019	654.12	VQ . . . .
1.750	36.9158	728.03	VQ . . . .
1.833	42.3908	794.96	VQ . . . .
1.917	48.2745	854.32	V Q . . . .
2.000	54.6449	924.98	V Q . . . .
2.083	61.5297	999.67	V Q . . . .
2.167	69.0340	1089.62	V Q . . . .
2.250	77.0421	1162.77	V Q . . . .
2.333	85.5671	1237.83	V Q . . . .
2.417	94.7659	1335.67	V Q . . . .
2.500	104.6137	1429.90	V Q . . . .
2.583	115.1765	1533.71	V Q . . . .
2.667	126.4184	1632.32	V Q . . . .
2.750	138.1920	1709.53	V Q . . . .
2.833	150.4765	1783.71	V Q . . . .
2.917	163.3435	1868.28	V Q . . . .
3.000	176.9159	1970.71	V Q . . . .
3.083	191.1270	2063.46	V Q . . . .
3.167	205.8578	2138.92	V Q . . . .
3.250	221.1216	2216.30	V Q . . . .
3.333	236.9047	2291.71	V Q . . . .
3.417	253.1612	2360.44	V Q . . . .
3.500	269.9033	2430.96	V Q . . . .
3.583	287.0589	2490.99	V Q . . . .
3.667	304.5747	2543.30	V Q . . . .
3.750	322.4525	2595.87	V Q . . . .
3.833	340.7064	2650.46	V Q . . . .
3.917	359.3279	2703.85	.V Q . . . .

4.000	378.2966	2754.25	.V Q . . . .
4.083	397.5930	2801.84	.V Q . . . .
4.167	417.1973	2846.54	.V Q . . . .
4.250	437.0783	2886.73	.V Q . . . .
4.333	457.2202	2924.60	.V Q . . . .
4.417	477.5916	2957.94	.V Q . . . .
4.500	498.1930	2991.31	.V Q . . . .
4.583	519.0140	3023.21	.V Q . . . .
4.667	540.0504	3054.48	.V Q . . . .
4.750	561.3027	3085.83	.V Q . . . .
4.833	582.7626	3115.99	.V Q . . . .
4.917	604.4274	3145.72	.V Q . . . .
5.000	626.2981	3175.63	.V Q . . . .
5.083	648.3544	3202.57	.V Q . . . .
5.167	670.5753	3226.48	.V Q . . . .
5.250	692.9617	3250.50	.V Q . . . .
5.333	715.5148	3274.71	. V Q . . . .
5.417	738.2353	3299.01	. V Q . . . .
5.500	761.1044	3320.59	. V Q . . . .
5.583	784.1098	3340.39	. V Q . . . .
5.667	807.2527	3360.36	. V Q . . . .
5.750	830.5341	3380.45	. V Q . . . .
5.833	853.9550	3400.71	. V Q . . . .
5.917	877.5164	3421.12	. V Q . . . .
6.000	901.2195	3441.69	. V Q . . . .
6.083	925.0641	3462.23	. V Q . . . .
6.167	949.0243	3479.03	. V Q . . . .
6.250	973.0883	3494.09	. V Q . . . .
6.333	997.2573	3509.33	. V Q . . . .
6.417	1021.5320	3524.70	. V Q . . . .
6.500	1045.9139	3540.25	. V Q . . . .
6.583	1070.4037	3555.91	. V Q . . . .
6.667	1095.0027	3571.77	. V Q . . . .
6.750	1119.7118	3587.76	. V Q . . . .
6.833	1144.5323	3603.94	. V Q . . . .
6.917	1169.4655	3620.29	. V Q . . . .
7.000	1194.5122	3636.79	. V Q . . . .
7.083	1219.6737	3653.45	. V Q . . . .
7.167	1244.9514	3670.32	. V Q . . . .
7.250	1270.3463	3687.34	. V Q . . . .
7.333	1295.8600	3704.59	. V Q . . . .
7.417	1321.4933	3721.96	. V Q . . . .
7.500	1347.2480	3739.59	. V Q . . . .
7.583	1373.1250	3757.34	. V Q . . . .
7.667	1399.1259	3775.32	. V Q . . . .
7.750	1425.2517	3793.48	. V Q. . . . .
7.833	1451.5043	3811.87	. V Q. . . . .
7.917	1477.8846	3830.44	. V Q. . . . .
8.000	1504.3947	3849.25	. V Q. . . . .
8.083	1531.0355	3868.25	. V Q. . . . .
8.167	1557.8090	3887.51	. V Q. . . . .
8.250	1584.7164	3906.96	. V Q. . . . .
8.333	1611.7596	3926.68	. V Q. . . . .
8.417	1638.9401	3946.60	. V Q. . . . .
8.500	1666.2596	3966.80	. V Q. . . . .
8.583	1693.7197	3987.21	. V Q. . . . .
8.667	1721.3224	4007.91	. V Q. . . . .
8.750	1749.0692	4028.84	. V Q. . . . .

8.833	1776.9622	4050.06	.	V	Q.	.	.	.
8.917	1804.9965	4070.58	.	V	Q.	.	.	.
9.000	1833.1680	4090.51	.	V	Q.	.	.	.
9.083	1861.4784	4110.67	.	V	Q.	.	.	.
9.167	1889.9299	4131.16	.	V	Q.	.	.	.
9.250	1918.5243	4151.90	.	V	Q.	.	.	.
9.333	1947.2638	4172.98	.	V	Q.	.	.	.
9.417	1976.1503	4194.31	.	V	Q.	.	.	.
9.500	2005.1862	4216.01	.	V	Q	.	.	.
9.583	2034.3734	4237.99	.	V	Q	.	.	.
9.667	2063.7146	4260.33	.	V	Q	.	.	.
9.750	2093.2117	4282.97	.	V	Q	.	.	.
9.833	2122.8674	4306.00	.	V	Q	.	.	.
9.917	2152.6838	4329.35	.	V	Q	.	.	.
10.000	2182.6638	4353.10	.	V	Q	.	.	.
10.083	2212.8096	4377.17	.	V	Q	.	.	.
10.167	2243.1243	4401.68	.	V	Q	.	.	.
10.250	2273.6101	4426.53	.	V	Q	.	.	.
10.333	2304.2700	4451.84	.	V	Q	.	.	.
10.417	2335.1069	4477.50	.	V	Q	.	.	.
10.500	2366.1238	4503.66	.	V	Q	.	.	.
10.583	2397.3235	4530.19	.	V	Q	.	.	.
10.667	2428.7095	4557.23	.	V	Q	.	.	.
10.750	2460.2844	4584.68	.	V	Q	.	.	.
10.833	2492.0520	4612.67	.	V	Q	.	.	.
10.917	2524.0154	4641.09	.	V	.Q	.	.	.
11.000	2556.1785	4670.08	.	V	.Q	.	.	.
11.083	2588.5444	4699.52	.	V	.Q	.	.	.
11.167	2621.1172	4729.57	.	V	.Q	.	.	.
11.250	2653.9004	4760.12	.	V	.Q	.	.	.
11.333	2686.8982	4791.29	.	V	.Q	.	.	.
11.417	2720.1145	4823.00	.	V	.Q	.	.	.
11.500	2753.5537	4855.38	.	V	.Q	.	.	.
11.583	2787.2197	4888.32	.	V	.Q	.	.	.
11.667	2821.1177	4921.99	.	V	.Q	.	.	.
11.750	2855.2517	4956.25	.	V	.Q	.	.	.
11.833	2889.6270	4991.29	.	V	.Q	.	.	.
11.917	2924.2480	5026.97	.	V	.Q	.	.	.
12.000	2959.1206	5063.48	.	V	. Q	.	.	.
12.083	2994.3215	5111.17	.	V	. Q	.	.	.
12.167	3029.9287	5170.18	.	V	. Q	.	.	.
12.250	3065.9468	5229.83	.	V	. Q	.	.	.
12.333	3102.3813	5290.30	.	V	. Q	.	.	.
12.417	3139.2371	5351.46	.	V	. Q	.	.	.
12.500	3176.5327	5415.34	.	V	. Q	.	.	.
12.583	3214.3296	5488.09	.	V	. Q	.	.	.
12.667	3252.6404	5562.71	.	V	. Q	.	.	.
12.750	3291.4700	5638.07	.	V	. Q	.	.	.
12.833	3330.9209	5728.27	.	V	. Q	.	.	.
12.917	3371.0876	5832.21	.	V	. Q	.	.	.
13.000	3412.0498	5947.70	.	V	. Q	.	.	.
13.083	3453.8923	6075.53	.	V	. Q	.	.	.
13.167	3496.7214	6218.77	.	V	. Q	.	.	.
13.250	3540.5203	6359.61	.	V	Q	.	.	.
13.333	3585.2883	6500.32	.	V	Q	.	.	.
13.417	3631.2026	6666.76	.	V	Q	.	.	.
13.500	3678.2466	6830.79	.	V	Q	.	.	.
13.583	3726.3159	6979.67	.	V	Q	.	.	.

13.667	3775.4817	7138.85	.	V	Q	.	.	.
13.750	3825.9224	7323.98	.	V	Q	.	.	.
13.833	3877.5530	7496.75	.	.V	Q	.	.	.
13.917	3930.2788	7655.80	.	.V	Q	.	.	.
14.000	3984.2488	7836.42	.	.V	Q	.	.	.
14.083	4039.5828	8034.49	.	.V	Q.	.	.	.
14.167	4096.5430	8270.63	.	.V	Q.	.	.	.
14.250	4154.9126	8475.25	.	.V	Q	.	.	.
14.333	4214.7139	8683.15	.	.V	Q	.	.	.
14.417	4276.2339	8932.73	.	. V	.Q	.	.	.
14.500	4339.4355	9176.88	.	. V	.Q	.	.	.
14.583	4404.4868	9445.48	.	. V	. Q	.	.	.
14.667	4471.3228	9704.61	.	. V	. Q	.	.	.
14.750	4539.6636	9923.11	.	. V	. Q	.	.	.
14.833	4609.5557	10148.32	.	. V	. Q	.	.	.
14.917	4681.2046	10403.45	.	. V	. Q	.	.	.
15.000	4754.8940	10699.73	.	. V	. Q	.	.	.
15.083	4830.5581	10986.40	.	. V	. Q	.	.	.
15.167	4908.0508	11251.93	.	. V	. Q	.	.	.
15.250	4987.3545	11514.93	.	. V	. Q	.	.	.
15.333	5068.4165	11770.19	.	. V	. Q	.	.	.
15.417	5151.1948	12019.41	.	. V	. Q	.	.	.
15.500	5235.5786	12252.52	.	. V	. Q.	.	.	.
15.583	5321.3237	12450.19	.	. V	. Q.	.	.	.
15.667	5408.3896	12642.00	.	. V	. Q	.	.	.
15.750	5496.9014	12851.91	.	. V	. Q	.	.	.
15.833	5586.7480	13045.76	.	. V	. .Q	.	.	.
15.917	5677.7871	13218.88	.	. V	. .Q	.	.	.
16.000	5770.1997	13418.32	.	. V	. .Q	.	.	.
16.083	5864.7373	13726.89	.	. V	. . Q	.	.	.
16.167	5961.2949	14020.20	.	. V	. . Q	.	.	.
16.250	6058.6616	14137.64	.	. V	. . Q	.	.	.
16.333	6156.7178	14237.76	.	. V	. . Q	.	.	.
16.417	6255.6895	14370.69	.	. V	. . Q	.	.	.
16.500	6355.6304	14511.43	.	. V	. . Q	.	.	.
16.583	6457.0640	14728.19	.	. V	. . Q	.	.	.
16.667	6559.4355	14864.37	.	. V	. . Q	.	.	.
16.750	6662.3066	14936.91	.	. V	. . Q	.	.	.
16.833	6766.6865	15155.96	.	. V.	. . Q	.	.	.
16.917	6872.8696	15417.76	.	. V.	. . Q	.	.	.
17.000	6980.8447	15677.96	.	. V.	. . Q	.	.	.
17.083	7090.0879	15862.07	.	. V	. . Q	.	.	.
17.167	7200.5840	16044.04	.	. V	. . Q	.	.	.
17.250	7311.4219	16093.63	.	. V	. . Q	.	.	.
17.333	7422.6968	16157.14	.	. .V	. . Q	.	.	.
17.417	7535.9219	16440.29	.	. .V	. . Q.	.	.	.
17.500	7648.8740	16400.65	.	. .V	. . Q.	.	.	.
17.583	7761.0322	16285.37	.	. . V	. . Q	.	.	.
17.667	7874.0781	16414.26	.	. . V	. . Q	.	.	.
17.750	7988.6929	16642.03	.	. . V	. . Q	.	.	.
17.833	8102.0747	16463.05	.	. . V	. . Q	.	.	.
17.917	8214.1836	16278.14	.	. . V	. . Q	.	.	.
18.000	8327.6455	16474.65	.	. . V	. . Q	.	.	.
18.083	8441.7256	16564.41	.	. . V	. . Q	.	.	.
18.167	8557.3418	16787.41	.	. . V	. . Q	.	.	.
18.250	8670.0381	16363.50	.	. . V	. . Q	.	.	.
18.333	8782.4512	16322.38	.	. . V	. . Q	.	.	.
18.417	8897.2402	16667.37	.	. . V	. . Q	.	.	.

18.500	9011.4111	16577.65	. . . V . Q.
18.583	9126.0781	16649.71	. . . V . Q.
18.667	9238.8223	16370.50	. . . V . Q .
18.750	9348.1641	15876.46	. . . V . Q .
18.833	9456.8994	15788.38	. . . V . Q .
18.917	9567.1279	16005.24	. . . V . Q .
19.000	9679.2676	16282.74	. . . V . Q .
19.083	9788.9844	15930.83	. . . V . Q .
19.167	9894.9844	15391.13	. . . V . Q .
19.250	10000.1865	15275.40	. . . V . Q .
19.333	10104.3721	15127.75	. . . V . Q .
19.417	10206.4248	14818.05	. . . V . Q .
19.500	10307.0889	14616.47	. . . V. Q .
19.583	10404.7998	14187.63	. . . V. Q .
19.667	10500.0811	13834.80	. . . V. Q .
19.750	10594.0752	13647.91	. . . V Q .
19.833	10687.1162	13509.51	. . . V Q .
19.917	10778.5791	13280.41	. . . VQ .
20.000	10867.7051	12941.03	. . . Q .
20.083	10954.5176	12605.19	. . . QV .
20.167	11038.9561	12260.44	. . . Q.V .
20.250	11120.9697	11908.37	. . . Q .V .
20.333	11200.7998	11591.27	. . . Q .V .
20.417	11277.9971	11209.02	. . . Q . V .
20.500	11353.2129	10921.31	. . . Q . V .
20.583	11426.1826	10595.20	. . . Q . V .
20.667	11497.1387	10302.79	. . . Q . V .
20.750	11566.3740	10053.02	. . . Q . V .
20.833	11633.7920	9789.09	. . . Q . V .
20.917	11699.3525	9519.35	. . . Q . V .
21.000	11762.8428	9218.84	. . . Q . V .
21.083	11823.9980	8879.76	. . . Q . V .
21.167	11883.1045	8582.19	. . . Q . V .
21.250	11940.6338	8353.28	. . . Q. . V .
21.333	11996.6328	8131.01	. . . Q. . V .
21.417	12051.1621	7917.69	. . . Q . . V .
21.500	12103.8564	7651.15	. . . Q . . V .
21.583	12155.0684	7435.97	. . . Q . . V .
21.667	12205.1709	7274.94	. . . Q . . V .
21.750	12254.1738	7115.26	. . . Q . . V .
21.833	12302.0488	6951.41	. . . Q . . V .
21.917	12348.7959	6787.68	. . . Q . . V .
22.000	12394.4092	6623.11	. . . Q . . V .
22.083	12438.8906	6458.67	. . . Q . . V .
22.167	12481.8398	6236.20	. . . Q . . V .
22.250	12523.6465	6070.27	. . . Q . . V .
22.333	12564.6104	5947.96	. . . Q . . V .
22.417	12604.8115	5837.25	. . . Q . . V .
22.500	12644.2432	5725.54	. . . Q . . V .
22.583	12682.9238	5616.41	. . . Q . . V .
22.667	12720.8721	5510.13	. . . Q . . V .
22.750	12758.0947	5404.69	. . Q . . V .
22.833	12794.6133	5302.55	. . Q . . V .
22.917	12830.4336	5201.09	. . Q . . V .
23.000	12865.5410	5097.58	. . Q . . V .
23.083	12899.9922	5002.24	. .Q . . V .
23.167	12933.8779	4920.17	. .Q . . V .
23.250	12967.2305	4842.83	. .Q . . V .

23.333	13000.0625	4767.23	. .Q . . V .
23.417	13032.3779	4692.15	. .Q . . V .
23.500	13064.2314	4625.18	. .Q . . V .
23.583	13095.6484	4561.69	. Q . . V .
23.667	13126.6426	4500.33	. Q . . V .
23.750	13157.2217	4440.11	. Q . . V .
23.833	13187.3955	4381.24	. Q . . V .
23.917	13217.1709	4323.34	. Q . . V .
24.000	13246.5557	4266.66	. Q . . V .
24.083	13275.5195	4205.62	. Q . . V .
24.167	13304.0820	4147.23	. Q. . V .
24.250	13332.2891	4095.61	. Q. . V .
24.333	13360.1611	4047.05	. Q. . V .
24.417	13387.7031	3999.15	. Q. . V .
24.500	13414.9121	3950.68	. Q. . V .
24.583	13441.7656	3899.14	. Q. . V .
24.667	13468.2676	3848.10	. Q. . V .
24.750	13494.4131	3796.34	. Q. . V .
24.833	13520.1377	3735.16	. Q . . V .
24.917	13545.2725	3649.51	. Q . . V .
25.000	13569.8027	3561.73	. Q . . V .
25.083	13593.8174	3486.89	. Q . . V .
25.167	13617.2715	3405.53	. Q . . V .
25.250	13640.1719	3325.09	. Q . . V .
25.333	13662.5127	3243.82	. Q . . V .
25.417	13684.2041	3149.59	. Q . . V .
25.500	13705.2627	3057.66	. Q . . V .
25.583	13725.7510	2974.95	. Q . . V .
25.667	13745.6387	2887.74	. Q . . . V.
25.750	13764.8359	2787.45	. Q . . . V.
25.833	13783.3965	2695.00	. Q . . . V.
25.917	13801.3896	2612.60	. Q . . . V.
26.000	13818.7549	2521.36	. Q . . . V.
26.083	13835.4707	2427.16	. Q . . . V.
26.167	13851.4404	2318.79	. Q . . . V.
26.250	13866.7871	2228.36	. Q . . . V.
26.333	13881.5049	2137.05	. Q . . . V.
26.417	13895.4443	2023.99	. Q . . . V.
26.500	13908.6377	1915.71	. Q . . . V.
26.583	13921.0273	1798.99	. Q . . . V.
26.667	13932.6572	1688.64	. Q . . . V.
26.750	13943.6816	1600.78	. Q . . . V.
26.833	13954.1289	1516.88	. Q . . . V.
26.917	13963.9443	1425.22	. Q . . . V.
27.000	13973.0244	1318.37	. Q . . . V.
27.083	13981.4424	1222.29	. Q . . . V.
27.167	13989.3252	1144.52	. Q . . . V.
27.250	13996.6650	1065.67	. Q . . . V.
27.333	14003.4805	989.65	. Q . . . V.
27.417	14009.8242	921.13	. Q . . . V.
27.500	14015.6895	851.59	. Q . . . V.
27.583	14021.1523	793.26	.Q . . . V.
27.667	14026.2715	743.32	.Q . . . V.
27.750	14031.0488	693.68	.Q . . . V.
27.833	14035.4746	642.62	.Q . . . V.
27.917	14039.5605	593.32	.Q . . . V.
28.000	14043.3320	547.59	.Q . . . V.
28.083	14046.8115	505.18	.Q . . . V.

28.167	14050.0225	466.18	.Q	.	.	.	V.
28.250	14052.9990	432.13	.Q	.	.	.	V.
28.333	14055.7598	400.84	Q	.	.	.	V.
28.417	14058.3389	374.45	Q	.	.	.	V.
28.500	14060.7383	348.41	Q	.	.	.	V.
28.583	14062.9707	324.18	Q	.	.	.	V.
28.667	14065.0430	300.93	Q	.	.	.	V.
28.750	14066.9570	277.91	Q	.	.	.	V.
28.833	14068.7227	256.42	Q	.	.	.	V.
28.917	14070.3457	235.65	Q	.	.	.	V.
29.000	14071.8262	215.03	Q	.	.	.	V.
29.083	14073.1875	197.66	Q	.	.	.	V.
29.167	14074.4521	183.62	Q	.	.	.	V.
29.250	14075.6211	169.69	Q	.	.	.	V.
29.333	14076.6943	155.85	Q	.	.	.	V.
29.417	14077.6729	142.15	Q	.	.	.	V.
29.500	14078.5781	131.44	Q	.	.	.	V.
29.583	14079.4229	122.70	Q	.	.	.	V.
29.667	14080.2080	114.03	Q	.	.	.	V.
29.750	14080.9336	105.41	Q	.	.	.	V.
29.833	14081.6006	96.88	Q	.	.	.	V.
29.917	14082.2090	88.37	Q	.	.	.	V.
30.000	14082.7598	79.94	Q	.	.	.	V.
30.083	14083.2539	71.73	Q	.	.	.	V.
30.167	14083.7188	67.51	Q	.	.	.	V.
30.250	14084.1680	65.16	Q	.	.	.	V.
30.333	14084.6006	62.84	Q	.	.	.	V.
30.417	14085.0176	60.53	Q	.	.	.	V.
30.500	14085.4189	58.23	Q	.	.	.	V.
30.583	14085.8047	55.98	Q	.	.	.	V.
30.667	14086.1748	53.73	Q	.	.	.	V.
30.750	14086.5293	51.50	Q	.	.	.	V.
30.833	14086.8691	49.28	Q	.	.	.	V.
30.917	14087.1934	47.06	Q	.	.	.	V.
31.000	14087.5029	44.90	Q	.	.	.	V.
31.083	14087.7969	42.74	Q	.	.	.	V.
31.167	14088.0762	40.59	Q	.	.	.	V.
31.250	14088.3408	38.46	Q	.	.	.	V.
31.333	14088.5908	36.33	Q	.	.	.	V.
31.417	14088.8271	34.25	Q	.	.	.	V.
31.500	14089.0488	32.15	Q	.	.	.	V.
31.583	14089.2559	30.09	Q	.	.	.	V.
31.667	14089.4492	28.06	Q	.	.	.	V.
31.750	14089.6289	26.04	Q	.	.	.	V.
31.833	14089.7939	24.03	Q	.	.	.	V.
31.917	14089.9453	22.03	Q	.	.	.	V.
32.000	14090.0830	20.05	Q	.	.	.	V.
32.083	14090.2080	18.08	Q	.	.	.	V.
32.167	14090.3193	16.13	Q	.	.	.	V.
32.250	14090.4170	14.18	Q	.	.	.	V.
32.333	14090.5010	12.25	Q	.	.	.	V.
32.417	14090.5723	10.33	Q	.	.	.	V.
32.500	14090.6299	8.43	Q	.	.	.	V.
32.583	14090.6748	6.53	Q	.	.	.	V.
32.667	14090.7070	4.65	Q	.	.	.	V.
32.750	14090.7266	2.77	Q	.	.	.	V
32.833	14090.7324	0.91	Q	.	.	.	V

TIME DURATION(minutes) OF PERCENTILES OF ESTIMATED PEAK FLOW RATE:
(Note: 100% of Peak Flow Rate estimate assumed to have
an instantaneous time duration)

Percentile of Estimated Peak Flow Rate	Duration (minutes)
0%	1970.0
10%	1440.0
20%	1175.0
30%	665.0
40%	510.0
50%	420.0
60%	355.0
70%	300.0
80%	230.0
90%	155.0

END OF FLOODSCx ROUTING ANALYSIS

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******************************************************************************

             F L O O D    R O U T I N G    A N A L Y S I S
             USING COUNTY HYDROLOGY MANUAL OF ORANGE(1986)
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                          Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RMV PA-3 ROMP AMENDMENT 2022 - NODE 134T                              *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL             *
* 25-YR EV OCT 2022 ROKAMOTO                                            *
 ************************************************************************

  FILE NAME: EV2534TS.DAT
  TIME/DATE OF STUDY: 10:39 10/25/2022


******************************************************************************
  FLOW PROCESS FROM NODE  13500.00 TO NODE    134.00 IS CODE =   1
------------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS)<<<<<
==============================================================================

      (UNIT-HYDROGRAPH ADDED TO STREAM #1)

         WATERSHED AREA =    3859.700 ACRES
         BASEFLOW =   0.000 CFS/SQUARE-MILE
         *USER ENTERED "LAG" TIME =    1.350 HOURS
         VALLEY(DEVELOPED) S-GRAPH SELECTED
         MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.284
         LOW LOSS FRACTION = 0.463
         *HYDROGRAPH MODEL #1 SPECIFIED*

         SPECIFIED PEAK  5-MINUTES RAINFALL(INCH)=  0.34
         SPECIFIED PEAK 30-MINUTES RAINFALL(INCH)=  0.72
         SPECIFIED PEAK  1-HOUR RAINFALL(INCH) =  0.95
         SPECIFIED PEAK  3-HOUR RAINFALL(INCH) =  1.59
         SPECIFIED PEAK  6-HOUR RAINFALL(INCH) =  2.20
         SPECIFIED PEAK 24-HOUR RAINFALL(INCH) =  3.68

         *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
           5-MINUTE FACTOR = 0.828
          30-MINUTE FACTOR = 0.828
           1-HOUR FACTOR = 0.828
           3-HOUR FACTOR = 0.974
           6-HOUR FACTOR = 0.987
          24-HOUR FACTOR = 0.992

         UNIT HYDROGRAPH TIME UNIT =   5.000 MINUTES
         UNIT INTERVAL PERCENTAGE OF LAG-TIME =   6.173
```


UNIT HYDROGRAPH DETERMINATION

INTERVAL NUMBER	"S" GRAPH MEAN VALUES	UNIT HYDROGRAPH ORDINATES(CFS)
1	0.353	164.650
2	1.058	329.300
3	1.769	331.638
4	2.714	441.214
5	3.829	520.304
6	5.610	831.701
7	8.146	1183.457
8	11.272	1459.477
9	14.675	1588.138
10	18.342	1712.027
11	22.143	1773.875
12	26.136	1863.946
13	30.204	1898.763
14	35.128	2298.813
15	39.722	2144.246
16	45.411	2655.306
17	51.285	2742.112
18	55.755	2086.605
19	61.051	2471.806
20	66.050	2333.457
21	70.363	2013.331
22	74.265	1821.628
23	77.506	1512.705
24	80.278	1293.773
25	83.042	1290.464
26	85.470	1133.359
27	87.474	935.449
28	89.059	739.832
29	90.456	652.065
30	91.751	604.468
31	92.957	562.563
32	94.059	514.489
33	94.872	379.571
34	95.655	365.689
35	96.272	287.633
36	96.756	226.041
37	97.240	225.973
38	97.724	225.970
39	98.049	151.678
40	98.165	54.352
41	98.281	54.056
42	98.397	54.202
43	98.513	53.907
44	98.629	54.056
45	98.745	54.202
46	98.860	53.761
47	98.976	54.202
48	99.092	54.056

49	99.208	54.056
50	99.323	54.056
51	99.439	54.056
52	99.555	54.056
53	99.671	54.056
54	99.787	54.056
55	99.902	54.056
56	100.000	45.538

TOTAL SOIL-LOSS VOLUME(ACRE-FEET) = 499.3369
TOTAL STORM RUNOFF VOLUME(ACRE-FEET) = 674.7775

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2 4 - H O U R S T O R M
R U N O F F H Y D R O G R A P H

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HYDROGRAPH IN FIVE-MINUTE UNIT INTERVALS(CFS)
(Note: Time indicated is at END of Each Unit Intervals)

TIME(HRS)	VOLUME(AF)	Q(CFS)	0.	450.0	900.0	1350.0	1800.0
0.083	0.0029	0.42	Q	.	.	.	.
0.167	0.0116	1.26	Q	.	.	.	.
0.250	0.0262	2.11	Q	.	.	.	.
0.333	0.0485	3.25	Q	.	.	.	.
0.417	0.0801	4.59	Q	.	.	.	.
0.500	0.1264	6.73	Q	.	.	.	.
0.583	0.1937	9.77	Q	.	.	.	.
0.667	0.2869	13.53	Q	.	.	.	.
0.750	0.4083	17.63	Q	.	.	.	.
0.833	0.5603	22.06	Q	.	.	.	.
0.917	0.7439	26.66	Q	.	.	.	.
1.000	0.9610	31.51	Q	.	.	.	.
1.083	1.2121	36.47	Q	.	.	.	.
1.167	1.5045	42.46	Q	.	.	.	.
1.250	1.8356	48.08	VQ	.	.	.	.
1.333	2.2146	55.02	VQ	.	.	.	.
1.417	2.6430	62.21	VQ	.	.	.	.
1.500	3.1095	67.74	VQ	.	.	.	.
1.583	3.6211	74.29	VQ	.	.	.	.
1.667	4.1755	80.50	VQ	.	.	.	.
1.750	4.7672	85.91	VQ	.	.	.	.
1.833	5.3929	90.85	V Q	.	.	.	.
1.917	6.0473	95.03	V Q	.	.	.	.
2.000	6.7268	98.66	V Q	.	.	.	.
2.083	7.4313	102.29	V Q	.	.	.	.
2.167	8.1581	105.54	V Q	.	.	.	.
2.250	8.9039	108.29	V Q	.	.	.	.
2.333	9.6654	110.56	V Q	.	.	.	.
2.417	10.4409	112.61	V Q	.	.	.	.
2.500	11.2298	114.55	V Q	.	.	.	.
2.583	12.0314	116.39	V Q	.	.	.	.
2.667	12.8449	118.12	V Q	.	.	.	.
2.750	13.6679	119.51	V Q	.	.	.	.
2.833	14.5004	120.87	V Q	.	.	.	.
2.917	15.3408	122.04	V Q	.	.	.	.
3.000	16.1884	123.06	V Q	.	.	.	.
3.083	17.0429	124.08	.VQ	.	.	.	.
3.167	17.9046	125.11	.VQ	.	.	.	.
3.250	18.7721	125.96	.VQ	.	.	.	.
3.333	19.6437	126.56	.VQ	.	.	.	.
3.417	20.5196	127.17	.VQ	.	.	.	.
3.500	21.3997	127.79	.VQ	.	.	.	.
3.583	22.2840	128.41	.VQ	.	.	.	.
3.667	23.1726	129.03	.VQ	.	.	.	.
3.750	24.0656	129.66	.VQ	.	.	.	.
3.833	24.9629	130.29	.VQ	.	.	.	.
3.917	25.8647	130.93	.VQ	.	.	.	.

4.000	26.7709	131.58	.VQ	.	.	.	.
4.083	27.6816	132.23	.VQ	.	.	.	.
4.167	28.5968	132.89	.VQ	.	.	.	.
4.250	29.5165	133.55	.VQ	.	.	.	.
4.333	30.4409	134.22	.VQ	.	.	.	.
4.417	31.3699	134.89	.VQ	.	.	.	.
4.500	32.3036	135.57	.V Q	.	.	.	.
4.583	33.2421	136.26	.V Q	.	.	.	.
4.667	34.1851	136.93	. VQ	.	.	.	.
4.750	35.1321	137.49	. VQ	.	.	.	.
4.833	36.0829	138.06	. VQ	.	.	.	.
4.917	37.0377	138.63	. VQ	.	.	.	.
5.000	37.9965	139.22	. VQ	.	.	.	.
5.083	38.9593	139.80	. VQ	.	.	.	.
5.167	39.9262	140.39	. VQ	.	.	.	.
5.250	40.8972	140.99	. VQ	.	.	.	.
5.333	41.8724	141.60	. VQ	.	.	.	.
5.417	42.8518	142.21	. VQ	.	.	.	.
5.500	43.8355	142.83	. VQ	.	.	.	.
5.583	44.8235	143.46	. VQ	.	.	.	.
5.667	45.8159	144.09	. VQ	.	.	.	.
5.750	46.8127	144.73	. VQ	.	.	.	.
5.833	47.8140	145.38	. VQ	.	.	.	.
5.917	48.8197	146.04	. VQ	.	.	.	.
6.000	49.8301	146.70	. VQ	.	.	.	.
6.083	50.8451	147.38	. Q	.	.	.	.
6.167	51.8648	148.06	. Q	.	.	.	.
6.250	52.8892	148.75	. Q	.	.	.	.
6.333	53.9184	149.44	. Q	.	.	.	.
6.417	54.9525	150.15	. Q	.	.	.	.
6.500	55.9915	150.86	. Q	.	.	.	.
6.583	57.0355	151.59	. Q	.	.	.	.
6.667	58.0845	152.32	. Q	.	.	.	.
6.750	59.1386	153.06	. Q	.	.	.	.
6.833	60.1979	153.81	. Q	.	.	.	.
6.917	61.2625	154.57	. Q	.	.	.	.
7.000	62.3323	155.34	. Q	.	.	.	.
7.083	63.4076	156.12	. Q	.	.	.	.
7.167	64.4883	156.92	. Q	.	.	.	.
7.250	65.5745	157.72	. Q	.	.	.	.
7.333	66.6663	158.53	. Q	.	.	.	.
7.417	67.7637	159.35	. QV	.	.	.	.
7.500	68.8670	160.19	. QV	.	.	.	.
7.583	69.9760	161.04	. QV	.	.	.	.
7.667	71.0910	161.89	. QV	.	.	.	.
7.750	72.2120	162.76	. QV	.	.	.	.
7.833	73.3390	163.65	. QV	.	.	.	.
7.917	74.4722	164.54	. QV	.	.	.	.
8.000	75.6117	165.45	. QV	.	.	.	.
8.083	76.7575	166.37	. QV	.	.	.	.
8.167	77.9098	167.31	. QV	.	.	.	.
8.250	79.0686	168.26	. QV	.	.	.	.
8.333	80.2340	169.22	. QV	.	.	.	.
8.417	81.4062	170.20	. QV	.	.	.	.
8.500	82.5851	171.19	. QV	.	.	.	.
8.583	83.7711	172.20	. QV	.	.	.	.
8.667	84.9641	173.22	. Q V	.	.	.	.
8.750	86.1642	174.26	. Q V	.	.	.	.

8.833	87.3716	175.32	. Q V	.	.	.	.
8.917	88.5864	176.39	. Q V	.	.	.	.
9.000	89.8087	177.48	. Q V	.	.	.	.
9.083	91.0387	178.59	. Q V	.	.	.	.
9.167	92.2764	179.71	. Q V	.	.	.	.
9.250	93.5219	180.86	. QV	.	.	.	.
9.333	94.7756	182.02	. QV	.	.	.	.
9.417	96.0373	183.21	. QV	.	.	.	.
9.500	97.3074	184.41	. QV	.	.	.	.
9.583	98.5859	185.64	. QV	.	.	.	.
9.667	99.8730	186.89	. QV	.	.	.	.
9.750	101.1688	188.15	. QV	.	.	.	.
9.833	102.4735	189.45	. Q V	.	.	.	.
9.917	103.7873	190.76	. Q V	.	.	.	.
10.000	105.1103	192.10	. Q V	.	.	.	.
10.083	106.4427	193.47	. Q V	.	.	.	.
10.167	107.7847	194.86	. Q V	.	.	.	.
10.250	109.1365	196.27	. Q V	.	.	.	.
10.333	110.4982	197.72	. Q V	.	.	.	.
10.417	111.8700	199.19	. Q V	.	.	.	.
10.500	113.2522	200.70	. Q V	.	.	.	.
10.583	114.6450	202.23	. Q V	.	.	.	.
10.667	116.0485	203.79	. Q V	.	.	.	.
10.750	117.4630	205.38	. Q V	.	.	.	.
10.833	118.8887	207.01	. Q V	.	.	.	.
10.917	120.3259	208.67	. Q V	.	.	.	.
11.000	121.7747	210.38	. Q V	.	.	.	.
11.083	123.2355	212.11	. Q V	.	.	.	.
11.167	124.7085	213.88	. Q V	.	.	.	.
11.250	126.1940	215.69	. Q V	.	.	.	.
11.333	127.6923	217.55	. Q V	.	.	.	.
11.417	129.2036	219.44	. Q V	.	.	.	.
11.500	130.7283	221.39	. Q V	.	.	.	.
11.583	132.2667	223.37	. Q V	.	.	.	.
11.667	133.8191	225.41	. Q V	.	.	.	.
11.750	135.3858	227.49	. Q V	.	.	.	.
11.833	136.9672	229.62	. Q V	.	.	.	.
11.917	138.5637	231.81	. Q V	.	.	.	.
12.000	140.1757	234.06	. Q V	.	.	.	.
12.083	141.8055	236.66	. Q V	.	.	.	.
12.167	143.4558	239.62	. Q V	.	.	.	.
12.250	145.1270	242.65	. Q V	.	.	.	.
12.333	146.8209	245.96	. Q V	.	.	.	.
12.417	148.5391	249.47	. Q V	.	.	.	.
12.500	150.2859	253.64	. Q V	.	.	.	.
12.583	152.0663	258.52	. Q V.	.	.	.	.
12.667	153.8845	264.00	. Q V.	.	.	.	.
12.750	155.7426	269.79	. Q V.	.	.	.	.
12.833	157.6428	275.92	. Q V.	.	.	.	.
12.917	159.5867	282.25	. Q V.	.	.	.	.
13.000	161.5760	288.86	. Q V.	.	.	.	.
13.083	163.6121	295.63	. Q V.	.	.	.	.
13.167	165.7007	303.26	. Q V.	.	.	.	.
13.250	167.8406	310.72	. Q V.	.	.	.	.
13.333	170.0394	319.26	. Q V	.	.	.	.
13.417	172.2989	328.09	. Q V	.	.	.	.
13.500	174.6121	335.87	. Q V	.	.	.	.
13.583	176.9847	344.50	. Q V	.	.	.	.

13.667	179.4162	353.05	. Q V . . .
13.750	181.9036	361.18	. Q V . . .
13.833	184.4460	369.15	. Q V . . .
13.917	187.0405	376.72	. Q .V . . .
14.000	189.6859	384.12	. Q .V . . .
14.083	192.3870	392.19	. Q .V . . .
14.167	195.1468	400.72	. Q .V . . .
14.250	197.9643	409.11	. Q.V . . .
14.333	200.8413	417.74	. Q.V . . .
14.417	203.7800	426.70	. Q. V . . .
14.500	206.7884	436.82	. Q. V . . .
14.583	209.8752	448.19	. Q. V . . .
14.667	213.0478	460.66	. Q V . . .
14.750	216.3095	473.60	. Q V . . .
14.833	219.6655	487.29	. Q V . . .
14.917	223.1187	501.41	. .Q V . . .
15.000	226.6737	516.18	. .Q V . . .
15.083	230.3343	531.52	. .Q V . . .
15.167	234.1129	548.66	. . QV . . .
15.250	238.0095	565.78	. . Q V . . .
15.333	242.0384	584.99	. . Q V . . .
15.417	246.1979	603.96	. . QV . . .
15.500	250.4725	620.68	. . QV . . .
15.583	254.8774	639.59	. . QV . . .
15.667	259.4135	658.64	. . QV . . .
15.750	264.0824	677.94	. . Q . . .
15.833	268.8809	696.74	. . Q . . .
15.917	273.8177	716.82	. . QV . . .
16.000	278.9383	743.51	. . Q . . .
16.083	284.4912	806.28	. . VQ . . .
16.167	290.4594	866.58	. . V Q. . .
16.250	296.6211	894.68	. . V Q. . .
16.333	303.1599	949.45	. . V .Q . .
16.417	310.1175	1010.23	. . V . Q . .
16.500	317.8497	1122.73	. . V . Q . .
16.583	326.3904	1240.11	. . V. Q . .
16.667	335.5378	1328.20	. . V. Q. .
16.750	345.0133	1375.84	. . V Q .
16.833	354.8157	1423.31	. . .V .Q .
16.917	364.8187	1452.43	. . .V . Q .
17.000	375.0927	1491.79	. . . V . Q .
17.083	385.5927	1524.59	. . . V . Q .
17.167	396.7834	1624.90	. . . V . Q .
17.250	407.9354	1619.27	. . . V . Q .
17.333	419.8256	1726.46	. . . V . Q .
17.417	431.6816	1721.49	. . . V . Q .
17.500	442.5182	1573.48	. . . V . Q .
17.583	453.7181	1626.22	. . . V . Q .
17.667	464.4775	1562.27	. . . V . Q .
17.750	474.4877	1453.48	. . . V . Q .
17.833	483.8676	1361.97	. . . V Q .
17.917	492.5076	1254.53	. . . Q V. .
18.000	500.5827	1172.51	. . . Q V. .
18.083	508.3839	1132.73	. . . Q V .
18.167	515.6585	1056.27	. . . Q V .
18.250	522.3466	971.12	. . .Q V .
18.333	528.4770	890.13	. . Q. .V .
18.417	534.2416	837.03	. . Q . .V .

18.500	539.7264	796.38	. . . Q . .V .
18.583	544.9224	754.46	. . . Q . . V .
18.667	549.8122	710.00	. . . Q . . V .
18.750	554.2938	650.72	. . . Q . . V .
18.833	558.5464	617.48	. . . Q . . V .
18.917	562.5002	574.10	. . . Q . . V .
19.000	566.2040	537.78	. . .Q . . V .
19.083	569.7477	514.55	. . .Q . . V .
19.167	573.1167	489.17	. . Q . . V .
19.250	576.2081	448.88	. . Q. . . V .
19.333	579.0121	407.14	. . Q. . . V .
19.417	581.6910	388.96	. . Q . . . V .
19.500	584.2694	374.38	. . Q . . . V .
19.583	586.7465	359.66	. . Q . . . V .
19.667	589.1259	345.49	. . Q . . . V .
19.750	591.4187	332.92	. . Q . . . V .
19.833	593.6307	321.18	. . Q . . . V .
19.917	595.7715	310.84	. . Q . . . V .
20.000	597.8474	301.42	. . Q . . . V .
20.083	599.8631	292.69	. . Q . . . V .
20.167	601.8226	284.52	. . Q . . . V .
20.250	603.7312	277.13	. . Q . . . V .
20.333	605.5945	270.56	. . Q . . . V .
20.417	607.4137	264.14	. . Q . . . . V .
20.500	609.1888	257.74	. . Q . . . . V .
20.583	610.9141	250.51	. . Q . . . . V .
20.667	612.5726	240.82	. . Q . . . . V .
20.750	614.1219	224.96	. . Q . . . . V .
20.833	615.6345	219.61	. . Q . . . . V .
20.917	617.1164	215.18	. . Q . . . . V .
21.000	618.5705	211.14	. . Q . . . . V .
21.083	619.9961	206.99	. . Q . . . . V .
21.167	621.3945	203.06	. . Q . . . . V .
21.250	622.7680	199.43	. . Q . . . . V .
21.333	624.1188	196.13	. . Q . . . . V .
21.417	625.4478	192.97	. . Q . . . . . V .
21.500	626.7559	189.94	. . Q . . . . . V .
21.583	628.0439	187.02	. . Q . . . . . V .
21.667	629.3127	184.23	. . Q . . . . . V .
21.750	630.5640	181.68	. . Q . . . . . V .
21.833	631.7983	179.22	. . Q . . . . . V .
21.917	633.0162	176.84	. . Q . . . . . V .
22.000	634.2184	174.55	. . Q . . . . . V .
22.083	635.4052	172.33	. . Q . . . . . V .
22.167	636.5773	170.18	. . Q . . . . . V .
22.250	637.7350	168.10	. . Q . . . . . V .
22.333	638.8788	166.08	. . Q . . . . . V .
22.417	640.0091	164.12	. . Q . . . . . V .
22.500	641.1263	162.22	. . Q . . . . . . V .
22.583	642.2308	160.37	. . Q . . . . . . V .
22.667	643.3229	158.59	. . Q . . . . . . V .
22.750	644.4037	156.94	. . Q . . . . . . V .
22.833	645.4735	155.33	. . Q . . . . . . V .
22.917	646.5325	153.77	. . Q . . . . . . V .
23.000	647.5811	152.25	. . Q . . . . . . V .
23.083	648.6194	150.77	. . Q . . . . . . V .
23.167	649.6478	149.33	. . Q . . . . . . V .
23.250	650.6666	147.92	. . Q . . . . . . V .

23.333	651.6758	146.55	. Q	.	.	.	V	.
23.417	652.6760	145.21	. Q	.	.	.	V	.
23.500	653.6671	143.91	. Q	.	.	.	V	.
23.583	654.6494	142.63	. Q	.	.	.	V	.
23.667	655.6231	141.39	. Q	.	.	.	V	.
23.750	656.5885	140.17	. Q	.	.	.	V	.
23.833	657.5457	138.99	. Q	.	.	.	V	.
23.917	658.4949	137.82	. Q	.	.	.	V.	
24.000	659.4363	136.69	. Q	.	.	.	V.	
24.083	660.3671	135.15	. Q	.	.	.	V.	
24.167	661.2846	133.23	. Q	.	.	.	V.	
24.250	662.1891	131.33	. Q	.	.	.	V.	
24.333	663.0787	129.17	. Q	.	.	.	V.	
24.417	663.9523	126.84	. Q	.	.	.	V.	
24.500	664.8046	123.75	. Q	.	.	.	V.	
24.583	665.6296	119.79	. Q	.	.	.	V.	
24.667	666.4228	115.17	. Q	.	.	.	V.	
24.750	667.1822	110.26	. Q	.	.	.	V.	
24.833	667.9059	105.08	. Q	.	.	.	V.	
24.917	668.5931	99.78	. Q	.	.	.	V.	
25.000	669.2426	94.30	. Q	.	.	.	V.	
25.083	669.8539	88.78	.Q	.	.	.	V.	
25.167	670.4206	82.27	.Q	.	.	.	V.	
25.250	670.9455	76.22	.Q	.	.	.	V.	
25.333	671.4200	68.90	.Q	.	.	.	V.	
25.417	671.8431	61.42	.Q	.	.	.	V.	
25.500	672.2264	55.66	.Q	.	.	.	V.	
25.583	672.5637	48.97	.Q	.	.	.	V.	
25.667	672.8575	42.67	Q	.	.	.	V.	
25.750	673.1140	37.24	Q	.	.	.	V.	
25.833	673.3367	32.33	Q	.	.	.	V.	
25.917	673.5312	28.24	Q	.	.	.	V.	
26.000	673.7016	24.75	Q	.	.	.	V.	
26.083	673.8481	21.28	Q	.	.	.	V.	
26.167	673.9738	18.24	Q	.	.	.	V.	
26.250	674.0821	15.73	Q	.	.	.	V.	
26.333	674.1766	13.73	Q	.	.	.	V.	
26.417	674.2591	11.97	Q	.	.	.	V.	
26.500	674.3303	10.35	Q	.	.	.	V.	
26.583	674.3912	8.84	Q	.	.	.	V.	
26.667	674.4426	7.46	Q	.	.	.	V.	
26.750	674.4869	6.44	Q	.	.	.	V.	
26.833	674.5246	5.47	Q	.	.	.	V.	
26.917	674.5569	4.69	Q	.	.	.	V.	
27.000	674.5851	4.08	Q	.	.	.	V.	
27.083	674.6091	3.48	Q	.	.	.	V.	
27.167	674.6289	2.88	Q	.	.	.	V.	
27.250	674.6459	2.47	Q	.	.	.	V.	
27.333	674.6619	2.32	Q	.	.	.	V.	
27.417	674.6768	2.16	Q	.	.	.	V.	
27.500	674.6906	2.01	Q	.	.	.	V.	
27.583	674.7034	1.86	Q	.	.	.	V.	
27.667	674.7151	1.71	Q	.	.	.	V.	
27.750	674.7258	1.56	Q	.	.	.	V.	
27.833	674.7355	1.41	Q	.	.	.	V.	
27.917	674.7442	1.26	Q	.	.	.	V.	
28.000	674.7519	1.11	Q	.	.	.	V.	
28.083	674.7585	0.97	Q	.	.	.	V.	

28.167	674.7642	0.82	Q	.	.	.	V.	
28.250	674.7689	0.68	Q	.	.	.	V.	
28.333	674.7726	0.54	Q	.	.	.	V.	
28.417	674.7754	0.40	Q	.	.	.	V.	
28.500	674.7772	0.26	Q	.	.	.	V.	
28.583	674.7780	0.12	Q	.	.	.	V	

TIME DURATION(minutes) OF PERCENTILES OF ESTIMATED PEAK FLOW RATE:
(Note: 100% of Peak Flow Rate estimate assumed to have
an instantaneous time duration)

Percentile of Estimated Peak Flow Rate	Duration (minutes)
0%	1715.0
10%	805.0
20%	365.0
30%	240.0
40%	175.0
50%	135.0
60%	105.0
70%	85.0
80%	60.0
90%	35.0

END OF FLOODSCx ROUTING ANALYSIS

```
____________________________________________________________________________
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                          Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RMV PA-3 ROMP AMENDMENT 2022 - NODE 134U                                 *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL                 *
* 25-YR EV NOV 2022 ROKAMOTO                                               *
 ************************************************************************

  FILE NAME: EV2534US.DAT
  TIME/DATE OF STUDY: 18:04 11/07/2022


                        ** INPUT SUMMARY **


****************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    134.00 IS CODE =   1
----------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
============================================================================
  WATERSHED AREA =   62698.000 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.579 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.285; LOW LOSS FRACTION = 0.448
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.40; 30-MINUTE =  0.77;  1-HOUR =  1.05
    3-HOUR =  1.93;    6-HOUR =  2.83; 24-HOUR =  4.96
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.304; 30-MINUTE = 0.358;  1-HOUR = 0.405
    3-HOUR = 0.750;    6-HOUR = 0.890; 24-HOUR = 0.936
============================================================================
```



```
 +--------------------------------------------------------------------------------
--------------------------------------+
 |                                       * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV2534US.DAT   ]
Page:   1 of    |
 +---------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +---------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 10100.00     134.00| Subarea (UH) Added to Stream #1|       0.0     16204.7|
18.167 |             |           |
 +---------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                             |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                     |
 +--------------------------------------------------------------------------------
--------------------------------------+


   END OF FLOODSCx ROUTING ANALYSIS
```

```
**************************************************************************

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                        Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RMV PA-3 ROMP AMENDMENT 2022 - NODE 133C                              *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL             *
* 50-YR EV NOV 2022 ROKAMOTO                                            *
 ************************************************************************

  FILE NAME: EV5033CS.DAT
  TIME/DATE OF STUDY: 16:18 11/07/2022


                       ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    133.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =   60992.301 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.381 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.286; LOW LOSS FRACTION = 0.415
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.44; 30-MINUTE =  0.86;  1-HOUR =  1.18
    3-HOUR =  2.18;    6-HOUR =  3.22; 24-HOUR =  5.64
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.308; 30-MINUTE = 0.363;  1-HOUR = 0.408
    3-HOUR = 0.754;    6-HOUR = 0.891; 24-HOUR = 0.936
==========================================================================
```



```
 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV5033CS.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 10100.00     133.00| Subarea (UH) Added to Stream #1|       0.0     19165.1|
18.000 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
-------------------------------------+

   END OF FLOODSCx ROUTING ANALYSIS
```

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**************************************************************************

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                        Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RMV PA-3 ROMP AMENDMENT 2022 - NODE 133T                              *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL             *
* 50-YR EV OCT 2022 ROKAMOTO                                            *
 ************************************************************************

  FILE NAME: EV5033TS.DAT
  TIME/DATE OF STUDY: 10:12 10/25/2022


**************************************************************************
  FLOW PROCESS FROM NODE  13010.00 TO NODE    133.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS)<<<<<
==========================================================================

      (UNIT-HYDROGRAPH ADDED TO STREAM #1)

         WATERSHED AREA =    6638.200 ACRES
         BASEFLOW =   0.000 CFS/SQUARE-MILE
         *USER ENTERED "LAG" TIME =    1.153 HOURS
         VALLEY(DEVELOPED) S-GRAPH SELECTED
         MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.239
         LOW LOSS FRACTION = 0.498
         *HYDROGRAPH MODEL #1 SPECIFIED*

         SPECIFIED PEAK  5-MINUTES RAINFALL(INCH)=  0.37
         SPECIFIED PEAK 30-MINUTES RAINFALL(INCH)=  0.80
         SPECIFIED PEAK  1-HOUR RAINFALL(INCH) =  1.06
         SPECIFIED PEAK  3-HOUR RAINFALL(INCH) =  1.78
         SPECIFIED PEAK  6-HOUR RAINFALL(INCH) =  2.47
         SPECIFIED PEAK 24-HOUR RAINFALL(INCH) =  4.12

         *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
           5-MINUTE FACTOR = 0.744
          30-MINUTE FACTOR = 0.744
           1-HOUR FACTOR = 0.744
           3-HOUR FACTOR = 0.959
           6-HOUR FACTOR = 0.978
          24-HOUR FACTOR = 0.987

         UNIT HYDROGRAPH TIME UNIT =   5.000 MINUTES
         UNIT INTERVAL PERCENTAGE OF LAG-TIME =   7.228
```


UNIT HYDROGRAPH DETERMINATION

INTERVAL NUMBER	"S" GRAPH MEAN VALUES	UNIT HYDROGRAPH ORDINATES(CFS)
1	0.413	331.560
2	1.239	663.121
3	2.137	721.054
4	3.356	978.393
5	5.133	1426.859
6	7.983	2288.048
7	11.614	2914.856
8	15.758	3326.584
9	19.933	3351.536
10	24.730	3851.310
11	29.303	3671.315
12	34.911	4502.392
13	40.486	4475.615
14	47.306	5474.580
15	53.455	4936.583
16	59.046	4488.520
17	65.258	4987.378
18	70.297	4045.121
19	74.847	3652.966
20	78.416	2865.428
21	81.693	2630.469
22	84.712	2423.833
23	87.186	1985.814
24	89.082	1522.040
25	90.700	1299.019
26	92.191	1197.437
27	93.569	1105.667
28	94.636	856.829
29	95.554	736.750
30	96.291	592.263
31	96.858	454.936
32	97.425	455.150
33	97.941	414.150
34	98.134	154.795
35	98.269	108.687
36	98.404	108.797
37	98.540	108.693
38	98.675	108.687
39	98.811	108.907
40	98.947	108.907
41	99.082	108.693
42	99.217	108.693
43	99.353	108.693
44	99.488	108.693
45	99.624	108.693
46	99.759	108.693
47	99.894	108.693
48	100.000	84.836

TOTAL SOIL-LOSS VOLUME(ACRE-FEET) = 1016.1733

TOTAL STORM RUNOFF VOLUME(ACRE-FEET) = 1231.5459

==========

2 4 - H O U R S T O R M
R U N O F F H Y D R O G R A P H

==========

HYDROGRAPH IN FIVE-MINUTE UNIT INTERVALS(CFS)
(Note: Time indicated is at END of Each Unit Intervals)

TIME(HRS)	VOLUME(AF)	Q(CFS)	0.	875.0	1750.0	2625.0	3500.0
0.083	0.0061	0.88	Q	.	.	.	.
0.167	0.0243	2.65	Q	.	.	.	.
0.250	0.0558	4.57	Q	.	.	.	.
0.333	0.1053	7.19	Q	.	.	.	.
0.417	0.1812	11.01	Q	.	.	.	.
0.500	0.2991	17.13	Q	.	.	.	.
0.583	0.4709	24.94	Q	.	.	.	.
0.667	0.7041	33.87	Q	.	.	.	.
0.750	0.9995	42.89	Q	.	.	.	.
0.833	1.3664	53.27	Q	.	.	.	.
0.917	1.8017	63.21	Q	.	.	.	.
1.000	2.3210	75.39	Q	.	.	.	.
1.083	2.9239	87.54	VQ	.	.	.	.
1.167	3.6291	102.40	VQ	.	.	.	.
1.250	4.4270	115.86	VQ	.	.	.	.
1.333	5.3099	128.19	VQ	.	.	.	.
1.417	6.2870	141.88	VQ	.	.	.	.
1.500	7.3415	153.11	VQ	.	.	.	.
1.583	8.4664	163.34	VQ	.	.	.	.
1.667	9.6476	171.52	VQ	.	.	.	.
1.750	10.8811	179.09	V Q	.	.	.	.
1.833	12.1631	186.15	V Q	.	.	.	.
1.917	13.4859	192.07	V Q	.	.	.	.
2.000	14.8411	196.78	V Q	.	.	.	.
2.083	16.2247	200.91	V Q	.	.	.	.
2.167	17.6352	204.79	V Q	.	.	.	.
2.250	19.0707	208.45	V Q	.	.	.	.
2.333	20.5271	211.46	V Q	.	.	.	.
2.417	22.0020	214.16	V Q	.	.	.	.
2.500	23.4930	216.50	V Q	.	.	.	.
2.583	24.9976	218.47	V Q	.	.	.	.
2.667	26.5160	220.47	V Q	.	.	.	.
2.750	28.0474	222.36	V Q	.	.	.	.
2.833	29.5872	223.58	V Q	.	.	.	.
2.917	31.1346	224.68	.VQ	.	.	.	.
3.000	32.6896	225.79	.VQ	.	.	.	.
3.083	34.2524	226.91	.VQ	.	.	.	.
3.167	35.8229	228.04	.VQ	.	.	.	.
3.250	37.4012	229.18	.VQ	.	.	.	.
3.333	38.9875	230.33	.VQ	.	.	.	.
3.417	40.5817	231.48	.VQ	.	.	.	.
3.500	42.1840	232.65	.VQ	.	.	.	.
3.583	43.7943	233.82	.VQ	.	.	.	.
3.667	45.4128	235.01	.VQ	.	.	.	.
3.750	47.0395	236.20	.VQ	.	.	.	.
3.833	48.6746	237.41	.VQ	.	.	.	.
3.917	50.3180	238.62	.VQ	.	.	.	.

4.000	51.9694	239.79	.VQ	.	.	.	.
4.083	53.6273	240.73	.VQ	.	.	.	.
4.167	55.2919	241.69	.VQ	.	.	.	.
4.250	56.9630	242.65	.VQ	.	.	.	.
4.333	58.6410	243.63	.VQ	.	.	.	.
4.417	60.3257	244.62	.VQ	.	.	.	.
4.500	62.0173	245.62	. Q	.	.	.	.
4.583	63.7158	246.63	. Q	.	.	.	.
4.667	65.4214	247.65	. Q	.	.	.	.
4.750	67.1340	248.68	. Q	.	.	.	.
4.833	68.8539	249.72	. Q	.	.	.	.
4.917	70.5809	250.77	. Q	.	.	.	.
5.000	72.3153	251.84	. Q	.	.	.	.
5.083	74.0572	252.91	. Q	.	.	.	.
5.167	75.8065	254.00	. Q	.	.	.	.
5.250	77.5634	255.10	. Q	.	.	.	.
5.333	79.3280	256.22	. Q	.	.	.	.
5.417	81.1003	257.34	. Q	.	.	.	.
5.500	82.8805	258.48	. Q	.	.	.	.
5.583	84.6686	259.63	. Q	.	.	.	.
5.667	86.4648	260.80	. Q	.	.	.	.
5.750	88.2691	261.98	. Q	.	.	.	.
5.833	90.0816	263.18	. VQ	.	.	.	.
5.917	91.9024	264.38	. VQ	.	.	.	.
6.000	93.7316	265.61	. Q	.	.	.	.
6.083	95.5694	266.84	. Q	.	.	.	.
6.167	97.4158	268.10	. Q	.	.	.	.
6.250	99.2709	269.36	. Q	.	.	.	.
6.333	101.1349	270.65	. Q	.	.	.	.
6.417	103.0078	271.95	. Q	.	.	.	.
6.500	104.8898	273.27	. Q	.	.	.	.
6.583	106.7810	274.60	. Q	.	.	.	.
6.667	108.6815	275.95	. Q	.	.	.	.
6.750	110.5913	277.31	. Q	.	.	.	.
6.833	112.5108	278.70	. Q	.	.	.	.
6.917	114.4399	280.10	. Q	.	.	.	.
7.000	116.3788	281.53	. Q	.	.	.	.
7.083	118.3276	282.97	. Q	.	.	.	.
7.167	120.2865	284.43	. Q	.	.	.	.
7.250	122.2556	285.91	. Q	.	.	.	.
7.333	124.2350	287.41	. QV	.	.	.	.
7.417	126.2249	288.93	. QV	.	.	.	.
7.500	128.2254	290.48	. QV	.	.	.	.
7.583	130.2367	292.04	. QV	.	.	.	.
7.667	132.2589	293.63	. QV	.	.	.	.
7.750	134.2922	295.23	. QV	.	.	.	.
7.833	136.3368	296.87	. QV	.	.	.	.
7.917	138.3927	298.52	. QV	.	.	.	.
8.000	140.4603	300.21	. QV	.	.	.	.
8.083	142.5396	301.91	. QV	.	.	.	.
8.167	144.6308	303.65	. QV	.	.	.	.
8.250	146.7341	305.40	. QV	.	.	.	.
8.333	148.8497	307.19	. QV	.	.	.	.
8.417	150.9778	308.99	. QV	.	.	.	.
8.500	153.1186	310.84	. QV	.	.	.	.
8.583	155.2722	312.70	. Q V	.	.	.	.
8.667	157.4389	314.61	. Q V	.	.	.	.
8.750	159.6189	316.53	. Q V	.	.	.	.

8.833	161.8124	318.50	. Q V	.	.	.	.
8.917	164.0195	320.48	. Q V	.	.	.	.
9.000	166.2407	322.51	. Q V	.	.	.	.
9.083	168.4760	324.57	. Q V	.	.	.	.
9.167	170.7258	326.67	. Q V	.	.	.	.
9.250	172.9902	328.79	. Q V	.	.	.	.
9.333	175.2695	330.96	. Q V	.	.	.	.
9.417	177.5640	333.16	. Q V	.	.	.	.
9.500	179.8740	335.41	. Q V	.	.	.	.
9.583	182.1996	337.68	. Q V	.	.	.	.
9.667	184.5413	340.01	. Q V	.	.	.	.
9.750	186.8992	342.37	. Q V	.	.	.	.
9.833	189.2738	344.79	. Q V	.	.	.	.
9.917	191.6652	347.23	. Q V	.	.	.	.
10.000	194.0739	349.74	. Q V	.	.	.	.
10.083	196.5001	352.28	. Q V	.	.	.	.
10.167	198.9442	354.89	. Q V	.	.	.	.
10.250	201.4065	357.53	. Q V	.	.	.	.
10.333	203.8875	360.24	. Q V	.	.	.	.
10.417	206.3874	362.98	. Q V	.	.	.	.
10.500	208.9066	365.80	. Q V	.	.	.	.
10.583	211.4456	368.66	. Q V	.	.	.	.
10.667	214.0048	371.59	. Q V	.	.	.	.
10.750	216.5845	374.57	. Q V	.	.	.	.
10.833	219.1853	377.64	. Q V	.	.	.	.
10.917	221.8075	380.75	. Q V	.	.	.	.
11.000	224.4518	383.94	. Q V	.	.	.	.
11.083	227.1184	387.19	. Q V	.	.	.	.
11.167	229.8080	390.53	. Q V	.	.	.	.
11.250	232.5211	393.93	. Q V	.	.	.	.
11.333	235.2582	397.43	. Q V	.	.	.	.
11.417	238.0198	400.99	. Q V	.	.	.	.
11.500	240.8067	404.66	. Q V	.	.	.	.
11.583	243.6193	408.39	. Q V	.	.	.	.
11.667	246.4583	412.24	. Q V	.	.	.	.
11.750	249.3244	416.15	. Q V	.	.	.	.
11.833	252.2184	420.20	. Q V	.	.	.	.
11.917	255.1407	424.32	. Q V	.	.	.	.
12.000	258.0923	428.58	. Q V	.	.	.	.
12.083	261.0788	433.63	. Q V	.	.	.	.
12.167	264.1060	439.54	. Q V	.	.	.	.
12.250	267.1753	445.67	. Q V	.	.	.	.
12.333	270.2918	452.52	. Q V	.	.	.	.
12.417	273.4628	460.43	. Q V	.	.	.	.
12.500	276.7021	470.35	. Q V	.	.	.	.
12.583	280.0200	481.75	. Q V.	.	.	.	.
12.667	283.4237	494.23	. Q V.	.	.	.	.
12.750	286.9148	506.90	. Q V.	.	.	.	.
12.833	290.5021	520.88	. Q V.	.	.	.	.
12.917	294.1841	534.62	. Q V.	.	.	.	.
13.000	297.9747	550.40	. Q V.	.	.	.	.
13.083	301.8748	566.30	. Q V.	.	.	.	.
13.167	305.9011	584.61	. Q V.	.	.	.	.
13.250	310.0469	601.97	. Q V	.	.	.	.
13.333	314.3080	618.70	. Q V	.	.	.	.
13.417	318.6930	636.71	. Q V	.	.	.	.
13.500	323.1906	653.05	. Q V	.	.	.	.
13.583	327.7967	668.80	. Q V	.	.	.	.

13.667	332.5022	683.25	. Q V . . .
13.750	337.3057	697.46	. Q V . . .
13.833	342.2068	711.65	. Q .V . . .
13.917	347.2014	725.21	. Q .V . . .
14.000	352.2857	738.24	. Q .V . . .
14.083	357.4698	752.73	. Q .V . . .
14.167	362.7666	769.10	. Q .V . . .
14.250	368.1792	785.91	. Q .V . . .
14.333	373.7164	804.00	. Q. V . . .
14.417	379.3940	824.39	. Q. V . . .
14.500	385.2426	849.21	. Q. V . . .
14.583	391.2838	877.17	. Q V . . .
14.667	397.5356	907.76	. Q V . . .
14.750	404.0015	938.85	. Q V . . .
14.833	410.6993	972.53	. .Q V . . .
14.917	417.6263	1005.79	. .Q V . . .
15.000	424.8157	1043.91	. .Q V . . .
15.083	432.2728	1082.77	. . Q V . . .
15.167	440.0397	1127.75	. . Q V . . .
15.250	448.1073	1171.42	. . QV . . .
15.333	456.4736	1214.78	. . QV . . .
15.417	465.1393	1258.26	. . QV . . .
15.500	474.0640	1295.86	. . QV . . .
15.583	483.2502	1333.84	. . Q . . .
15.667	492.6779	1368.90	. . QV . . .
15.750	502.3381	1402.67	. . Q . . .
15.833	512.2044	1432.58	. . Q . . .
15.917	522.2888	1464.26	. . Q . . .
16.000	532.6876	1509.90	. . Q . . .
16.083	543.9142	1630.10	. . VQ . . .
16.167	555.9641	1749.64	. . VQ. . .
16.250	568.5558	1828.32	. . V Q . .
16.333	582.0397	1957.87	. . V . Q . .
16.417	596.8431	2149.45	. . V. Q . .
16.500	613.4393	2409.76	. . V. Q . .
16.583	631.3632	2602.55	. . V Q. .
16.667	650.2018	2735.38	. . .V .Q .
16.750	669.3168	2775.50	. . .V .Q .
16.833	689.4313	2920.63	. . . V . Q .
16.917	709.7371	2948.39	. . . V . Q .
17.000	731.5887	3172.87	. . . V . Q .
17.083	753.7737	3221.25	. . . V . Q .
17.167	777.2701	3411.67	. . . V . Q .
17.250	799.8107	3272.90	. . . V . Q .
17.333	821.4713	3145.10	. . . V . Q .
17.417	843.2782	3166.37	. . . V . Q .
17.500	863.2065	2893.59	. . . V . Q .
17.583	881.8264	2703.60	. . . V Q .
17.667	898.6975	2449.69	. . . Q V. .
17.750	914.6903	2322.15	. . . Q V. .
17.833	929.7641	2188.71	. . . Q V .
17.917	943.6025	2009.34	. . . Q V .
18.000	956.1693	1824.70	. . Q .V .
18.083	967.8914	1702.05	. . Q. .V .
18.167	978.9662	1608.07	. . Q . .V .
18.250	989.3998	1514.95	. . Q . . V .
18.333	998.9830	1391.49	. . Q . . V .
18.417	1007.8851	1292.59	. . Q . . V .

18.500	1016.1315	1197.37	. . Q . . V .
18.583	1023.7831	1111.03	. . Q . . V .
18.667	1031.0360	1053.12	. . Q . . V .
18.750	1037.8219	985.30	. .Q . . V .
18.833	1043.8790	879.50	. Q . . V .
18.917	1049.5631	825.33	. Q. . . V .
19.000	1054.9932	788.45	. Q. . . V .
19.083	1060.1958	755.42	. Q . . . V .
19.167	1065.1503	719.39	. Q . . . V .
19.250	1069.8757	686.13	. Q . . . V .
19.333	1074.3987	656.74	. Q . . . V .
19.417	1078.7301	628.92	. Q . . . V .
19.500	1082.8948	604.71	. Q . . . V .
19.583	1086.9075	582.64	. Q . . . V .
19.667	1090.7830	562.72	. Q . . . V .
19.750	1094.5255	543.42	. Q . . . V .
19.833	1098.1444	525.46	. Q . . . V .
19.917	1101.6354	506.90	. Q . . . V .
20.000	1104.9647	483.43	. Q . . . V .
20.083	1108.0697	450.84	. Q . . . V .
20.167	1111.0846	437.76	. Q . . . V .
20.250	1114.0250	426.95	. Q . . . V .
20.333	1116.8977	417.11	. Q . . . V .
20.417	1119.7009	407.04	. Q . . . V .
20.500	1122.4410	397.86	. Q . . . V .
20.583	1125.1233	389.46	. Q . . . V .
20.667	1127.7502	381.43	. Q . . . V .
20.750	1130.3246	373.80	. Q . . . V .
20.833	1132.8522	367.00	. Q . . . V .
20.917	1135.3353	360.56	. Q . . . V .
21.000	1137.7766	354.47	. Q . . . V .
21.083	1140.1803	349.02	. Q . . . V .
21.167	1142.5479	343.77	. Q . . . V .
21.250	1144.8806	338.72	. Q . . . V .
21.333	1147.1799	333.86	. Q . . . V .
21.417	1149.4469	329.17	. Q . . . V .
21.500	1151.6827	324.64	. Q . . . V .
21.583	1153.8883	320.26	. Q . . . V .
21.667	1156.0647	316.02	. Q . . . V .
21.750	1158.2129	311.92	. Q . . . V .
21.833	1160.3337	307.94	. Q . . . V .
21.917	1162.4280	304.09	. Q . . . V .
22.000	1164.4968	300.40	. Q . . . V .
22.083	1166.5422	297.00	. Q . . . V .
22.167	1168.5649	293.70	. Q . . . V .
22.250	1170.5656	290.49	. Q . . . V .
22.333	1172.5448	287.38	. Q . . . V .
22.417	1174.5032	284.36	. Q . . . V .
22.500	1176.4413	281.42	. Q . . . V .
22.583	1178.3597	278.55	. Q . . . V .
22.667	1180.2590	275.77	. Q . . . V .
22.750	1182.1396	273.06	. Q . . . V .
22.833	1184.0020	270.42	. Q . . . V .
22.917	1185.8466	267.84	. Q . . . V .
23.000	1187.6740	265.33	. Q . . . V .
23.083	1189.4844	262.88	. Q . . . V .
23.167	1191.2783	260.49	. Q . . . V .
23.250	1193.0563	258.15	. Q . . . V .

23.333	1194.8185	255.87	. Q	.	.	.	V	.
23.417	1196.5653	253.65	. Q	.	.	.	V	.
23.500	1198.2972	251.47	. Q	.	.	.	V	.
23.583	1200.0145	249.34	. Q	.	.	.	V	.
23.667	1201.7174	247.26	. Q	.	.	.	V.	
23.750	1203.4062	245.23	. Q	.	.	.	V.	
23.833	1205.0814	243.23	. Q	.	.	.	V.	
23.917	1206.7432	241.28	. Q	.	.	.	V.	
24.000	1208.3917	239.37	. Q	.	.	.	V.	
24.083	1210.0214	236.62	. Q	.	.	.	V.	
24.167	1211.6263	233.04	. Q	.	.	.	V.	
24.250	1213.2058	229.35	. Q	.	.	.	V.	
24.333	1214.7555	225.02	. Q	.	.	.	V.	
24.417	1216.2676	219.55	. Q	.	.	.	V.	
24.500	1217.7266	211.85	. Q	.	.	.	V.	
24.583	1219.1216	202.56	. Q	.	.	.	V.	
24.667	1220.4457	192.26	. Q	.	.	.	V.	
24.750	1221.6990	181.97	. Q	.	.	.	V.	
24.833	1222.8728	170.44	.Q	.	.	.	V.	
24.917	1223.9712	159.48	.Q	.	.	.	V.	
25.000	1224.9795	146.40	.Q	.	.	.	V.	
25.083	1225.8988	133.48	.Q	.	.	.	V.	
25.167	1226.7115	118.01	.Q	.	.	.	V.	
25.250	1227.4283	104.08	.Q	.	.	.	V.	
25.333	1228.0581	91.44	.Q	.	.	.	V.	
25.417	1228.5923	77.56	Q	.	.	.	V.	
25.500	1229.0488	66.28	Q	.	.	.	V.	
25.583	1229.4353	56.12	Q	.	.	.	V.	
25.667	1229.7667	48.13	Q	.	.	.	V.	
25.750	1230.0477	40.81	Q	.	.	.	V.	
25.833	1230.2825	34.09	Q	.	.	.	V.	
25.917	1230.4794	28.58	Q	.	.	.	V.	
26.000	1230.6470	24.34	Q	.	.	.	V.	
26.083	1230.7897	20.73	Q	.	.	.	V.	
26.167	1230.9095	17.40	Q	.	.	.	V.	
26.250	1231.0083	14.35	Q	.	.	.	V.	
26.333	1231.0907	11.97	Q	.	.	.	V.	
26.417	1231.1591	9.93	Q	.	.	.	V.	
26.500	1231.2162	8.29	Q	.	.	.	V.	
26.583	1231.2645	7.03	Q	.	.	.	V.	
26.667	1231.3042	5.77	Q	.	.	.	V.	
26.750	1231.3361	4.63	Q	.	.	.	V.	
26.833	1231.3649	4.19	Q	.	.	.	V.	
26.917	1231.3915	3.87	Q	.	.	.	V.	
27.000	1231.4159	3.55	Q	.	.	.	V.	
27.083	1231.4382	3.24	Q	.	.	.	V.	
27.167	1231.4584	2.93	Q	.	.	.	V.	
27.250	1231.4764	2.62	Q	.	.	.	V.	
27.333	1231.4923	2.31	Q	.	.	.	V.	
27.417	1231.5061	2.01	Q	.	.	.	V.	
27.500	1231.5178	1.71	Q	.	.	.	V.	
27.583	1231.5275	1.41	Q	.	.	.	V.	
27.667	1231.5352	1.11	Q	.	.	.	V.	
27.750	1231.5408	0.81	Q	.	.	.	V.	
27.833	1231.5443	0.52	Q	.	.	.	V.	
27.917	1231.5459	0.23	Q	.	.	.	V.	

TIME DURATION(minutes) OF PERCENTILES OF ESTIMATED PEAK FLOW RATE:

(Note: 100% of Peak Flow Rate estimate assumed to have an instantaneous time duration)

Percentile of Estimated Peak Flow Rate	Duration (minutes)
0%	1675.0
10%	690.0
20%	340.0
30%	225.0
40%	165.0
50%	115.0
60%	90.0
70%	75.0
80%	55.0
90%	30.0

==========

END OF FLOODSCx ROUTING ANALYSIS

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**************************************************************************

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             USING COUNTY HYDROLOGY MANUAL OF ORANGE(1986)
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             Ver. 20.0  Release Date: 06/01/2013  License ID 1237

                        Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RMV PA-3 ROMP AMENDMENT 2022 - NODE 133U                              *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL             *
* 50-YR EV NOV 2022 ROKAMOTO                                            *
 ************************************************************************

  FILE NAME: EV5033US.DAT
  TIME/DATE OF STUDY: 16:17 11/07/2022


                       ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    133.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =   54354.000 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.381 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.292; LOW LOSS FRACTION = 0.406
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.45; 30-MINUTE =  0.87;  1-HOUR =  1.20
    3-HOUR =  2.23;    6-HOUR =  3.31; 24-HOUR =  5.82
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.328; 30-MINUTE = 0.381;  1-HOUR = 0.422
    3-HOUR = 0.771;    6-HOUR = 0.897; 24-HOUR = 0.940
==========================================================================
```



```
 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV5033US.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 10100.00     133.00| Subarea (UH) Added to Stream #1|       0.0     18104.5|
18.000 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
-------------------------------------+

   END OF FLOODSCx ROUTING ANALYSIS
```

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             Ver. 17.0  Release Date: 07/01/2010  License ID 1527

                          Analysis prepared by:



 ************************** DESCRIPTION OF STUDY **************************
* RMV PA-3 ROMP AMENDMENT 2022 - NODE 134C                                 *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL                *
* 50-YR EV AUG 2023 ROKAMOTO                                               *
 **************************************************************************

  FILE NAME: EV5034CS.DAT
  TIME/DATE OF STUDY: 07:23 08/10/2023


                         ** INPUT SUMMARY **


****************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    134.00 IS CODE =   1
----------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
============================================================================
  WATERSHED AREA =   66557.602 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.479 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.285; LOW LOSS FRACTION = 0.416
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.44; 30-MINUTE =  0.85;  1-HOUR =  1.17
    3-HOUR =  2.15;    6-HOUR =  3.16; 24-HOUR =  5.51
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.294; 30-MINUTE = 0.352;  1-HOUR = 0.397
    3-HOUR = 0.741;    6-HOUR = 0.887; 24-HOUR = 0.933
============================================================================
```



```
 +--------------------------------------------------------------------------------
--------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV5034CS.DAT   ]
Page:   1 of    |
 +--------------------+-------------------------------+---------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                               | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS  |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +--------------------+-------------------------------+---------------------+-
-----------+-------------+-----------+
 | 10100.00     134.00| Subarea (UH) Added to Stream #1|      0.0     20086.5|
18.083 |            |           |
 +--------------------+-------------------------------+---------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                         |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                 |
 +--------------------------------------------------------------------------------
--------------------------------------+


   END OF FLOODSCx ROUTING ANALYSIS
```

```
************************************************************************

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                          Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RMV PA-3 ROMP AMENDMENT 2022 - NODE 134T                              *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL             *
* 50-YR EV OCT 2022 ROKAMOTO                                            *
 ************************************************************************

  FILE NAME: EV5034TS.DAT
  TIME/DATE OF STUDY: 10:11 10/25/2022


************************************************************************
  FLOW PROCESS FROM NODE  13500.00 TO NODE    134.00 IS CODE =   1
------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS)<<<<<
========================================================================

      (UNIT-HYDROGRAPH ADDED TO STREAM #1)

         WATERSHED AREA =    3859.700 ACRES
         BASEFLOW =   0.000 CFS/SQUARE-MILE
         *USER ENTERED "LAG" TIME =    1.294 HOURS
         VALLEY(DEVELOPED) S-GRAPH SELECTED
         MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.284
         LOW LOSS FRACTION = 0.431
         *HYDROGRAPH MODEL #1 SPECIFIED*

         SPECIFIED PEAK  5-MINUTES RAINFALL(INCH)=  0.37
         SPECIFIED PEAK 30-MINUTES RAINFALL(INCH)=  0.80
         SPECIFIED PEAK  1-HOUR RAINFALL(INCH) =  1.06
         SPECIFIED PEAK  3-HOUR RAINFALL(INCH) =  1.78
         SPECIFIED PEAK  6-HOUR RAINFALL(INCH) =  2.47
         SPECIFIED PEAK 24-HOUR RAINFALL(INCH) =  4.12

         *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
           5-MINUTE FACTOR = 0.828
          30-MINUTE FACTOR = 0.828
           1-HOUR FACTOR = 0.828
           3-HOUR FACTOR = 0.974
           6-HOUR FACTOR = 0.987
          24-HOUR FACTOR = 0.992

         UNIT HYDROGRAPH TIME UNIT =   5.000 MINUTES
         UNIT INTERVAL PERCENTAGE OF LAG-TIME =   6.440
```


UNIT HYDROGRAPH DETERMINATION

INTERVAL NUMBER	"S" GRAPH MEAN VALUES	UNIT HYDROGRAPH ORDINATES(CFS)
1	0.368	171.775
2	1.104	343.551
3	1.855	350.708
4	2.877	476.670
5	4.113	577.004
6	6.145	948.446
7	9.003	1334.511
8	12.275	1527.052
9	16.108	1789.284
10	19.769	1708.620
11	24.068	2007.088
12	28.051	1859.141
13	32.847	2238.747
14	37.674	2252.826
15	43.292	2622.539
16	49.468	2882.823
17	54.488	2343.198
18	59.648	2408.494
19	65.190	2587.232
20	69.701	2105.518
21	73.826	1925.250
22	77.314	1628.507
23	80.204	1348.844
24	83.085	1344.881
25	85.601	1174.542
26	87.656	958.971
27	89.273	754.690
28	90.705	668.617
29	92.042	623.884
30	93.282	578.795
31	94.337	492.790
32	95.157	382.441
33	95.940	365.667
34	96.489	256.376
35	96.994	235.710
36	97.499	235.849
37	97.955	212.561
38	98.122	77.935
39	98.243	56.343
40	98.364	56.485
41	98.484	56.272
42	98.605	56.272
43	98.726	56.485
44	98.846	56.204
45	98.967	56.485
46	99.088	56.343
47	99.208	56.343
48	99.329	56.343

49	99.450	56.343
50	99.571	56.343
51	99.691	56.343
52	99.812	56.343
53	99.933	56.343
54	100.000	31.421

TOTAL SOIL-LOSS VOLUME(ACRE-FEET) = 519.9105
TOTAL STORM RUNOFF VOLUME(ACRE-FEET) = 794.5671

==========

2 4 - H O U R S T O R M
R U N O F F H Y D R O G R A P H

==========

HYDROGRAPH IN FIVE-MINUTE UNIT INTERVALS(CFS)
(Note: Time indicated is at END of Each Unit Intervals)

TIME(HRS)	VOLUME(AF)	Q(CFS)	0.	525.0	1050.0	1575.0	2100.0
0.083	0.0036	0.52	Q	.	.	.	.
0.167	0.0143	1.55	Q	.	.	.	.
0.250	0.0323	2.62	Q	.	.	.	.
0.333	0.0603	4.06	Q	.	.	.	.
0.417	0.1003	5.81	Q	.	.	.	.
0.500	0.1602	8.69	Q	.	.	.	.
0.583	0.2479	12.74	Q	.	.	.	.
0.667	0.3676	17.38	Q	.	.	.	.
0.750	0.5249	22.83	Q	.	.	.	.
0.833	0.7181	28.06	Q	.	.	.	.
0.917	0.9536	34.20	Q	.	.	.	.
1.000	1.2285	39.91	Q	.	.	.	.
1.083	1.5507	46.79	Q	.	.	.	.
1.167	1.9208	53.74	VQ	.	.	.	.
1.250	2.3466	61.82	VQ	.	.	.	.
1.333	2.8336	70.71	VQ	.	.	.	.
1.417	3.3708	78.01	VQ	.	.	.	.
1.500	3.9599	85.53	VQ	.	.	.	.
1.583	4.6046	93.62	VQ	.	.	.	.
1.667	5.2952	100.28	VQ	.	.	.	.
1.750	6.0281	106.42	V Q	.	.	.	.
1.833	6.7973	111.69	V Q	.	.	.	.
1.917	7.5972	116.14	V Q	.	.	.	.
2.000	8.4276	120.59	V Q	.	.	.	.
2.083	9.2854	124.54	V Q	.	.	.	.
2.167	10.1660	127.86	V Q	.	.	.	.
2.250	11.0653	130.58	V Q	.	.	.	.
2.333	11.9817	133.05	V Q	.	.	.	.
2.417	12.9142	135.40	V Q	.	.	.	.
2.500	13.8620	137.62	V Q	.	.	.	.
2.583	14.8234	139.60	V Q	.	.	.	.
2.667	15.7962	141.25	V Q	.	.	.	.
2.750	16.7800	142.86	V Q	.	.	.	.
2.833	17.7728	144.14	V Q	.	.	.	.
2.917	18.7740	145.38	V Q	.	.	.	.
3.000	19.7837	146.61	V Q	.	.	.	.
3.083	20.8016	147.79	.VQ	.	.	.	.
3.167	21.8248	148.57	.VQ	.	.	.	.
3.250	22.8529	149.29	.VQ	.	.	.	.
3.333	23.8861	150.01	.VQ	.	.	.	.
3.417	24.9243	150.75	.VQ	.	.	.	.
3.500	25.9676	151.48	.VQ	.	.	.	.
3.583	27.0160	152.23	.VQ	.	.	.	.
3.667	28.0696	152.98	.VQ	.	.	.	.
3.750	29.1283	153.74	.VQ	.	.	.	.
3.833	30.1924	154.50	.VQ	.	.	.	.
3.917	31.2617	155.27	.VQ	.	.	.	.

4.000	32.3364	156.04	.VQ	.	.	.	.
4.083	33.4164	156.83	.VQ	.	.	.	.
4.167	34.5019	157.61	.V Q	.	.	.	.
4.250	35.5929	158.41	.V Q	.	.	.	.
4.333	36.6894	159.21	.V Q	.	.	.	.
4.417	37.7915	160.03	.V Q	.	.	.	.
4.500	38.8988	160.77	.V Q	.	.	.	.
4.583	40.0105	161.42	. VQ	.	.	.	.
4.667	41.1268	162.08	. VQ	.	.	.	.
4.750	42.2477	162.76	. VQ	.	.	.	.
4.833	43.3733	163.43	. VQ	.	.	.	.
4.917	44.5036	164.12	. VQ	.	.	.	.
5.000	45.6386	164.81	. VQ	.	.	.	.
5.083	46.7785	165.51	. VQ	.	.	.	.
5.167	47.9232	166.21	. VQ	.	.	.	.
5.250	49.0729	166.93	. VQ	.	.	.	.
5.333	50.2275	167.65	. VQ	.	.	.	.
5.417	51.3872	168.39	. VQ	.	.	.	.
5.500	52.5519	169.12	. VQ	.	.	.	.
5.583	53.7218	169.87	. VQ	.	.	.	.
5.667	54.8970	170.63	. VQ	.	.	.	.
5.750	56.0774	171.40	. VQ	.	.	.	.
5.833	57.2631	172.17	. VQ	.	.	.	.
5.917	58.4542	172.95	. VQ	.	.	.	.
6.000	59.6508	173.74	. Q	.	.	.	.
6.083	60.8530	174.55	. Q	.	.	.	.
6.167	62.0607	175.36	. Q	.	.	.	.
6.250	63.2741	176.18	. Q	.	.	.	.
6.333	64.4932	177.01	. Q	.	.	.	.
6.417	65.7181	177.86	. Q	.	.	.	.
6.500	66.9489	178.71	. Q	.	.	.	.
6.583	68.1856	179.58	. Q	.	.	.	.
6.667	69.4284	180.45	. Q	.	.	.	.
6.750	70.6773	181.34	. Q	.	.	.	.
6.833	71.9323	182.23	. Q	.	.	.	.
6.917	73.1936	183.15	. Q	.	.	.	.
7.000	74.4613	184.06	. Q	.	.	.	.
7.083	75.7354	185.00	. Q	.	.	.	.
7.167	77.0160	185.94	. Q	.	.	.	.
7.250	78.3032	186.90	. Q	.	.	.	.
7.333	79.5971	187.87	. QV	.	.	.	.
7.417	80.8978	188.86	. QV	.	.	.	.
7.500	82.2053	189.85	. QV	.	.	.	.
7.583	83.5199	190.87	. QV	.	.	.	.
7.667	84.8415	191.89	. QV	.	.	.	.
7.750	86.1702	192.94	. QV	.	.	.	.
7.833	87.5062	193.99	. QV	.	.	.	.
7.917	88.8497	195.06	. QV	.	.	.	.
8.000	90.2005	196.15	. QV	.	.	.	.
8.083	91.5590	197.25	. QV	.	.	.	.
8.167	92.9252	198.37	. QV	.	.	.	.
8.250	94.2992	199.51	. QV	.	.	.	.
8.333	95.6812	200.66	. QV	.	.	.	.
8.417	97.0712	201.83	. QV	.	.	.	.
8.500	98.4693	203.01	. QV	.	.	.	.
8.583	99.8758	204.22	. Q V	.	.	.	.
8.667	101.2908	205.44	. Q V	.	.	.	.
8.750	102.7143	206.69	. Q V	.	.	.	.

8.833	104.1465	207.95	. Q V	.	.	.	.
8.917	105.5875	209.24	. Q V	.	.	.	.
9.000	107.0376	210.54	. QV	.	.	.	.
9.083	108.4968	211.88	. QV	.	.	.	.
9.167	109.9652	213.22	. QV	.	.	.	.
9.250	111.4432	214.60	. QV	.	.	.	.
9.333	112.9307	215.99	. QV	.	.	.	.
9.417	114.4280	217.41	. QV	.	.	.	.
9.500	115.9353	218.85	. QV	.	.	.	.
9.583	117.4527	220.33	. QV	.	.	.	.
9.667	118.9803	221.81	. QV	.	.	.	.
9.750	120.5185	223.34	. Q V	.	.	.	.
9.833	122.0673	224.89	. Q V	.	.	.	.
9.917	123.6270	226.47	. Q V	.	.	.	.
10.000	125.1978	228.07	. Q V	.	.	.	.
10.083	126.7798	229.72	. Q V	.	.	.	.
10.167	128.3733	231.38	. Q V	.	.	.	.
10.250	129.9786	233.08	. Q V	.	.	.	.
10.333	131.5957	234.81	. Q V	.	.	.	.
10.417	133.2251	236.59	. Q V	.	.	.	.
10.500	134.8669	238.38	. Q V	.	.	.	.
10.583	136.5214	240.23	. Q V	.	.	.	.
10.667	138.1887	242.10	. Q V	.	.	.	.
10.750	139.8693	244.02	. Q V	.	.	.	.
10.833	141.5633	245.97	. Q V	.	.	.	.
10.917	143.2712	247.98	. Q V	.	.	.	.
11.000	144.9930	250.01	. Q V	.	.	.	.
11.083	146.7293	252.10	. Q V	.	.	.	.
11.167	148.4801	254.23	. Q V	.	.	.	.
11.250	150.2461	256.42	. Q V	.	.	.	.
11.333	152.0273	258.64	. Q V	.	.	.	.
11.417	153.8244	260.93	. Q V	.	.	.	.
11.500	155.6374	263.25	. Q V	.	.	.	.
11.583	157.4669	265.65	. Q V	.	.	.	.
11.667	159.3133	268.09	. Q V	.	.	.	.
11.750	161.1770	270.61	. Q V	.	.	.	.
11.833	163.0583	273.17	. Q V	.	.	.	.
11.917	164.9579	275.81	. Q V	.	.	.	.
12.000	166.8759	278.51	. Q V	.	.	.	.
12.083	168.8159	281.69	. Q V	.	.	.	.
12.167	170.7809	285.31	. Q V	.	.	.	.
12.250	172.7717	289.06	. Q V	.	.	.	.
12.333	174.7906	293.15	. Q V	.	.	.	.
12.417	176.8400	297.58	. Q V	.	.	.	.
12.500	178.9264	302.93	. Q V.	.	.	.	.
12.583	181.0565	309.29	. Q V.	.	.	.	.
12.667	183.2340	316.17	. Q V.	.	.	.	.
12.750	185.4640	323.79	. Q V.	.	.	.	.
12.833	187.7458	331.32	. Q V.	.	.	.	.
12.917	190.0851	339.68	. Q V.	.	.	.	.
13.000	192.4805	347.80	. Q V.	.	.	.	.
13.083	194.9389	356.96	. Q V.	.	.	.	.
13.167	197.4613	366.26	. Q V.	.	.	.	.
13.250	200.0550	376.60	. Q V	.	.	.	.
13.333	202.7248	387.66	. Q V	.	.	.	.
13.417	205.4638	397.69	. Q V	.	.	.	.
13.500	208.2738	408.02	. Q V	.	.	.	.
13.583	211.1593	418.97	. Q V	.	.	.	.

13.667	214.1138	428.99	. Q V . . .
13.750	217.1361	438.84	. Q V . . .
13.833	220.2228	448.19	. Q .V . . .
13.917	223.3713	457.17	. Q .V . . .
14.000	226.5831	466.34	. Q .V . . .
14.083	229.8615	476.04	. Q.V . . .
14.167	233.2091	486.06	. Q.V . . .
14.250	236.6250	495.99	. Q.V . . .
14.333	240.1128	506.42	. Q. V . . .
14.417	243.6768	517.49	. Q. V . . .
14.500	247.3273	530.06	. Q V . . .
14.583	251.0755	544.23	. Q V . . .
14.667	254.9264	559.16	. Q V . . .
14.750	258.8897	575.48	. Q V . . .
14.833	262.9644	591.65	. .Q V . . .
14.917	267.1616	609.42	. .Q V . . .
15.000	271.4807	627.15	. .Q V . . .
15.083	275.9357	646.86	. . QV . . .
15.167	280.5288	666.91	. . Q V . . .
15.250	285.2745	689.08	. . QV . . .
15.333	290.1844	712.91	. . QV . . .
15.417	295.2424	734.42	. . QV . . .
15.500	300.4465	755.64	. . QV . . .
15.583	305.8111	778.95	. . QV . . .
15.667	311.3272	800.93	. . Q . . .
15.750	317.0020	823.97	. . Q . . .
15.833	322.8257	845.60	. . Q . . .
15.917	328.8121	869.23	. . Q . . .
16.000	335.0248	902.09	. . VQ . . .
16.083	341.7368	974.58	. . VQ . . .
16.167	348.9438	1046.45	. . V Q. . .
16.250	356.4006	1082.73	. . V Q . .
16.333	364.3454	1153.58	. . V .Q . .
16.417	372.8332	1232.43	. . V . Q . .
16.500	382.3028	1374.98	. . V. Q . .
16.583	392.7105	1511.20	. . V. Q . .
16.667	403.6558	1589.26	. . V Q .
16.750	415.1931	1675.21	. . V .Q .
16.833	426.7850	1683.14	. . .V . Q .
16.917	438.9674	1768.90	. . . V . Q .
17.000	451.1451	1768.19	. . . V . Q .
17.083	464.0944	1880.24	. . . V . Q .
17.167	477.2867	1915.53	. . . V . Q .
17.250	491.1438	2012.04	. . . V . Q .
17.333	505.2489	2048.07	. . . V . Q.
17.417	518.4039	1910.10	. . . V . Q .
17.500	531.4771	1898.22	. . . V . Q .
17.583	544.5169	1893.39	. . . V . Q .
17.667	556.4719	1735.87	. . . V . Q .
17.750	567.7141	1632.36	. . . V .Q .
17.833	578.1108	1509.60	. . . QV. .
17.917	587.7606	1401.16	. . . Q V. .
18.000	597.0652	1351.03	. . . Q V .
18.083	605.7384	1259.34	. . . Q V .
18.167	613.7081	1157.20	. . . Q V .
18.250	621.0247	1062.36	. . Q .V .
18.333	627.9118	1000.01	. . Q. .V .
18.417	634.4639	951.36	. . Q . .V .

18.500	640.6663	900.60	. . Q . . V .
18.583	646.4436	838.87	. . Q . . V .
18.667	651.7837	775.38	. . Q . . V .
18.750	656.8375	733.82	. . Q . . V .
18.833	661.5013	677.19	. . Q . . V .
18.917	665.9308	643.15	. . Q . . V .
19.000	670.1517	612.89	. .Q . . V .
19.083	674.1130	575.18	. Q . . V .
19.167	677.6711	516.63	. Q. . . V .
19.250	681.0276	487.35	. Q. . . V .
19.333	684.2384	466.21	. Q . . . V .
19.417	687.3236	447.97	. Q . . . V .
19.500	690.2831	429.72	. Q . . . V .
19.583	693.1212	412.08	. Q . . . V .
19.667	695.8523	396.56	. Q . . . V .
19.750	698.4847	382.23	. Q . . . V .
19.833	701.0302	369.59	. Q . . . V .
19.917	703.4985	358.41	. Q . . . V .
20.000	705.8923	347.58	. Q . . . V .
20.083	708.2167	337.50	. Q . . . V .
20.167	710.4794	328.55	. Q . . . V .
20.250	712.6844	320.17	. Q . . . V .
20.333	714.8304	311.59	. Q . . . V .
20.417	716.9101	301.97	. Q . . . V .
20.500	718.8856	286.84	. Q . . . V .
20.583	720.7581	271.88	. Q . . . V .
20.667	722.5857	265.38	. Q . . . V .
20.750	724.3746	259.75	. Q . . . V .
20.833	726.1276	254.54	. Q . . . V .
20.917	727.8453	249.41	. Q . . . V .
21.000	729.5294	244.52	. Q . . . V .
21.083	731.1816	239.90	. Q . . . V .
21.167	732.8054	235.79	. Q . . . V .
21.250	734.4025	231.89	. Q . . . V .
21.333	735.9737	228.14	. Q . . . V .
21.417	737.5201	224.54	. Q . . . V .
21.500	739.0433	221.16	. Q . . . V .
21.583	740.5447	218.01	. Q . . . V .
21.667	742.0253	214.98	. Q . . . V .
21.750	743.4858	212.06	. Q . . . V .
21.833	744.9268	209.23	. Q . . . V .
21.917	746.3489	206.50	. Q . . . V .
22.000	747.7529	203.86	. Q . . . V .
22.083	749.1393	201.30	. Q . . . V .
22.167	750.5085	198.81	. Q . . . V .
22.250	751.8612	196.41	. Q . . . V .
22.333	753.1978	194.07	. Q . . . V .
22.417	754.5187	191.80	. Q . . . V .
22.500	755.8248	189.65	. Q . . . V .
22.583	757.1171	187.63	. Q . . . V .
22.667	758.3958	185.67	. Q . . . V .
22.750	759.6614	183.77	. Q . . . V .
22.833	760.9143	181.91	. Q . . . V .
22.917	762.1547	180.11	. Q . . . V .
23.000	763.3830	178.35	. Q . . . V .
23.083	764.5995	176.64	. Q . . . V .
23.167	765.8045	174.97	. Q . . . V .
23.250	766.9983	173.34	. Q . . . V .

23.333	768.1812	171.75	.	Q	.	.	.	V .
23.417	769.3533	170.20	.	Q	.	.	.	V .
23.500	770.5151	168.68	.	Q	.	.	.	V .
23.583	771.6666	167.21	.	Q	.	.	.	V .
23.667	772.8082	165.76	.	Q	.	.	.	V .
23.750	773.9401	164.35	.	Q	.	.	.	V .
23.833	775.0625	162.97	.	Q	.	.	.	V.
23.917	776.1756	161.62	.	Q	.	.	.	V.
24.000	777.2796	160.30	.	Q	.	.	.	V.
24.083	778.3711	158.49	.	Q	.	.	.	V.
24.167	779.4468	156.19	.	Q	.	.	.	V.
24.250	780.5067	153.91	.	Q	.	.	.	V.
24.333	781.5486	151.28	.	Q	.	.	.	V.
24.417	782.5704	148.38	.	Q	.	.	.	V.
24.500	783.5649	144.39	.	Q	.	.	.	V.
24.583	784.5242	139.29	.	Q	.	.	.	V.
24.667	785.4446	133.66	.	Q	.	.	.	V.
24.750	786.3212	127.28	.	Q	.	.	.	V.
24.833	787.1559	121.20	.	Q	.	.	.	V.
24.917	787.9430	114.28	.	Q	.	.	.	V.
25.000	788.6858	107.86	.	Q	.	.	.	V.
25.083	789.3769	100.34	.	Q	.	.	.	V.
25.167	790.0164	92.85	.	Q	.	.	.	V.
25.250	790.5969	84.30	.	Q	.	.	.	V.
25.333	791.1136	75.02	.	Q	.	.	.	V.
25.417	791.5781	67.44	.	Q	.	.	.	V.
25.500	791.9894	59.72	.	Q	.	.	.	V.
25.583	792.3442	51.51	Q	.	.	.	.	V.
25.667	792.6528	44.82	Q	.	.	.	.	V.
25.750	792.9194	38.71	Q	.	.	.	.	V.
25.833	793.1504	33.54	Q	.	.	.	.	V.
25.917	793.3518	29.24	Q	.	.	.	.	V.
26.000	793.5239	24.99	Q	.	.	.	.	V.
26.083	793.6705	21.28	Q	.	.	.	.	V.
26.167	793.7961	18.25	Q	.	.	.	.	V.
26.250	793.9053	15.85	Q	.	.	.	.	V.
26.333	793.9998	13.73	Q	.	.	.	.	V.
26.417	794.0807	11.75	Q	.	.	.	.	V.
26.500	794.1491	9.93	Q	.	.	.	.	V.
26.583	794.2068	8.38	Q	.	.	.	.	V.
26.667	794.2562	7.17	Q	.	.	.	.	V.
26.750	794.2976	6.02	Q	.	.	.	.	V.
26.833	794.3334	5.20	Q	.	.	.	.	V.
26.917	794.3641	4.46	Q	.	.	.	.	V.
27.000	794.3897	3.72	Q	.	.	.	.	V.
27.083	794.4107	3.05	Q	.	.	.	.	V.
27.167	794.4299	2.79	Q	.	.	.	.	V.
27.250	794.4479	2.60	Q	.	.	.	.	V.
27.333	794.4645	2.42	Q	.	.	.	.	V.
27.417	794.4799	2.23	Q	.	.	.	.	V.
27.500	794.4940	2.05	Q	.	.	.	.	V.
27.583	794.5068	1.86	Q	.	.	.	.	V.
27.667	794.5184	1.68	Q	.	.	.	.	V.
27.750	794.5287	1.50	Q	.	.	.	.	V.
27.833	794.5378	1.32	Q	.	.	.	.	V.
27.917	794.5457	1.14	Q	.	.	.	.	V.
28.000	794.5524	0.96	Q	.	.	.	.	V.
28.083	794.5578	0.79	Q	.	.	.	.	V.

28.167	794.5620	0.61	Q	.	.	.	V.	
28.250	794.5651	0.44	Q	.	.	.	V.	
28.333	794.5669	0.27	Q	.	.	.	V.	
28.417	794.5676	0.10	Q	.	.	.	V	

TIME DURATION(minutes) OF PERCENTILES OF ESTIMATED PEAK FLOW RATE:
(Note: 100% of Peak Flow Rate estimate assumed to have
an instantaneous time duration)

Percentile of Estimated Peak Flow Rate	Duration (minutes)
0%	1705.0
10%	800.0
20%	365.0
30%	240.0
40%	175.0
50%	130.0
60%	105.0
70%	80.0
80%	60.0
90%	35.0

END OF FLOODSCx ROUTING ANALYSIS

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**************************************************************************

             F L O O D    R O U T I N G    A N A L Y S I S
             USING COUNTY HYDROLOGY MANUAL OF ORANGE(1986)
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             Ver. 17.0  Release Date: 07/01/2010  License ID 1527

                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RMV PA-3 ROMP AMENDMENT 2022 - NODE 134U                              *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL             *
* 50-YR EV AUG 2023 ROKAMOTO                                            *
 ************************************************************************

  FILE NAME: EV5034US.DAT
  TIME/DATE OF STUDY: 07:24 08/10/2023


                        ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    134.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =   62698.000 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.479 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.285; LOW LOSS FRACTION = 0.416
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.44; 30-MINUTE =  0.86;  1-HOUR =  1.18
    3-HOUR =  2.17;    6-HOUR =  3.20; 24-HOUR =  5.59
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.304; 30-MINUTE = 0.358;  1-HOUR = 0.405
    3-HOUR = 0.750;    6-HOUR = 0.890; 24-HOUR = 0.936
==========================================================================
```



```
 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV5034US.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 10100.00     134.00| Subarea (UH) Added to Stream #1|       0.0     19362.5|
18.083 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
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   END OF FLOODSCx ROUTING ANALYSIS
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******************************************************************************

             F L O O D    R O U T I N G    A N A L Y S I S
             USING COUNTY HYDROLOGY MANUAL OF ORANGE(1986)
          (c) Copyright 1989-2013 Advanced Engineering Software (aes)
              Ver. 20.0  Release Date: 06/01/2013  License ID 1264

                          Analysis prepared by:

                        Michael Baker International
                      5 Hutton Centre Drive Suite 500
                            Santa Ana, CA92707


 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJJO - SINGLE AREA UH                                 *
* PHASE CONDITION NO PA5 - REGIONAL NODE 119                             *
* 5-YR EV JANUARY 2019 CCHIU                                             *
 ************************************************************************

  FILE NAME: EV05119S.DAT
  TIME/DATE OF STUDY: 15:23 01/02/2019


******************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    119.00 IS CODE =   1
------------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS)<<<<<
==============================================================================

      (UNIT-HYDROGRAPH ADDED TO STREAM #1)

         WATERSHED AREA =   49495.699 ACRES
         BASEFLOW =   0.000 CFS/SQUARE-MILE
         *USER ENTERED "LAG" TIME =    3.308 HOURS
         VALLEY(DEVELOPED) S-GRAPH SELECTED
         MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.496
         LOW LOSS FRACTION = 0.845
         *HYDROGRAPH MODEL #1 SPECIFIED*

         SPECIFIED PEAK  5-MINUTES RAINFALL(INCH)=  0.23
         SPECIFIED PEAK 30-MINUTES RAINFALL(INCH)=  0.44
         SPECIFIED PEAK  1-HOUR RAINFALL(INCH) =  0.62
         SPECIFIED PEAK  3-HOUR RAINFALL(INCH) =  1.15
         SPECIFIED PEAK  6-HOUR RAINFALL(INCH) =  1.71
         SPECIFIED PEAK 24-HOUR RAINFALL(INCH) =  3.02

         *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
           5-MINUTE FACTOR = 0.345
          30-MINUTE FACTOR = 0.395
           1-HOUR FACTOR = 0.435
           3-HOUR FACTOR = 0.785
           6-HOUR FACTOR = 0.904
          24-HOUR FACTOR = 0.944

         UNIT HYDROGRAPH TIME UNIT =   5.000 MINUTES
         UNIT INTERVAL PERCENTAGE OF LAG-TIME =   2.519
```


UNIT HYDROGRAPH DETERMINATION

INTERVAL NUMBER	"S" GRAPH MEAN VALUES	UNIT HYDROGRAPH ORDINATES(CFS)
1	0.144	861.677
2	0.432	1723.350
3	0.720	1723.347
4	1.008	1723.356
5	1.296	1723.347
6	1.583	1723.351
7	1.872	1724.623
8	2.242	2219.490
9	2.680	2622.489
10	3.119	2622.484
11	3.557	2622.499
12	4.039	2884.965
13	4.797	4536.802
14	5.603	4825.445
15	6.538	5598.162
16	7.601	6361.703
17	8.835	7389.128
18	10.162	7941.579
19	11.427	7573.530
20	12.687	7539.667
21	14.025	8012.714
22	15.857	10962.717
23	17.296	8617.995
24	18.640	8042.302
25	20.023	8281.445
26	21.674	9877.360
27	23.579	11406.680
28	25.158	9450.541
29	26.597	8616.757
30	28.117	9093.035
31	30.019	11389.873
32	31.785	10566.387
33	34.046	13538.745
34	36.009	11749.252
35	37.423	8462.316
36	39.675	13483.635
37	41.987	13835.489
38	44.288	13777.192
39	46.590	13779.521
40	49.336	16437.600
41	51.473	12788.671
42	53.304	10959.846
43	55.042	10406.136
44	56.867	10921.850
45	58.980	12651.186
46	61.521	15207.171
47	63.774	13489.457
48	65.586	10843.551

49	67.261	10024.962
50	69.135	11220.614
51	70.855	10296.508
52	72.369	9060.257
53	73.992	9715.191
54	75.544	9289.422
55	76.797	7501.493
56	77.917	6702.062
57	79.037	6702.702
58	80.169	6781.572
59	81.351	7071.614
60	82.479	6756.043
61	83.540	6349.957
62	84.544	6007.670
63	85.504	5744.299
64	86.374	5210.615
65	87.149	4640.943
66	87.910	4551.570
67	88.535	3741.773
68	89.128	3548.000
69	89.721	3549.142
70	90.280	3350.757
71	90.811	3174.385
72	91.341	3174.385
73	91.869	3163.972
74	92.363	2956.271
75	92.843	2872.743
76	93.323	2872.743
77	93.802	2868.085
78	94.188	2311.201
79	94.509	1916.715
80	94.828	1914.386
81	95.148	1914.386
82	95.468	1914.386
83	95.788	1914.340
84	96.065	1659.143
85	96.264	1192.729
86	96.462	1183.458
87	96.660	1183.413
88	96.857	1181.129
89	97.054	1181.129
90	97.252	1185.742
91	97.450	1181.129
92	97.647	1181.084
93	97.845	1183.458
94	98.004	953.699
95	98.058	320.229
96	98.105	280.771
97	98.152	283.100
98	98.200	285.429
99	98.246	278.442
100	98.294	287.758
101	98.341	278.442
102	98.388	280.771
103	98.435	283.100
104	98.482	280.771
105	98.530	287.758
106	98.576	278.442

107	98.624	283.100
108	98.671	283.100
109	98.718	283.100
110	98.766	283.100
111	98.813	283.100
112	98.860	283.100
113	98.907	278.442
114	98.955	287.758
115	99.001	278.442
116	99.048	278.442
117	99.094	278.442
118	99.141	278.442
119	99.187	278.442
120	99.234	278.442
121	99.280	278.442
122	99.327	278.442
123	99.373	278.442
124	99.420	278.442
125	99.466	278.442
126	99.513	278.442
127	99.559	278.442
128	99.606	278.442
129	99.652	278.442
130	99.699	278.442
131	99.745	278.442
132	99.792	278.442
133	99.839	278.442
134	99.885	278.442
135	99.932	278.442
136	99.978	278.442
137	100.000	131.389

TOTAL SOIL-LOSS VOLUME(ACRE-FEET) = 9835.5820

TOTAL STORM RUNOFF VOLUME(ACRE-FEET) = 1926.9926

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2 4 - H O U R S T O R M
R U N O F F H Y D R O G R A P H

HYDROGRAPH IN FIVE-MINUTE UNIT INTERVALS(CFS)
(Note: Time indicated is at END of Each Unit Intervals)

TIME(HRS)	VOLUME(AF)	Q(CFS)	0.	625.0	1250.0	1875.0	2500.0
0.083	0.0040	0.58	Q	.	.	.	.
0.167	0.0161	1.75	Q	.	.	.	.
0.250	0.0362	2.92	Q	.	.	.	.
0.333	0.0644	4.09	Q	.	.	.	.
0.417	0.1007	5.27	Q	.	.	.	.
0.500	0.1451	6.45	Q	.	.	.	.
0.583	0.1977	7.64	Q	.	.	.	.
0.667	0.2608	9.16	Q	.	.	.	.
0.750	0.3363	10.96	Q	.	.	.	.
0.833	0.4242	12.77	Q	.	.	.	.
0.917	0.5246	14.58	Q	.	.	.	.
1.000	0.6387	16.57	Q	.	.	.	.
1.083	0.7743	19.69	Q	.	.	.	.
1.167	0.9328	23.01	Q	.	.	.	.
1.250	1.1178	26.87	Q	.	.	.	.
1.333	1.3330	31.25	Q	.	.	.	.
1.417	1.5833	36.34	Q	.	.	.	.
1.500	1.8713	41.82	Q	.	.	.	.
1.583	2.1954	47.06	Q	.	.	.	.
1.667	2.5556	52.30	Q	.	.	.	.
1.750	2.9542	57.88	Q	.	.	.	.
1.833	3.4051	65.47	VQ	.	.	.	.
1.917	3.8975	71.49	VQ	.	.	.	.
2.000	4.4288	77.15	VQ	.	.	.	.
2.083	5.0003	82.98	VQ	.	.	.	.
2.167	5.6196	89.91	VQ	.	.	.	.
2.250	6.2938	97.90	VQ	.	.	.	.
2.333	7.0142	104.59	VQ	.	.	.	.
2.417	7.7768	110.74	VQ	.	.	.	.
2.500	8.5842	117.23	VQ	.	.	.	.
2.583	9.4471	125.29	V Q	.	.	.	.
2.667	10.3619	132.83	V Q	.	.	.	.
2.750	11.3425	142.39	V Q	.	.	.	.
2.833	12.3809	150.78	V Q	.	.	.	.
2.917	13.4620	156.97	V Q	.	.	.	.
3.000	14.6092	166.58	V Q	.	.	.	.
3.083	15.8245	176.45	V Q	.	.	.	.
3.167	17.1077	186.32	V Q	.	.	.	.
3.250	18.4591	196.23	V Q	.	.	.	.
3.333	19.8914	207.96	V Q	.	.	.	.
3.417	21.3877	217.26	V Q	.	.	.	.
3.500	22.9397	225.36	V Q	.	.	.	.
3.583	24.5452	233.11	V Q	.	.	.	.
3.667	26.2066	241.24	V Q	.	.	.	.
3.750	27.9322	250.56	V Q	.	.	.	.
3.833	29.7342	261.65	V Q	.	.	.	.
3.917	31.6048	271.61	V Q	.	.	.	.

4.000	33.5319	279.82	V Q	.	.	.	.
4.083	35.5119	287.50	V Q	.	.	.	.
4.167	37.5506	296.02	V Q	.	.	.	.
4.250	39.6439	303.94	V Q	.	.	.	.
4.333	41.7862	311.06	V Q	.	.	.	.
4.417	43.9807	318.65	V Q	.	.	.	.
4.500	46.2257	325.98	V Q	.	.	.	.
4.583	48.5131	332.12	.V Q	.	.	.	.
4.667	50.8392	337.76	.V Q	.	.	.	.
4.750	53.2043	343.41	.V Q	.	.	.	.
4.833	55.6089	349.15	.V Q	.	.	.	.
4.917	58.0545	355.10	.V Q	.	.	.	.
5.000	60.5398	360.87	.V Q	.	.	.	.
5.083	63.0631	366.38	.V Q	.	.	.	.
5.167	65.6229	371.69	.V Q	.	.	.	.
5.250	68.2183	376.84	.V Q	.	.	.	.
5.333	70.8468	381.66	.V Q	.	.	.	.
5.417	73.5060	386.12	.V Q	.	.	.	.
5.500	76.1957	390.54	.V Q	.	.	.	.
5.583	78.9121	394.42	.V Q	.	.	.	.
5.667	81.6546	398.21	.V Q	.	.	.	.
5.750	84.4232	402.01	.V Q	.	.	.	.
5.833	87.2173	405.70	.V Q	.	.	.	.
5.917	90.0361	409.29	.V Q	.	.	.	.
6.000	92.8799	412.91	.V Q	.	.	.	.
6.083	95.7485	416.53	.V Q	.	.	.	.
6.167	98.6413	420.04	. V Q	.	.	.	.
6.250	101.5581	423.51	. V Q	.	.	.	.
6.333	104.4989	427.01	. V Q	.	.	.	.
6.417	107.4639	430.52	. V Q	.	.	.	.
6.500	110.4506	433.68	. V Q	.	.	.	.
6.583	113.4574	436.59	. V Q	.	.	.	.
6.667	116.4844	439.52	. V Q	.	.	.	.
6.750	119.5318	442.47	. V Q	.	.	.	.
6.833	122.5996	445.45	. V Q	.	.	.	.
6.917	125.6881	448.44	. V Q	.	.	.	.
7.000	128.7962	451.30	. V Q	.	.	.	.
7.083	131.9218	453.84	. V Q	.	.	.	.
7.167	135.0652	456.42	. V Q	.	.	.	.
7.250	138.2263	459.00	. V Q	.	.	.	.
7.333	141.4055	461.62	. V Q	.	.	.	.
7.417	144.6029	464.25	. V Q	.	.	.	.
7.500	147.8185	466.92	. V Q	.	.	.	.
7.583	151.0526	469.59	. V Q	.	.	.	.
7.667	154.3054	472.30	. V Q	.	.	.	.
7.750	157.5769	475.03	. V Q	.	.	.	.
7.833	160.8664	477.63	. V Q	.	.	.	.
7.917	164.1710	479.83	. V Q	.	.	.	.
8.000	167.4907	482.03	. V Q	.	.	.	.
8.083	170.8257	484.24	. V Q	.	.	.	.
8.167	174.1762	486.49	. V Q	.	.	.	.
8.250	177.5423	488.76	. V Q	.	.	.	.
8.333	180.9243	491.06	. V Q	.	.	.	.
8.417	184.3222	493.38	. V Q	.	.	.	.
8.500	187.7364	495.73	. V Q	.	.	.	.
8.583	191.1668	498.11	. V Q	.	.	.	.
8.667	194.6139	500.52	. V Q	.	.	.	.
8.750	198.0778	502.95	. V Q	.	.	.	.

8.833	201.5586	505.42	.	V	Q	.	.	.	.
8.917	205.0566	507.91	.	V	Q	.	.	.	.
9.000	208.5720	510.44	.	V	Q	.	.	.	.
9.083	212.1050	512.99	.	V	Q	.	.	.	.
9.167	215.6558	515.58	.	V	Q	.	.	.	.
9.250	219.2247	518.20	.	V	Q	.	.	.	.
9.333	222.8119	520.86	.	V	Q	.	.	.	.
9.417	226.4176	523.54	.	V	Q	.	.	.	.
9.500	230.0421	526.28	.	V	Q	.	.	.	.
9.583	233.6855	529.03	.	V	Q	.	.	.	.
9.667	237.3483	531.83	.	V	Q	.	.	.	.
9.750	241.0305	534.66	.	V	Q	.	.	.	.
9.833	244.7325	537.53	.	V	Q	.	.	.	.
9.917	248.4545	540.44	.	V	Q	.	.	.	.
10.000	252.1969	543.39	.	V	Q	.	.	.	.
10.083	255.9598	546.38	.	V	Q	.	.	.	.
10.167	259.7437	549.42	.	V	Q	.	.	.	.
10.250	263.5487	552.49	.	V	Q	.	.	.	.
10.333	267.3753	555.62	.	V	Q	.	.	.	.
10.417	271.2237	558.78	.	V	Q	.	.	.	.
10.500	275.0942	562.01	.	V	Q	.	.	.	.
10.583	278.9872	565.26	.	V	Q.	.	.	.	.
10.667	282.9031	568.58	.	V	Q.	.	.	.	.
10.750	286.8420	571.94	.	V	Q.	.	.	.	.
10.833	290.8046	575.36	.	V	Q.	.	.	.	.
10.917	294.7910	578.82	.	V	Q.	.	.	.	.
11.000	298.8017	582.36	.	V	Q.	.	.	.	.
11.083	302.8370	585.93	.	V	Q.	.	.	.	.
11.167	306.8975	589.58	.	V	Q.	.	.	.	.
11.250	310.9834	593.27	.	V	Q.	.	.	.	.
11.333	315.0952	597.04	.	V	Q.	.	.	.	.
11.417	319.2327	600.76	.	V	Q.	.	.	.	.
11.500	323.3957	604.47	.	V	Q.	.	.	.	.
11.583	327.5846	608.23	.	V	Q.	.	.	.	.
11.667	331.8001	612.08	.	V	Q.	.	.	.	.
11.750	336.0424	615.98	.	V	Q.	.	.	.	.
11.833	340.3122	619.98	.	V	Q.	.	.	.	.
11.917	344.6100	624.03	.	V	Q.	.	.	.	.
12.000	348.9363	628.18	.	V	Q	.	.	.	.
12.083	353.2982	633.35	.	V	Q	.	.	.	.
12.167	357.7031	639.59	.	V	Q	.	.	.	.
12.250	362.1514	645.89	.	V	Q	.	.	.	.
12.333	366.6437	652.29	.	V	Q	.	.	.	.
12.417	371.1806	658.75	.	V	Q	.	.	.	.
12.500	375.7626	665.32	.	V	Q	.	.	.	.
12.583	380.3904	671.95	.	V	Q	.	.	.	.
12.667	385.0685	679.26	.	V	Q	.	.	.	.
12.750	389.8004	687.08	.	V	Q	.	.	.	.
12.833	394.5871	695.03	.	V	.Q	.	.	.	.
12.917	399.4290	703.05	.	V	.Q	.	.	.	.
13.000	404.3291	711.48	.	V	.Q	.	.	.	.
13.083	409.3005	721.85	.	V	.Q	.	.	.	.
13.167	414.3463	732.66	.	V	.Q	.	.	.	.
13.250	419.4732	744.41	.	V	.Q	.	.	.	.
13.333	424.6877	757.15	.	V	. Q	.	.	.	.
13.417	429.9984	771.11	.	V	. Q	.	.	.	.
13.500	435.4104	785.82	.	V	. Q	.	.	.	.
13.583	440.9213	800.19	.	V	. Q	.	.	.	.

13.667	446.5320	814.66	.	V	.	Q	.	.	.
13.750	452.2464	829.74	.	V	.	Q	.	.	.
13.833	458.0885	848.27	.	V	.	Q	.	.	.
13.917	464.0406	864.25	.	V	.	Q	.	.	.
14.000	470.0995	879.74	.	V	.	Q	.	.	.
14.083	476.2750	896.69	.	V	.	Q	.	.	.
14.167	482.5880	916.65	.	V	Q	.	.	.	.
14.250	489.0505	938.35	.	V	Q	.	.	.	.
14.333	495.6478	957.93	.	V	Q	.	.	.	.
14.417	502.3737	976.60	.	V	Q	.	.	.	.
14.500	509.2326	995.91	.	V	Q	.	.	.	.
14.583	516.2423	1017.81	.	V	Q	.	.	.	.
14.667	523.4015	1039.51	.	V	Q	.	.	.	.
14.750	530.7366	1065.06	.	.V	Q	.	.	.	.
14.833	538.2342	1088.66	.	.V	Q	.	.	.	.
14.917	545.8688	1108.55	.	.V	Q	.	.	.	.
15.000	553.6820	1134.47	.	.V	Q	.	.	.	.
15.083	561.6906	1162.84	.	.V	Q	.	.	.	.
15.167	569.8965	1191.50	.	.V	Q.	.	.	.	.
15.250	578.3054	1220.97	.	. V	Q.	.	.	.	.
15.333	586.9440	1254.32	.	. V	Q	.	.	.	.
15.417	595.7816	1283.21	.	. V	Q	.	.	.	.
15.500	604.7986	1309.28	.	. V	Q	.	.	.	.
15.583	613.9875	1334.23	.	. V	.Q	.	.	.	.
15.667	623.3532	1359.89	.	. V	.Q	.	.	.	.
15.750	632.9094	1387.55	.	. V	. Q	.	.	.	.
15.833	642.6994	1421.51	.	. V	. Q	.	.	.	.
15.917	652.6937	1451.17	.	. V	. Q	.	.	.	.
16.000	662.8716	1477.83	.	. V	. Q	.	.	.	.
16.083	673.4265	1532.57	.	. V	. Q	.	.	.	.
16.167	684.3708	1589.12	.	. V	. Q	.	.	.	.
16.250	695.5027	1616.35	.	. V	. Q	.	.	.	.
16.333	706.7863	1638.38	.	. V	. Q	.	.	.	.
16.417	718.2047	1657.96	.	. V	. Q	.	.	.	.
16.500	729.7687	1679.10	.	. V	. Q	.	.	.	.
16.583	741.4846	1701.14	.	. V	. Q	.	.	.	.
16.667	753.4464	1736.85	.	. V	. Q	.	.	.	.
16.750	765.6373	1770.13	.	. V	. Q	.	.	.	.
16.833	777.9440	1786.93	.	. V	. Q	.	.	.	.
16.917	790.3539	1801.91	.	. V	. Q	.	.	.	.
17.000	802.9882	1834.50	.	. V	. Q.	.	.	.	.
17.083	816.1560	1911.97	.	. V	. Q	.	.	.	.
17.167	829.4908	1936.22	.	. V	. Q	.	.	.	.
17.250	843.1384	1981.63	.	. V	. .Q	.	.	.	.
17.333	857.1237	2030.66	.	. V	. . Q	.	.	.	.
17.417	871.4710	2083.24	.	. V	. . Q	.	.	.	.
17.500	886.0105	2111.13	.	. V	. . Q	.	.	.	.
17.583	900.5180	2106.49	.	. V	. . Q	.	.	.	.
17.667	915.1242	2120.82	.	. V	. . Q	.	.	.	.
17.750	929.9841	2157.65	.	. V.	. . Q	.	.	.	.
17.833	945.6509	2274.83	.	. V.	. . Q	.	.	.	.
17.917	960.8250	2203.28	.	. V.	. . Q	.	.	.	.
18.000	975.9404	2194.75	.	. V	. . Q	.	.	.	.
18.083	991.1492	2208.33	.	. V	. . Q	.	.	.	.
18.167	1006.8131	2274.39	.	. V	. . Q	.	.	.	.
18.250	1022.8733	2331.94	.	. .V	. . Q	.	.	.	.
18.333	1038.4314	2259.03	.	. .V	. . Q	.	.	.	.
18.417	1053.7609	2225.84	.	. .V	. . Q	.	.	.	.

```
18.500   1069.1960   2241.20  .         .         . V       .    Q    .
18.583   1085.1765   2320.36  .         .         . V       .      Q  .
18.667   1100.8937   2282.13  .         .         . V       .     Q   .
18.750   1117.2234   2371.07  .         .         .  V      .      Q  .
18.833   1133.0438   2297.13  .         .         .  V      .     Q   .
18.917   1148.1238   2189.61  .         .         .  V      .    Q    .
19.000   1164.3645   2358.15  .         .         .   V     .      Q  .
19.083   1180.6470   2364.22  .         .         .   V     .      Q  .
19.167   1196.8326   2350.17  .         .         .   V     .      Q  .
19.250   1212.8871   2331.11  .         .         .    V    .      Q  .
19.333   1229.4636   2406.92  .         .         .    V    .       Q .
19.417   1245.0747   2266.72  .         .         .    V    .     Q   .
19.500   1260.1451   2188.23  .         .         .     V   .    Q    .
19.583   1274.9904   2155.53  .         .         .     V   .   Q     .
19.667   1289.9534   2172.64  .         .         .     V   .   Q     .
19.750   1305.2424   2219.96  .         .         .      V  .    Q    .
19.833   1320.9630   2282.63  .         .         .      V  .     Q   .
19.917   1336.1392   2203.57  .         .         .      V  .    Q    .
20.000   1350.5498   2092.43  .         .         .       V . Q       .
20.083   1364.6429   2046.33  .         .         .       V . Q       .
20.167   1378.8878   2068.35  .         .         .       V .  Q      .
20.250   1392.7570   2013.80  .         .         .       V . Q       .
20.333   1406.1598   1946.08  .         .         .        V.Q        .
20.417   1419.5544   1944.91  .         .         .        V.Q        .
20.500   1432.6908   1907.41  .         .         .        VQ         .
20.583   1445.2345   1821.34  .         .         .        Q.         .
20.667   1457.4260   1770.21  .         .         .       Q V         .
20.750   1469.4344   1743.62  .         .         .      Q  V         .
20.833   1481.2666   1718.03  .         .         .      Q  V         .
20.917   1492.9932   1702.70  .         .         .      Q  V         .
21.000   1504.4401   1662.09  .         .         .     Q   .V        .
21.083   1515.5833   1618.00  .         .         .    Q    .V        .
21.167   1526.4255   1574.30  .         .         .    Q    .V        .
21.250   1536.9951   1534.70  .         .         .   Q     .V        .
21.333   1547.2141   1483.79  .         .         .  Q      . V       .
21.417   1557.0922   1434.29  .         .         . Q       . V       .
21.500   1566.7550   1403.05  .         .         . Q       . V       .
21.583   1576.0564   1350.57  .         .        .Q         . V       .
21.667   1585.1439   1319.52  .         .        .Q         . V       .
21.750   1594.0428   1292.12  .         .        Q          .  V      .
21.833   1602.6915   1255.78  .         .        Q          .  V      .
21.917   1611.0979   1220.61  .         .       Q.          .  V      .
22.000   1619.3219   1194.13  .         .       Q.          .  V      .
22.083   1627.3682   1168.31  .         .      Q .          .  V      .
22.167   1635.1844   1134.92  .         .      Q .          .  V      .
22.250   1642.8094   1107.14  .         .     Q  .          .   V     .
22.333   1650.2764   1084.19  .         .     Q  .          .   V     .
22.417   1657.5834   1060.98  .         .    Q   .          .   V     .
22.500   1664.6035   1019.33  .         .    Q   .          .   V     .
22.583   1671.4004    986.91  .         .   Q    .          .   V     .
22.667   1678.0778    969.55  .         .   Q    .          .   V     .
22.750   1684.6396    952.79  .         .   Q    .          .   V     .
22.833   1691.0812    935.31  .         .  Q     .          .    V    .
22.917   1697.3934    916.54  .         .  Q     .          .    V    .
23.000   1703.5176    889.23  .         .  Q     .          .    V    .
23.083   1709.4122    855.90  .         . Q      .          .    V    .
23.167   1715.1951    839.67  .         . Q      .          .    V    .
23.250   1720.8799    825.43  .         . Q      .          .    V    .
```



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23.333   1726.4691    811.56  .         . Q       .          .    V    .
23.417   1731.9613    797.47  .         . Q       .          .    V    .
23.500   1737.3624    784.25  .         . Q       .          .     V   .
23.583   1742.6824    772.45  .         . Q       .          .     V   .
23.667   1747.9219    760.78  .         . Q       .          .     V   .
23.750   1753.0767    748.48  .         .Q        .          .     V   .
23.833   1758.0908    728.05  .         .Q        .          .     V   .
23.917   1762.8765    694.88  .         .Q        .          .     V   .
24.000   1767.5798    682.93  .         Q         .          .     V   .
24.083   1772.2126    672.69  .         Q         .          .     V   .
24.167   1776.7729    662.16  .         Q         .          .     V   .
24.250   1781.2537    650.59  .         Q         .          .     V   .
24.333   1785.6586    639.59  .         Q         .          .      V  .
24.417   1789.9838    628.03  .         Q         .          .      V  .
24.500   1794.2371    617.57  .        Q.         .          .      V  .
24.583   1798.4219    607.63  .        Q.         .          .      V  .
24.667   1802.5354    597.29  .        Q.         .          .      V  .
24.750   1806.5784    587.05  .        Q.         .          .      V  .
24.833   1810.5496    576.62  .        Q.         .          .      V  .
24.917   1814.4587    567.61  .        Q.         .          .      V  .
25.000   1818.3068    558.73  .       Q .         .          .      V  .
25.083   1822.0907    549.42  .       Q .         .          .      V  .
25.167   1825.8099    540.04  .       Q .         .          .      V  .
25.250   1829.4622    530.30  .       Q .         .          .      V  .
25.333   1833.0446    520.16  .       Q .         .          .       V .
25.417   1836.5510    509.13  .       Q .         .          .       V .
25.500   1839.9818    498.15  .      Q  .         .          .       V .
25.583   1843.3352    486.92  .      Q  .         .          .       V .
25.667   1846.6146    476.17  .      Q  .         .          .       V .
25.750   1849.8185    465.21  .      Q  .         .          .       V .
25.833   1852.9359    452.66  .      Q  .         .          .       V .
25.917   1855.9835    442.51  .      Q  .         .          .       V .
26.000   1858.9651    432.93  .     Q   .         .          .       V .
26.083   1861.8804    423.30  .     Q   .         .          .       V .
26.167   1864.7227    412.70  .     Q   .         .          .       V .
26.250   1867.4857    401.20  .     Q   .         .          .       V .
26.333   1870.1794    391.12  .     Q   .         .          .       V .
26.417   1872.8085    381.74  .     Q   .         .          .       V .
26.500   1875.3713    372.12  .    Q    .         .          .       V .
26.583   1877.8580    361.07  .    Q    .         .          .       V .
26.667   1880.2732    350.69  .    Q    .         .          .        V.
26.750   1882.6055    338.64  .    Q    .         .          .        V.
26.833   1884.8652    328.12  .    Q    .         .          .        V.
26.917   1887.0682    319.88  .    Q    .         .          .        V.
27.000   1889.1913    308.27  .   Q     .         .          .        V.
27.083   1891.2338    296.58  .   Q     .         .          .        V.
27.167   1893.1968    285.03  .   Q     .         .          .        V.
27.250   1895.0798    273.41  .   Q     .         .          .        V.
27.333   1896.8691    259.80  .   Q     .         .          .        V.
27.417   1898.5476    243.72  .  Q      .         .          .        V.
27.500   1900.1296    229.72  .  Q      .         .          .        V.
27.583   1901.6500    220.76  .  Q      .         .          .        V.
27.667   1903.1071    211.57  .  Q      .         .          .        V.
27.750   1904.4921    201.11  .  Q      .         .          .        V.
27.833   1905.7922    188.78  .  Q      .         .          .        V.
27.917   1907.0159    177.68  . Q       .         .          .        V.
28.000   1908.1757    168.41  . Q       .         .          .        V.
28.083   1909.2758    159.74  . Q       .         .          .        V.
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28.167	1910.3109	150.31	. Q	.	.	.	V.
28.250	1911.2858	141.54	. Q	.	.	.	V.
28.333	1912.2063	133.66	. Q	.	.	.	V.
28.417	1913.0710	125.56	. Q	.	.	.	V.
28.500	1913.8835	117.97	.Q	.	.	.	V.
28.583	1914.6525	111.65	.Q	.	.	.	V.
28.667	1915.3820	105.93	.Q	.	.	.	V.
28.750	1916.0724	100.25	.Q	.	.	.	V.
28.833	1916.7236	94.56	.Q	.	.	.	V.
28.917	1917.3347	88.73	.Q	.	.	.	V.
29.000	1917.9073	83.15	.Q	.	.	.	V.
29.083	1918.4437	77.89	.Q	.	.	.	V.
29.167	1918.9458	72.90	.Q	.	.	.	V.
29.250	1919.4149	68.12	.Q	.	.	.	V.
29.333	1919.8539	63.74	.Q	.	.	.	V.
29.417	1920.2667	59.94	Q	.	.	.	V.
29.500	1920.6550	56.38	Q	.	.	.	V.
29.583	1921.0228	53.40	Q	.	.	.	V.
29.667	1921.3711	50.58	Q	.	.	.	V.
29.750	1921.7001	47.77	Q	.	.	.	V.
29.833	1922.0109	45.13	Q	.	.	.	V.
29.917	1922.3044	42.63	Q	.	.	.	V.
30.000	1922.5809	40.15	Q	.	.	.	V.
30.083	1922.8406	37.70	Q	.	.	.	V.
30.167	1923.0844	35.40	Q	.	.	.	V.
30.250	1923.3129	33.19	Q	.	.	.	V.
30.333	1923.5262	30.99	Q	.	.	.	V.
30.417	1923.7246	28.81	Q	.	.	.	V.
30.500	1923.9106	27.02	Q	.	.	.	V.
30.583	1924.0863	25.51	Q	.	.	.	V.
30.667	1924.2517	24.02	Q	.	.	.	V.
30.750	1924.4070	22.54	Q	.	.	.	V.
30.833	1924.5521	21.08	Q	.	.	.	V.
30.917	1924.6873	19.62	Q	.	.	.	V.
31.000	1924.8136	18.35	Q	.	.	.	V.
31.083	1924.9335	17.40	Q	.	.	.	V.
31.167	1925.0469	16.46	Q	.	.	.	V.
31.250	1925.1539	15.54	Q	.	.	.	V.
31.333	1925.2546	14.62	Q	.	.	.	V.
31.417	1925.3491	13.71	Q	.	.	.	V.
31.500	1925.4373	12.81	Q	.	.	.	V.
31.583	1925.5193	11.91	Q	.	.	.	V.
31.667	1925.5952	11.02	Q	.	.	.	V.
31.750	1925.6650	10.14	Q	.	.	.	V.
31.833	1925.7299	9.41	Q	.	.	.	V.
31.917	1925.7927	9.13	Q	.	.	.	V.
32.000	1925.8538	8.87	Q	.	.	.	V.
32.083	1925.9131	8.61	Q	.	.	.	V.
32.167	1925.9706	8.35	Q	.	.	.	V.
32.250	1926.0264	8.10	Q	.	.	.	V.
32.333	1926.0804	7.84	Q	.	.	.	V.
32.417	1926.1328	7.60	Q	.	.	.	V.
32.500	1926.1835	7.35	Q	.	.	.	V.
32.583	1926.2324	7.11	Q	.	.	.	V.
32.667	1926.2798	6.87	Q	.	.	.	V.
32.750	1926.3254	6.63	Q	.	.	.	V.
32.833	1926.3695	6.39	Q	.	.	.	V.
32.917	1926.4119	6.15	Q	.	.	.	V.

33.000	1926.4526	5.92	Q	.	.	.	V.
33.083	1926.4918	5.69	Q	.	.	.	V.
33.167	1926.5294	5.46	Q	.	.	.	V.
33.250	1926.5654	5.23	Q	.	.	.	V.
33.333	1926.5999	5.00	Q	.	.	.	V.
33.417	1926.6328	4.78	Q	.	.	.	V.
33.500	1926.6642	4.56	Q	.	.	.	V.
33.583	1926.6941	4.34	Q	.	.	.	V.
33.667	1926.7224	4.12	Q	.	.	.	V.
33.750	1926.7493	3.91	Q	.	.	.	V.
33.833	1926.7747	3.69	Q	.	.	.	V.
33.917	1926.7986	3.48	Q	.	.	.	V.
34.000	1926.8212	3.27	Q	.	.	.	V.
34.083	1926.8423	3.06	Q	.	.	.	V.
34.167	1926.8619	2.85	Q	.	.	.	V.
34.250	1926.8801	2.65	Q	.	.	.	V.
34.333	1926.8970	2.44	Q	.	.	.	V.
34.417	1926.9124	2.24	Q	.	.	.	V.
34.500	1926.9264	2.04	Q	.	.	.	V.
34.583	1926.9391	1.84	Q	.	.	.	V.
34.667	1926.9503	1.64	Q	.	.	.	V.
34.750	1926.9602	1.44	Q	.	.	.	V.
34.833	1926.9688	1.24	Q	.	.	.	V.
34.917	1926.9760	1.05	Q	.	.	.	V.
35.000	1926.9818	0.85	Q	.	.	.	V.
35.083	1926.9863	0.66	Q	.	.	.	V.
35.167	1926.9895	0.47	Q	.	.	.	V.
35.250	1926.9915	0.28	Q	.	.	.	V.
35.333	1926.9921	0.09	Q	.	.	.	V.

TIME DURATION(minutes) OF PERCENTILES OF ESTIMATED PEAK FLOW RATE:
(Note: 100% of Peak Flow Rate estimate assumed to have
an instantaneous time duration)

Percentile of Estimated Peak Flow Rate	Duration (minutes)
0%	2120.0
10%	1430.0
20%	1060.0
30%	645.0
40%	500.0
50%	405.0
60%	330.0
70%	265.0
80%	200.0
90%	125.0

END OF FLOODSCx ROUTING ANALYSIS

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**************************************************************************

             F L O O D    R O U T I N G    A N A L Y S I S
             USING COUNTY HYDROLOGY MANUAL OF ORANGE(1986)
         (c) Copyright 1989-2013 Advanced Engineering Software (aes)
             Ver. 20.0  Release Date: 06/01/2013  License ID 1237

                        Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RMV PA-3 ROMP AMENDMENT 2022 - NODE 126                                *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL              *
* 5-YR EV NOV 2022 ROKAMOTO                                              *
 **************************************************************************

  FILE NAME: EV05126S.DAT
  TIME/DATE OF STUDY: 03:47 11/08/2022


                       ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    126.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =   50438.699 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    3.426 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.495; LOW LOSS FRACTION = 0.845
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.23; 30-MINUTE =  0.44;  1-HOUR =  0.62
    3-HOUR =  1.15;    6-HOUR =  1.71; 24-HOUR =  3.01
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.341; 30-MINUTE = 0.392;  1-HOUR = 0.432
    3-HOUR = 0.782;    6-HOUR = 0.902; 24-HOUR = 0.943
==========================================================================
```



```
 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV05126S.DAT   ]
Page:   1 of    |
 +-------------------+---------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                 | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+---------------------------------+----------------------+-
-----------+-------------+-----------+
 | 10100.00     126.00| Subarea (UH) Added to Stream #1|       0.0      2381.2|
19.167 |             |           |
 +-------------------+---------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
-------------------------------------+

   END OF FLOODSCx ROUTING ANALYSIS
```

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*****************************************************************************

             F L O O D    R O U T I N G    A N A L Y S I S
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          (c) Copyright 1989-2013 Advanced Engineering Software (aes)
              Ver. 20.0  Release Date: 06/01/2013  License ID 1237

                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RMV PA-3 BODR 2022 - NODE 127                                         *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL             *
* 5-YR EV NOV 2022 ROKAMOTO                                             *
 *************************************************************************

  FILE NAME: EV05127S.DAT
  TIME/DATE OF STUDY: 03:50 11/08/2022


                        ** INPUT SUMMARY **


*****************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    127.00 IS CODE =   1
-----------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
=============================================================================
  WATERSHED AREA =   53506.199 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    3.580 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.477; LOW LOSS FRACTION = 0.840
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.23; 30-MINUTE =  0.44;  1-HOUR =  0.61
    3-HOUR =  1.13;    6-HOUR =  1.68; 24-HOUR =  2.95
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.331; 30-MINUTE = 0.383;  1-HOUR = 0.424
    3-HOUR = 0.773;    6-HOUR = 0.898; 24-HOUR = 0.941
=============================================================================
```



```
 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV05127S.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 10100.00     127.00| Subarea (UH) Added to Stream #1|       0.0      2480.5|
19.250 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
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   END OF FLOODSCx ROUTING ANALYSIS
```

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******************************************************************************

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                        Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RMV PA-3 ROMP AMENDMENT 2022 - NODE 137                                *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL              *
* 5-YR EV NOV 2022 ROKAMOTO                                              *
 ************************************************************************

  FILE NAME: EV05137S.DAT
  TIME/DATE OF STUDY: 04:05 11/08/2022


                       ** INPUT SUMMARY **


******************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    137.00 IS CODE =   1
------------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==============================================================================
  WATERSHED AREA =   67798.297 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    3.951 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.473; LOW LOSS FRACTION = 0.827
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.22; 30-MINUTE =  0.44;  1-HOUR =  0.60
    3-HOUR =  1.09;    6-HOUR =  1.59; 24-HOUR =  2.78
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.291; 30-MINUTE = 0.350;  1-HOUR = 0.394
    3-HOUR = 0.738;    6-HOUR = 0.886; 24-HOUR = 0.933
==============================================================================
```



```
 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV05137S.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 10100.00     137.00| Subarea (UH) Added to Stream #1|       0.0      2868.0|
19.583 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
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   END OF FLOODSCx ROUTING ANALYSIS
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                        Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RMV PA-3 ROMP AMENDMENT 2022 - NODE 138                                *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL              *
* 5-YR EV NOV 2022 ROKAMOTO                                              *
 **************************************************************************

  FILE NAME: EV05138S.DAT
  TIME/DATE OF STUDY: 03:57 11/08/2022


                       ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    138.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =   69102.000 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    4.081 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.473; LOW LOSS FRACTION = 0.826
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.22; 30-MINUTE =  0.44;  1-HOUR =  0.60
    3-HOUR =  1.09;    6-HOUR =  1.59; 24-HOUR =  2.77
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.287; 30-MINUTE = 0.348;  1-HOUR = 0.392
    3-HOUR = 0.734;    6-HOUR = 0.885; 24-HOUR = 0.932
==========================================================================
```



```
 +-------------------------------------------------------------------------------
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 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV05138S.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 10100.00     138.00| Subarea (UH) Added to Stream #1|       0.0      2866.0|
19.750 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
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   END OF FLOODSCx ROUTING ANALYSIS
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                        Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RMV PA-3 ROMP AMENDMENT 2022 - NODE 139                                *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL              *
* 5-YR EV NOV 2022 ROKAMOTO                                              *
 **************************************************************************

  FILE NAME: EV05139S.DAT
  TIME/DATE OF STUDY: 03:58 11/08/2022


                       ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    139.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =   69529.797 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    4.144 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.472; LOW LOSS FRACTION = 0.825
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.22; 30-MINUTE =  0.44;  1-HOUR =  0.60
    3-HOUR =  1.09;    6-HOUR =  1.59; 24-HOUR =  2.76
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.286; 30-MINUTE = 0.348;  1-HOUR = 0.391
    3-HOUR = 0.733;    6-HOUR = 0.885; 24-HOUR = 0.932
==========================================================================
```



```
 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV05139S.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 10100.00     139.00| Subarea (UH) Added to Stream #1|       0.0      2886.7|
19.417 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
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   END OF FLOODSCx ROUTING ANALYSIS
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                          Analysis prepared by:

                        Michael Baker International
                      5 Hutton Centre Drive Suite 500
                            Santa Ana, CA92707


 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJJO - SINGLE AREA UH                                 *
* PHASE CONDITION NO PA5- REGIONAL NODE 119                              *
* 10-YR EV JANUARY 2019 CCHIU                                            *
 ************************************************************************

  FILE NAME: EV10119S.DAT
  TIME/DATE OF STUDY: 15:07 01/02/2019


******************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    119.00 IS CODE =   1
------------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS)<<<<<
==============================================================================

      (UNIT-HYDROGRAPH ADDED TO STREAM #1)

         WATERSHED AREA =   49495.699 ACRES
         BASEFLOW =   0.000 CFS/SQUARE-MILE
         *USER ENTERED "LAG" TIME =    2.320 HOURS
         VALLEY(DEVELOPED) S-GRAPH SELECTED
         MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.298
         LOW LOSS FRACTION = 0.746
         *HYDROGRAPH MODEL #1 SPECIFIED*

         SPECIFIED PEAK  5-MINUTES RAINFALL(INCH)=  0.33
         SPECIFIED PEAK 30-MINUTES RAINFALL(INCH)=  0.63
         SPECIFIED PEAK  1-HOUR RAINFALL(INCH) =  0.88
         SPECIFIED PEAK  3-HOUR RAINFALL(INCH) =  1.65
         SPECIFIED PEAK  6-HOUR RAINFALL(INCH) =  2.45
         SPECIFIED PEAK 24-HOUR RAINFALL(INCH) =  4.32

         *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
           5-MINUTE FACTOR = 0.345
          30-MINUTE FACTOR = 0.395
           1-HOUR FACTOR = 0.435
           3-HOUR FACTOR = 0.785
           6-HOUR FACTOR = 0.904
          24-HOUR FACTOR = 0.944

         UNIT HYDROGRAPH TIME UNIT =   5.000 MINUTES
         UNIT INTERVAL PERCENTAGE OF LAG-TIME =   3.592
```


UNIT HYDROGRAPH DETERMINATION

INTERVAL NUMBER	"S" GRAPH MEAN VALUES	UNIT HYDROGRAPH ORDINATES(CFS)
1	0.205	1228.630
2	0.616	2457.261
3	1.026	2457.261
4	1.437	2457.258
5	1.849	2467.763
6	2.392	3251.878
7	3.017	3739.312
8	3.642	3739.302
9	4.492	5087.152
10	5.646	6909.555
11	7.038	8333.941
12	8.701	9954.133
13	10.573	11203.939
14	12.371	10762.129
15	14.356	11883.826
16	16.755	14360.438
17	18.676	11497.777
18	20.748	12404.951
19	23.329	15451.019
20	25.596	13567.688
21	27.693	12552.027
22	30.286	15519.716
23	33.073	16682.510
24	35.987	17442.402
25	38.316	13941.234
26	41.687	20182.363
27	44.925	19380.238
28	48.531	21586.014
29	51.724	19113.350
30	54.294	15379.867
31	56.855	15335.317
32	60.009	18879.207
33	63.439	20527.777
34	66.036	15546.261
35	68.534	14955.901
36	71.029	14932.337
37	73.253	13310.596
38	75.483	13350.510
39	77.240	10517.134
40	78.836	9555.762
41	80.461	9723.822
42	82.118	9918.234
43	83.640	9114.328
44	85.047	8421.854
45	86.331	7683.026
46	87.441	6645.525
47	88.418	5845.684
48	89.263	5059.634

49	90.090	4953.043
50	90.853	4564.083
51	91.609	4526.635
52	92.330	4317.518
53	93.015	4096.207
54	93.698	4092.919
55	94.255	3332.947
56	94.711	2730.805
57	95.167	2729.161
58	95.624	2730.805
59	96.040	2493.191
60	96.331	1741.347
61	96.613	1685.997
62	96.894	1685.997
63	97.176	1685.997
64	97.458	1685.997
65	97.740	1687.641
66	97.986	1476.058
67	98.072	514.275
68	98.140	403.574
69	98.207	405.218
70	98.274	401.976
71	98.342	403.620
72	98.409	401.976
73	98.476	403.574
74	98.544	403.620
75	98.611	403.574
76	98.679	403.620
77	98.746	400.332
78	98.813	403.620
79	98.881	406.817
80	98.948	400.377
81	99.015	403.574
82	99.082	400.377
83	99.149	400.377
84	99.216	400.377
85	99.283	400.377
86	99.350	400.377
87	99.417	400.377
88	99.483	400.377
89	99.550	400.377
90	99.617	400.377
91	99.684	400.377
92	99.751	400.377
93	99.818	400.377
94	99.885	400.377
95	99.952	400.377
96	100.000	289.402

TOTAL SOIL-LOSS VOLUME(ACRE-FEET) = 11932.6064
TOTAL STORM RUNOFF VOLUME(ACRE-FEET) = 4873.3203

==========

2 4 - H O U R S T O R M
R U N O F F H Y D R O G R A P H

==========

HYDROGRAPH IN FIVE-MINUTE UNIT INTERVALS(CFS)
(Note: Time indicated is at END of Each Unit Intervals)

TIME(HRS)	VOLUME(AF)	Q(CFS)	0.	1800.0	3600.0	5400.0	7200.0
0.083	0.0134	1.95	Q	.	.	.	.
0.167	0.0536	5.84	Q	.	.	.	.
0.250	0.1208	9.75	Q	.	.	.	.
0.333	0.2149	13.67	Q	.	.	.	.
0.417	0.3362	17.62	Q	.	.	.	.
0.500	0.4934	22.82	Q	.	.	.	.
0.583	0.6917	28.80	Q	.	.	.	.
0.667	0.9315	34.81	Q	.	.	.	.
0.750	1.2274	42.97	Q	.	.	.	.
0.833	1.5995	54.03	Q	.	.	.	.
0.917	2.0636	67.39	Q	.	.	.	.
1.000	2.6377	83.35	Q	.	.	.	.
1.083	3.3356	101.34	Q	.	.	.	.
1.167	4.1529	118.68	Q	.	.	.	.
1.250	5.1023	137.85	Q	.	.	.	.
1.333	6.2111	161.00	Q	.	.	.	.
1.417	7.4486	179.68	Q	.	.	.	.
1.500	8.8250	199.86	VQ	.	.	.	.
1.583	10.3741	224.93	VQ	.	.	.	.
1.667	12.0758	247.09	VQ	.	.	.	.
1.750	13.9195	267.70	VQ	.	.	.	.
1.833	15.9380	293.09	VQ	.	.	.	.
1.917	18.1446	320.39	VQ	.	.	.	.
2.000	20.5481	348.98	VQ	.	.	.	.
2.083	23.1108	372.12	V Q	.	.	.	.
2.167	25.9016	405.22	V Q	.	.	.	.
2.250	28.9122	437.13	V Q	.	.	.	.
2.333	32.1674	472.66	V Q	.	.	.	.
2.417	35.6410	504.36	V Q	.	.	.	.
2.500	39.2931	530.28	V Q	.	.	.	.
2.583	43.1236	556.19	V Q	.	.	.	.
2.667	47.1719	587.82	V Q	.	.	.	.
2.750	51.4566	622.13	V Q	.	.	.	.
2.833	55.9242	648.70	V Q	.	.	.	.
2.917	60.5688	674.39	V Q	.	.	.	.
3.000	65.3908	700.16	V Q	.	.	.	.
3.083	70.3731	723.43	V Q	.	.	.	.
3.167	75.5168	746.86	V Q	.	.	.	.
3.250	80.7913	765.87	V Q	.	.	.	.
3.333	86.1870	783.45	V Q	.	.	.	.
3.417	91.7058	801.33	V Q	.	.	.	.
3.500	97.3506	819.62	V Q	.	.	.	.
3.583	103.1128	836.68	V Q	.	.	.	.
3.667	108.9856	852.73	V Q	.	.	.	.
3.750	114.9612	867.65	V Q	.	.	.	.
3.833	121.0289	881.02	V Q	.	.	.	.
3.917	127.1801	893.15	.V Q	.	.	.	.

4.000	133.4068	904.12	.V Q	.	.	.	.
4.083	139.7080	914.94	.V Q	.	.	.	.
4.167	146.0801	925.23	.V Q	.	.	.	.
4.250	152.5228	935.47	.V Q	.	.	.	.
4.333	159.0342	945.47	.V Q	.	.	.	.
4.417	165.6123	955.13	.V Q	.	.	.	.
4.500	172.2574	964.87	.V Q	.	.	.	.
4.583	178.9614	973.43	.V Q	.	.	.	.
4.667	185.7184	981.11	.V Q	.	.	.	.
4.750	192.5283	988.80	.V Q	.	.	.	.
4.833	199.3917	996.57	.V Q	.	.	.	.
4.917	206.3061	1003.98	.V Q	.	.	.	.
5.000	213.2639	1010.27	.V Q	.	.	.	.
5.083	220.2646	1016.49	.V Q	.	.	.	.
5.167	227.3086	1022.79	.V Q	.	.	.	.
5.250	234.3961	1029.10	.V Q	.	.	.	.
5.333	241.5275	1035.48	.V Q	.	.	.	.
5.417	248.7029	1041.88	. V Q	.	.	.	.
5.500	255.9207	1048.02	. V Q	.	.	.	.
5.583	263.1704	1052.66	. V Q	.	.	.	.
5.667	270.4514	1057.19	. V Q	.	.	.	.
5.750	277.7636	1061.73	. V Q	.	.	.	.
5.833	285.1076	1066.35	. V Q	.	.	.	.
5.917	292.4835	1070.98	. V Q	.	.	.	.
6.000	299.8918	1075.68	. V Q	.	.	.	.
6.083	307.3326	1080.40	. V Q	.	.	.	.
6.167	314.8064	1085.20	. V Q	.	.	.	.
6.250	322.3134	1090.01	. V Q	.	.	.	.
6.333	329.8541	1094.91	. V Q	.	.	.	.
6.417	337.4285	1099.81	. V Q	.	.	.	.
6.500	345.0373	1104.80	. V Q	.	.	.	.
6.583	352.6806	1109.81	. V Q	.	.	.	.
6.667	360.3589	1114.90	. V Q	.	.	.	.
6.750	368.0725	1120.00	. V Q	.	.	.	.
6.833	375.8218	1125.20	. V Q	.	.	.	.
6.917	383.6070	1130.41	. V Q	.	.	.	.
7.000	391.4287	1135.71	. V Q	.	.	.	.
7.083	399.2870	1141.03	. V Q	.	.	.	.
7.167	407.1827	1146.45	. V Q	.	.	.	.
7.250	415.1158	1151.88	. V Q	.	.	.	.
7.333	423.0869	1157.42	. V Q	.	.	.	.
7.417	431.0964	1162.97	. V Q	.	.	.	.
7.500	439.1448	1168.63	. V Q	.	.	.	.
7.583	447.2323	1174.31	. V Q	.	.	.	.
7.667	455.3597	1180.09	. V Q	.	.	.	.
7.750	463.5271	1185.90	. V Q	.	.	.	.
7.833	471.7352	1191.82	. V Q	.	.	.	.
7.917	479.9843	1197.76	. V Q	.	.	.	.
8.000	488.2738	1203.64	. V Q	.	.	.	.
8.083	496.6009	1209.09	. V Q	.	.	.	.
8.167	504.9662	1214.66	. V Q	.	.	.	.
8.250	513.3701	1220.24	. V Q	.	.	.	.
8.333	521.8134	1225.96	. V Q	.	.	.	.
8.417	530.2961	1231.69	. V Q	.	.	.	.
8.500	538.8192	1237.56	. V Q	.	.	.	.
8.583	547.3829	1243.45	. V Q	.	.	.	.
8.667	555.9882	1249.48	. V Q	.	.	.	.
8.750	564.6351	1255.53	. V Q	.	.	.	.

8.833	573.3246	1261.73	. V Q	.	.	.	.
8.917	582.0571	1267.95	. V Q	.	.	.	.
9.000	590.8335	1274.32	. V Q	.	.	.	.
9.083	599.6539	1280.73	. V Q	.	.	.	.
9.167	608.5195	1287.28	. V Q	.	.	.	.
9.250	617.4305	1293.87	. V Q	.	.	.	.
9.333	626.3879	1300.62	. V Q	.	.	.	.
9.417	635.3920	1307.40	. V Q	.	.	.	.
9.500	644.4440	1314.35	. V Q	.	.	.	.
9.583	653.5442	1321.34	. V Q	.	.	.	.
9.667	662.6937	1328.51	. V Q	.	.	.	.
9.750	671.8928	1335.71	. V Q	.	.	.	.
9.833	681.1428	1343.10	. V Q	.	.	.	.
9.917	690.4440	1350.54	. V Q	.	.	.	.
10.000	699.7977	1358.16	. V Q	.	.	.	.
10.083	709.2043	1365.84	. V Q	.	.	.	.
10.167	718.6651	1373.71	. V Q	.	.	.	.
10.250	728.1805	1381.64	. V Q	.	.	.	.
10.333	737.7520	1389.77	. VQ	.	.	.	.
10.417	747.3798	1397.97	. VQ	.	.	.	.
10.500	757.0657	1406.38	. VQ	.	.	.	.
10.583	766.8099	1414.86	. VQ	.	.	.	.
10.667	776.6141	1423.57	. VQ	.	.	.	.
10.750	786.4788	1432.35	. VQ	.	.	.	.
10.833	796.4056	1441.37	. V Q	.	.	.	.
10.917	806.3951	1450.47	. V Q	.	.	.	.
11.000	816.4489	1459.82	. V Q	.	.	.	.
11.083	826.5677	1469.26	. V Q	.	.	.	.
11.167	836.7534	1478.96	. V Q	.	.	.	.
11.250	847.0065	1488.75	. V Q	.	.	.	.
11.333	857.3290	1498.83	. VQ	.	.	.	.
11.417	867.7217	1509.01	. VQ	.	.	.	.
11.500	878.1865	1519.49	. VQ	.	.	.	.
11.583	888.7242	1530.08	. VQ	.	.	.	.
11.667	899.3370	1540.98	. VQ	.	.	.	.
11.750	910.0257	1552.01	. VQ	.	.	.	.
11.833	920.7927	1563.37	. VQ	.	.	.	.
11.917	931.6388	1574.86	. VQ	.	.	.	.
12.000	942.5666	1586.71	. VQ	.	.	.	.
12.083	953.5992	1601.93	. VQ	.	.	.	.
12.167	964.7612	1620.73	. V Q.	.	.	.	.
12.250	976.0536	1639.66	. VQ.	.	.	.	.
12.333	987.4790	1658.97	. VQ.	.	.	.	.
12.417	999.0385	1678.44	. VQ.	.	.	.	.
12.500	1010.7491	1700.37	. VQ.	.	.	.	.
12.583	1022.6205	1723.73	. VQ.	.	.	.	.
12.667	1034.6556	1747.50	. VQ.	.	.	.	.
12.750	1046.8799	1774.96	. VQ.	.	.	.	.
12.833	1059.3291	1807.62	. V Q	.	.	.	.
12.917	1072.0298	1844.15	. V Q	.	.	.	.
13.000	1085.0142	1885.33	. V Q	.	.	.	.
13.083	1098.3055	1929.91	. VQ	.	.	.	.
13.167	1111.8988	1973.74	. VQ	.	.	.	.
13.250	1125.8149	2020.63	. V.Q	.	.	.	.
13.333	1140.1017	2074.43	. V.Q	.	.	.	.
13.417	1154.7080	2120.84	. V.Q	.	.	.	.
13.500	1169.6534	2170.08	. V. Q	.	.	.	.
13.583	1184.9940	2227.45	. V. Q	.	.	.	.

13.667	1200.6987	2280.33	. V. Q . . .
13.750	1216.7504	2330.69	. V. Q . . .
13.833	1233.2059	2389.35	. V Q . . .
13.917	1250.0875	2451.21	. V Q . . .
14.000	1267.4124	2515.56	. V Q . . .
14.083	1285.1837	2580.40	. V Q . . .
14.167	1303.5819	2671.42	. V Q . . .
14.250	1322.5896	2759.91	. V Q . . .
14.333	1342.2457	2854.07	. .V Q . . .
14.417	1362.5031	2941.36	. .V Q . . .
14.500	1383.3351	3024.81	. .V Q . . .
14.583	1404.7631	3111.34	. .V Q . . .
14.667	1426.8479	3206.73	. .V Q . . .
14.750	1449.6857	3316.04	. .V Q . . .
14.833	1473.2781	3425.62	. . V Q. . . .
14.917	1497.6792	3543.03	. . V Q. . . .
15.000	1522.9635	3671.29	. . V Q . . .
15.083	1549.1509	3802.42	. . V .Q . . .
15.167	1576.2012	3927.70	. . V .Q . . .
15.250	1604.1013	4051.10	. . V . Q . . .
15.333	1632.9460	4188.25	. . V . Q . . .
15.417	1662.5122	4293.00	. . V . Q . . .
15.500	1692.7864	4395.81	. . V . Q . . .
15.583	1723.9030	4518.13	. . V . Q . . .
15.667	1755.7310	4621.42	. . V . Q . . .
15.750	1788.1705	4710.23	. . V . Q . . .
15.833	1821.3066	4811.37	. . V . Q . . .
15.917	1855.1653	4916.27	. . V . Q . . .
16.000	1889.8351	5034.05	. . V . Q . . .
16.083	1925.7271	5211.51	. . V . Q . . .
16.167	1962.9885	5410.36	. . V . Q . . .
16.250	2000.8141	5492.27	. . V . Q . . .
16.333	2039.2413	5579.63	. . V . Q . . .
16.417	2078.1628	5651.41	. . V . .Q . . .
16.500	2117.8293	5759.57	. . V . .Q . . .
16.583	2158.0139	5834.79	. . V . . Q . . .
16.667	2198.6172	5895.58	. . V . . Q . . .
16.750	2240.6296	6100.20	. . V . . Q . . .
16.833	2284.0205	6300.34	. . V . . Q . . .
16.917	2328.4409	6449.86	. . V. . Q . . .
17.000	2373.9922	6614.06	. . V. . Q . . .
17.083	2420.3450	6730.43	. . V. . Q . . .
17.167	2466.5342	6706.67	. . V . Q . . .
17.250	2513.3103	6791.89	. . V . Q . . .
17.333	2561.1438	6945.43	. . .V . Q . . .
17.417	2607.5645	6740.28	. . .V . Q . . .
17.500	2654.4817	6812.39	. . .V . Q . . .
17.583	2702.7874	7013.97	. . . V . Q . . .
17.667	2749.8604	6834.98	. . . V . Q . . .
17.750	2796.4116	6759.25	. . . V . Q . . .
17.833	2844.5334	6987.30	. . . V . Q . . .
17.917	2893.1746	7062.71	. . . V . Q. . . .
18.000	2941.6309	7035.86	. . . V . Q. . . .
18.083	2987.9226	6721.58	. . . V . Q . . .
18.167	3037.4155	7186.36	. . . V . Q. . . .
18.250	3086.3203	7100.96	. . . V . Q. . . .
18.333	3135.8777	7195.74	. . . V . Q. . . .
18.417	3183.4756	6911.21	. . . V . Q . . .

18.500	3228.9155	6597.88	. . . V . Q . . .
18.583	3274.3738	6600.54	. . . V . Q . . .
18.667	3321.8652	6895.76	. . . V . Q . . .
18.750	3369.9246	6978.21	. . . V . Q . . .
18.833	3414.7981	6515.63	. . . V . Q . . .
18.917	3458.8833	6401.18	. . . V . Q . . .
19.000	3502.4314	6323.17	. . . V . Q . . .
19.083	3544.8967	6165.96	. . . V. Q . . .
19.167	3586.5938	6054.40	. . . V. Q . . .
19.250	3626.0554	5729.82	. . . V.Q . . .
19.333	3664.2573	5546.93	. . . Q . . .
19.417	3701.9236	5469.15	. . . Q . . .
19.500	3739.1841	5410.22	. . . Q . . .
19.583	3775.2712	5239.86	. . . QV . . .
19.667	3810.0217	5045.78	. . . Q .V . . .
19.750	3843.2913	4830.72	. . . Q .V . . .
19.833	3875.1182	4621.25	. . . Q .V . . .
19.917	3905.6401	4431.78	. . . Q . V . . .
20.000	3934.8752	4244.95	. . . Q . V . . .
20.083	3963.2927	4126.22	. . . Q . V . . .
20.167	3990.5864	3963.05	. . . Q . V . . .
20.250	4017.0771	3846.47	. . .Q . V . . .
20.333	4042.6692	3715.98	. . Q . V . . .
20.417	4067.3752	3587.32	. . Q. . V . . .
20.500	4091.2915	3472.65	. . Q. . V . . .
20.583	4114.0396	3303.00	. . Q . V . . .
20.667	4135.7075	3146.19	. . Q . V . . .
20.750	4156.6216	3036.69	. . Q . V . . .
20.833	4176.9097	2945.82	. . Q . V . . .
20.917	4196.4736	2840.72	. . Q . V . . .
21.000	4215.0894	2703.01	. . Q . V . . .
21.083	4233.1763	2626.24	. . Q . V . . .
21.167	4250.7822	2556.37	. . Q . V . . .
21.250	4267.9590	2494.03	. . Q . V . . .
21.333	4284.6987	2430.60	. . Q . V . . .
21.417	4300.9761	2363.44	. . Q . V . . .
21.500	4316.6201	2271.52	. . Q . V . . .
21.583	4331.3184	2134.16	. .Q . V . . .
21.667	4345.5991	2073.57	. .Q . V . . .
21.750	4359.5410	2024.39	. .Q . V . . .
21.833	4373.1592	1977.37	. Q . V . . .
21.917	4386.4492	1929.70	. Q . V . . .
22.000	4399.4497	1887.69	. Q . V . . .
22.083	4412.1504	1844.12	. Q . V . . .
22.167	4424.5562	1801.32	. Q . V . . .
22.250	4436.6675	1758.58	. Q. . V . . .
22.333	4448.4883	1716.35	. Q. . V . . .
22.417	4460.0205	1674.51	. Q. . V . . .
22.500	4471.2803	1634.90	. Q. . V . . .
22.583	4482.3335	1604.95	. Q . V . . .
22.667	4493.1968	1577.35	. Q . V . . .
22.750	4503.8794	1551.12	. Q . V . . .
22.833	4514.3823	1525.04	. Q . V . . .
22.917	4524.7163	1500.46	. Q . V . . .
23.000	4534.8979	1478.40	. Q . V . . .
23.083	4544.9331	1457.09	. Q . V . . .
23.167	4554.8252	1436.30	. Q . V . . .
23.250	4564.5776	1416.08	. Q . V . . .

23.333	4574.1987	1396.98	.	Q	.	.	V	.
23.417	4583.7021	1379.92	.	Q	.	.	V	.
23.500	4593.0938	1363.64	.	Q	.	.	V	.
23.583	4602.3916	1350.01	.	Q	.	.	V	.
23.667	4611.6001	1337.10	.	Q	.	.	V	.
23.750	4620.7236	1324.70	.	Q	.	.	V	.
23.833	4629.7612	1312.23	.	Q	.	.	V	.
23.917	4638.7041	1298.51	.	Q	.	.	V	.
24.000	4647.4829	1274.69	.	Q	.	.	V	.
24.083	4656.0049	1237.41	.	Q	.	.	V	.
24.167	4664.4214	1222.04	.	Q	.	.	V	.
24.250	4672.7344	1207.05	.	Q	.	.	V	.
24.333	4680.9434	1191.97	.	Q	.	.	V	.
24.417	4689.0391	1175.53	.	Q	.	.	V	.
24.500	4697.0127	1157.76	.	Q	.	.	V	.
24.583	4704.8584	1139.17	.	Q	.	.	V	.
24.667	4712.5762	1120.59	.	Q	.	.	V	.
24.750	4720.1514	1099.89	.	Q	.	.	V	.
24.833	4727.5645	1076.35	.	Q	.	.	V	.
24.917	4734.8003	1050.62	.	Q	.	.	V	.
25.000	4741.8477	1023.29	.	Q	.	.	V	.
25.083	4748.7100	996.42	.	Q	.	.	V	.
25.167	4755.3940	970.54	.	Q	.	.	V	.
25.250	4761.8896	943.17	.	Q	.	.	V	.
25.333	4768.1719	912.17	.	Q	.	.	V	.
25.417	4774.2734	885.98	.	Q	.	.	V	.
25.500	4780.1870	858.62	.	Q	.	.	V	.
25.583	4785.8804	826.70	.	Q	.	.	V	.
25.667	4791.3765	798.04	.	Q	.	.	V	.
25.750	4796.6880	771.24	.	Q	.	.	V	.
25.833	4801.7842	739.98	.	Q	.	.	V	.
25.917	4806.6543	707.14	.	Q	.	.	V	.
26.000	4811.2939	673.66	.	Q	.	.	V	.
26.083	4815.7480	646.74	.	Q	.	.	V	.
26.167	4819.9502	610.18	.	Q	.	.	V	.
26.250	4823.9116	575.17	.	Q	.	.	V	.
26.333	4827.6099	536.95	.	Q	.	.	V	.
26.417	4831.0737	502.92	.	Q	.	.	V	.
26.500	4834.3452	475.05	.	Q	.	.	V	.
26.583	4837.4268	447.46	.	Q	.	.	V	.
26.667	4840.2812	414.47	.	Q	.	.	V	.
26.750	4842.8921	379.12	.	Q	.	.	V	.
26.833	4845.3154	351.89	.	Q	.	.	V	.
26.917	4847.5591	325.79	.	Q	.	.	V	.
27.000	4849.6245	299.91	.	Q	.	.	V	.
27.083	4851.5308	276.78	.	Q	.	.	V	.
27.167	4853.2783	253.75	.	Q	.	.	V	.
27.250	4854.8994	235.36	.	Q	.	.	V	.
27.333	4856.4048	218.62	.	Q	.	.	V	.
27.417	4857.7939	201.73	.	Q	.	.	V	.
27.500	4859.0654	184.65	.	Q	.	.	V	.
27.583	4860.2290	168.97	Q	.	.	.	V	.
27.667	4861.2930	154.49	Q	.	.	.	V	.
27.750	4862.2661	141.27	Q	.	.	.	V	.
27.833	4863.1602	129.79	Q	.	.	.	V	.
27.917	4863.9844	119.65	Q	.	.	.	V	.
28.000	4864.7476	110.83	Q	.	.	.	V	.
28.083	4865.4517	102.23	Q	.	.	.	V	.

28.167	4866.1011	94.32	Q	.	.	.	V	.
28.250	4866.6968	86.51	Q	.	.	.	V	.
28.333	4867.2417	79.09	Q	.	.	.	V	.
28.417	4867.7383	72.07	Q	.	.	.	V	.
28.500	4868.1865	65.11	Q	.	.	.	V	.
28.583	4868.5957	59.39	Q	.	.	.	V	.
28.667	4868.9722	54.67	Q	.	.	.	V	.
28.750	4869.3164	49.98	Q	.	.	.	V	.
28.833	4869.6284	45.31	Q	.	.	.	V	.
28.917	4869.9111	41.06	Q	.	.	.	V	.
29.000	4870.1729	38.02	Q	.	.	.	V	.
29.083	4870.4146	35.10	Q	.	.	.	V	.
29.167	4870.6362	32.19	Q	.	.	.	V	.
29.250	4870.8379	29.30	Q	.	.	.	V	.
29.333	4871.0200	26.44	Q	.	.	.	V	.
29.417	4871.1826	23.59	Q	.	.	.	V	.
29.500	4871.3276	21.09	Q	.	.	.	V	.
29.583	4871.4663	20.13	Q	.	.	.	V	.
29.667	4871.5996	19.35	Q	.	.	.	V	.
29.750	4871.7275	18.58	Q	.	.	.	V	.
29.833	4871.8501	17.82	Q	.	.	.	V	.
29.917	4871.9678	17.06	Q	.	.	.	V	.
30.000	4872.0801	16.31	Q	.	.	.	V	.
30.083	4872.1870	15.56	Q	.	.	.	V	.
30.167	4872.2891	14.82	Q	.	.	.	V	.
30.250	4872.3862	14.08	Q	.	.	.	V	.
30.333	4872.4780	13.35	Q	.	.	.	V	.
30.417	4872.5649	12.63	Q	.	.	.	V	.
30.500	4872.6470	11.91	Q	.	.	.	V	.
30.583	4872.7241	11.19	Q	.	.	.	V	.
30.667	4872.7964	10.49	Q	.	.	.	V	.
30.750	4872.8638	9.78	Q	.	.	.	V	.
30.833	4872.9263	9.09	Q	.	.	.	V	.
30.917	4872.9839	8.40	Q	.	.	.	V	.
31.000	4873.0371	7.71	Q	.	.	.	V	.
31.083	4873.0854	7.03	Q	.	.	.	V	.
31.167	4873.1294	6.36	Q	.	.	.	V	.
31.250	4873.1685	5.69	Q	.	.	.	V	.
31.333	4873.2031	5.02	Q	.	.	.	V	.
31.417	4873.2329	4.36	Q	.	.	.	V	.
31.500	4873.2583	3.70	Q	.	.	.	V	.
31.583	4873.2793	3.04	Q	.	.	.	V	.
31.667	4873.2959	2.39	Q	.	.	.	V	.
31.750	4873.3081	1.74	Q	.	.	.	V	.
31.833	4873.3159	1.10	Q	.	.	.	V	.
31.917	4873.3188	0.46	Q	.	.	.	V	.

TIME DURATION(minutes) OF PERCENTILES OF ESTIMATED PEAK FLOW RATE:
(Note: 100% of Peak Flow Rate estimate assumed to have
an instantaneous time duration)

Percentile of Estimated Peak Flow Rate	Duration (minutes)
0%	1915.0
10%	1370.0
20%	740.0
30%	485.0

40%	390.0
50%	325.0
60%	270.0
70%	220.0
80%	165.0
90%	115.0

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END OF FLOODSCx ROUTING ANALYSIS

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             F L O O D    R O U T I N G    A N A L Y S I S
             USING COUNTY HYDROLOGY MANUAL OF ORANGE(1986)
         (c) Copyright 1989-2013 Advanced Engineering Software (aes)
             Ver. 20.0  Release Date: 06/01/2013  License ID 1237

                        Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RMV PA-3 ROMP AMENDMENT 2022 - NODE 126                                *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL              *
* 10-YR EV NOV 2022 ROKAMOTO                                             *
 ************************************************************************

  FILE NAME: EV10126S.DAT
  TIME/DATE OF STUDY: 18:23 11/07/2022


                       ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    126.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =   50438.699 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.425 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.297; LOW LOSS FRACTION = 0.747
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.33; 30-MINUTE =  0.63;  1-HOUR =  0.88
    3-HOUR =  1.64;    6-HOUR =  2.44; 24-HOUR =  4.29
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.341; 30-MINUTE = 0.392;  1-HOUR = 0.432
    3-HOUR = 0.782;    6-HOUR = 0.902; 24-HOUR = 0.943
==========================================================================
```



```
 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV10126S.DAT   ]
Page:   1 of    |
 +-------------------+---------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                 | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+---------------------------------+----------------------+-
-----------+-------------+-----------+
 | 10100.00     126.00| Subarea (UH) Added to Stream #1|       0.0      7134.1|
18.250 |             |           |
 +-------------------+---------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
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   END OF FLOODSCx ROUTING ANALYSIS
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                        Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RMV PA-3 ROMP AMENDMENT 2022 - NODE 127                                *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL              *
* 10-YR EV NOV 2022 ROKAMOTO                                             *
 ************************************************************************

  FILE NAME: EV10127S.DAT
  TIME/DATE OF STUDY: 18:23 11/07/2022


                       ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    127.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =   53506.199 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.564 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.297; LOW LOSS FRACTION = 0.747
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.32; 30-MINUTE =  0.63;  1-HOUR =  0.87
    3-HOUR =  1.62;    6-HOUR =  2.40; 24-HOUR =  4.22
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.331; 30-MINUTE = 0.383;  1-HOUR = 0.424
    3-HOUR = 0.773;    6-HOUR = 0.898; 24-HOUR = 0.941
==========================================================================
```



```
 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV10127S.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 10100.00     127.00| Subarea (UH) Added to Stream #1|       0.0      7092.0|
18.583 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
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   END OF FLOODSCx ROUTING ANALYSIS
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                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RMV PA-3 ROMP AMENDMENT 2022 - NODE 137                                *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL              *
* 10-YR EV AUG 2023 ROKAMOTO                                             *
 ************************************************************************

  FILE NAME: EV10137S.DAT
  TIME/DATE OF STUDY: 08:32 08/10/2023


                        ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    137.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =   67798.297 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.990 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.284; LOW LOSS FRACTION = 0.736
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.31; 30-MINUTE =  0.62;  1-HOUR =  0.85
    3-HOUR =  1.56;    6-HOUR =  2.28; 24-HOUR =  3.97
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.291; 30-MINUTE = 0.350;  1-HOUR = 0.394
    3-HOUR = 0.738;    6-HOUR = 0.886; 24-HOUR = 0.933
==========================================================================
```



```
 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV10137S.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 10100.00     137.00| Subarea (UH) Added to Stream #1|       0.0      7565.3|
18.750 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
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   END OF FLOODSCx ROUTING ANALYSIS
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                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RMV PA-3 ROMP AMENDMENT 2022 - NODE 138                                *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL              *
* 10-YR EV AUG 2023 ROKAMOTO                                             *
 ************************************************************************

  FILE NAME: EV10138S.DAT
  TIME/DATE OF STUDY: 08:31 08/10/2023


                        ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    138.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =   69102.000 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    3.094 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.284; LOW LOSS FRACTION = 0.735
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.31; 30-MINUTE =  0.62;  1-HOUR =  0.85
    3-HOUR =  1.55;    6-HOUR =  2.27; 24-HOUR =  3.95
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.287; 30-MINUTE = 0.348;  1-HOUR = 0.392
    3-HOUR = 0.734;    6-HOUR = 0.885; 24-HOUR = 0.932
==========================================================================
```



```
 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV10138S.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 10100.00     138.00| Subarea (UH) Added to Stream #1|       0.0      7530.9|
18.833 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
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   END OF FLOODSCx ROUTING ANALYSIS
```

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                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RMV PA-3 ROMP AMENDMENT 2022 - NODE 139                                *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL              *
* 10-YR EV AUG 2023 ROKAMOTO                                             *
 ************************************************************************

  FILE NAME: EV10139S.DAT
  TIME/DATE OF STUDY: 08:31 08/10/2023


                        ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    139.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =   69529.797 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    3.152 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.283; LOW LOSS FRACTION = 0.734
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.31; 30-MINUTE =  0.62;  1-HOUR =  0.85
    3-HOUR =  1.55;    6-HOUR =  2.27; 24-HOUR =  3.95
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.286; 30-MINUTE = 0.348;  1-HOUR = 0.391
    3-HOUR = 0.733;    6-HOUR = 0.885; 24-HOUR = 0.932
==========================================================================
```



```
 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV10139S.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 10100.00     139.00| Subarea (UH) Added to Stream #1|       0.0      7531.3|
18.917 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
-------------------------------------+

   END OF FLOODSCx ROUTING ANALYSIS
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**************************************************************************

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                        Analysis prepared by:

                      Michael Baker International
                    5 Hutton Centre Drive Suite 500
                          Santa Ana, CA92707


 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJJO - SINGLE AREA UH                                *
* PHASE CONDITION NO PA5 - REGIONAL NODE 119                            *
* 25-YR EV JANUARY 2019 CCHIU                                           *
 ************************************************************************

  FILE NAME: EV25119S.DAT
  TIME/DATE OF STUDY: 14:41 01/02/2019


**************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    119.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS)<<<<<
==========================================================================

      (UNIT-HYDROGRAPH ADDED TO STREAM #1)

         WATERSHED AREA =   49495.699 ACRES
         BASEFLOW =   0.000 CFS/SQUARE-MILE
         *USER ENTERED "LAG" TIME =    2.119 HOURS
         VALLEY(DEVELOPED) S-GRAPH SELECTED
         MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.298
         LOW LOSS FRACTION = 0.433
         *HYDROGRAPH MODEL #1 SPECIFIED*

         SPECIFIED PEAK  5-MINUTES RAINFALL(INCH)=  0.42
         SPECIFIED PEAK 30-MINUTES RAINFALL(INCH)=  0.78
         SPECIFIED PEAK  1-HOUR RAINFALL(INCH) =  1.08
         SPECIFIED PEAK  3-HOUR RAINFALL(INCH) =  2.02
         SPECIFIED PEAK  6-HOUR RAINFALL(INCH) =  3.00
         SPECIFIED PEAK 24-HOUR RAINFALL(INCH) =  5.30

         *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
           5-MINUTE FACTOR = 0.345
          30-MINUTE FACTOR = 0.395
           1-HOUR FACTOR = 0.435
           3-HOUR FACTOR = 0.785
           6-HOUR FACTOR = 0.904
          24-HOUR FACTOR = 0.944

         UNIT HYDROGRAPH TIME UNIT =   5.000 MINUTES
         UNIT INTERVAL PERCENTAGE OF LAG-TIME =   3.933
```


UNIT HYDROGRAPH DETERMINATION

INTERVAL NUMBER	"S" GRAPH MEAN VALUES	UNIT HYDROGRAPH ORDINATES(CFS)
1	0.225	1345.173
2	0.674	2690.348
3	1.124	2690.344
4	1.573	2690.350
5	2.058	2902.728
6	2.718	3951.946
7	3.402	4094.002
8	4.199	4767.580
9	5.417	7293.895
10	6.889	8807.938
11	8.696	10819.629
12	10.737	12215.654
13	12.704	11776.396
14	15.066	14135.504
15	17.479	14447.877
16	19.600	12694.560
17	22.168	15370.437
18	24.894	16316.075
19	27.152	13517.292
20	29.888	16380.045
21	32.903	18045.570
22	36.067	18942.230
23	38.760	16116.297
24	42.425	21938.598
25	46.006	21435.420
26	50.026	24063.812
27	53.062	18176.092
28	55.810	16445.523
29	58.990	19038.225
30	62.814	22887.479
31	65.775	17723.652
32	68.507	16356.926
33	71.205	16150.274
34	73.661	14698.422
35	76.009	14056.319
36	77.827	10879.104
37	79.578	10482.928
38	81.397	10889.516
39	83.119	10308.290
40	84.701	9469.220
41	86.142	8623.436
42	87.371	7358.504
43	88.444	6425.036
44	89.370	5539.155
45	90.262	5342.917
46	91.092	4966.150
47	91.914	4917.787
48	92.677	4567.006

49	93.426	4484.528
50	94.108	4081.685
51	94.616	3042.722
52	95.115	2989.198
53	95.615	2990.660
54	96.063	2684.451
55	96.379	1889.268
56	96.687	1846.111
57	96.996	1846.111
58	97.304	1846.157
59	97.613	1846.111
60	97.914	1804.507
61	98.055	844.277
62	98.129	440.018
63	98.202	439.972
64	98.276	442.941
65	98.350	442.941
66	98.423	437.004
67	98.497	442.986
68	98.571	442.941
69	98.645	442.941
70	98.718	437.004
71	98.793	445.955
72	98.866	437.004
73	98.940	445.909
74	99.013	437.004
75	99.086	437.004
76	99.159	437.004
77	99.232	437.004
78	99.305	437.004
79	99.378	437.004
80	99.451	437.004
81	99.524	437.004
82	99.597	437.004
83	99.670	437.004
84	99.743	437.004
85	99.816	437.004
86	99.889	437.004
87	99.962	437.004
88	100.000	225.512

TOTAL SOIL-LOSS VOLUME(ACRE-FEET) = 8777.2588

TOTAL STORM RUNOFF VOLUME(ACRE-FEET) = 11843.7471

==========

2 4 - H O U R S T O R M
R U N O F F H Y D R O G R A P H

==========

HYDROGRAPH IN FIVE-MINUTE UNIT INTERVALS(CFS)
(Note: Time indicated is at END of Each Unit Intervals)

TIME(HRS)	VOLUME(AF)	Q(CFS)	0. 3750.0 7500.0 11250.0 15000.0
0.083	0.0403	5.85	Q . . . .
0.167	0.1612	17.55	Q . . . .
0.250	0.3629	29.29	Q . . . .
0.333	0.6458	41.07	Q . . . .
0.417	1.0163	53.80	Q . . . .
0.500	1.5062	71.13	Q . . . .
0.583	2.1201	89.13	Q . . . .
0.667	2.8784	110.11	Q . . . .
0.750	3.8573	142.13	Q . . . .
0.833	5.1027	180.83	Q . . . .
0.917	6.6755	228.38	Q . . . .
1.000	8.6186	282.13	Q . . . .
1.083	10.9198	334.14	Q . . . .
1.167	13.6510	396.56	VQ . . . .
1.250	16.8226	460.52	VQ . . . .
1.333	20.3835	517.05	VQ . . . .
1.417	24.4152	585.39	VQ . . . .
1.500	28.9471	658.04	VQ . . . .
1.583	33.8972	718.75	VQ . . . .
1.667	39.3525	792.10	V Q . . . .
1.750	45.3642	872.90	V Q . . . .
1.833	51.9610	957.86	V Q . . . .
1.917	59.0601	1030.78	V Q . . . .
2.000	66.8374	1129.27	V Q . . . .
2.083	75.2797	1225.82	V Q . . . .
2.167	84.4681	1334.16	V Q . . . .
2.250	94.2282	1417.17	V Q . . . .
2.333	104.5107	1493.02	V Q . . . .
2.417	115.3944	1580.30	V Q . . . .
2.500	126.9968	1684.67	V Q . . . .
2.583	139.1651	1766.84	V Q . . . .
2.667	151.8610	1843.45	V Q . . . .
2.750	165.0794	1919.30	V Q . . . .
2.833	178.7792	1989.22	V Q . . . .
2.917	192.9423	2056.47	V Q . . . .
3.000	207.4757	2110.26	V Q . . . .
3.083	222.3684	2162.42	V Q . . . .
3.167	237.6346	2216.64	V Q . . . .
3.250	253.2574	2268.44	V Q . . . .
3.333	269.2138	2316.88	V Q . . . .
3.417	285.4792	2361.73	V Q . . . .
3.500	302.0176	2401.37	.V Q . . . .
3.583	318.8014	2437.01	.V Q . . . .
3.667	335.8059	2469.06	.V Q . . . .
3.750	353.0255	2500.29	.V Q . . . .
3.833	370.4507	2530.13	.V Q . . . .
3.917	388.0802	2559.80	.V Q . . . .

4.000	405.9052	2588.19	.V Q	.	.	.	.
4.083	423.9236	2616.26	.V Q	.	.	.	.
4.167	442.1247	2642.81	.V Q	.	.	.	.
4.250	460.4779	2664.88	.V Q	.	.	.	.
4.333	478.9830	2686.95	.V Q	.	.	.	.
4.417	497.6403	2709.04	.V Q	.	.	.	.
4.500	516.4422	2730.03	.V Q	.	.	.	.
4.583	535.3649	2747.58	.V Q	.	.	.	.
4.667	554.4089	2765.18	.V Q	.	.	.	.
4.750	573.5740	2782.77	.V Q	.	.	.	.
4.833	592.8619	2800.60	. V Q	.	.	.	.
4.917	612.2726	2818.44	. V Q	.	.	.	.
5.000	631.8065	2836.32	. V Q	.	.	.	.
5.083	651.4349	2850.04	. V Q	.	.	.	.
5.167	671.1474	2862.25	. V Q	.	.	.	.
5.250	690.9437	2874.43	. V Q	.	.	.	.
5.333	710.8257	2886.86	. V Q	.	.	.	.
5.417	730.7932	2899.28	. V Q	.	.	.	.
5.500	750.8478	2911.92	. V Q	.	.	.	.
5.583	770.9894	2924.57	. V Q	.	.	.	.
5.667	791.2200	2937.47	. V Q	.	.	.	.
5.750	811.5392	2950.36	. V Q	.	.	.	.
5.833	831.9489	2963.48	. V Q	.	.	.	.
5.917	852.4490	2976.62	. V Q	.	.	.	.
6.000	873.0413	2990.00	. V Q	.	.	.	.
6.083	893.7258	3003.40	. V Q	.	.	.	.
6.167	914.5043	3017.03	. V Q	.	.	.	.
6.250	935.3765	3030.66	. V Q	.	.	.	.
6.333	956.3446	3044.56	. V Q	.	.	.	.
6.417	977.4084	3058.46	. V Q	.	.	.	.
6.500	998.5699	3072.65	. V Q	.	.	.	.
6.583	1019.8290	3086.83	. V Q	.	.	.	.
6.667	1041.1879	3101.31	. V Q	.	.	.	.
6.750	1062.6464	3115.78	. V Q	.	.	.	.
6.833	1084.2067	3130.56	. V Q	.	.	.	.
6.917	1105.8688	3145.34	. V Q	.	.	.	.
7.000	1127.6349	3160.44	. V Q	.	.	.	.
7.083	1149.5050	3175.53	. V Q	.	.	.	.
7.167	1171.4813	3190.95	. V Q	.	.	.	.
7.250	1193.5638	3206.38	. V Q	.	.	.	.
7.333	1215.7485	3221.22	. V Q	.	.	.	.
7.417	1238.0287	3235.08	. V Q	.	.	.	.
7.500	1260.4067	3249.29	. V Q	.	.	.	.
7.583	1282.8826	3263.50	. V Q	.	.	.	.
7.667	1305.4587	3278.06	. V Q	.	.	.	.
7.750	1328.1353	3292.62	. V Q	.	.	.	.
7.833	1350.9146	3307.55	. V Q	.	.	.	.
7.917	1373.7968	3322.49	. V Q	.	.	.	.
8.000	1396.7844	3337.81	. V Q	.	.	.	.
8.083	1419.8777	3353.14	. V Q	.	.	.	.
8.167	1443.0792	3368.86	. V Q	.	.	.	.
8.250	1466.3892	3384.60	. V Q.	.	.	.	.
8.333	1489.8103	3400.74	. V Q.	.	.	.	.
8.417	1513.3427	3416.90	. V Q.	.	.	.	.
8.500	1536.9893	3433.49	. V Q.	.	.	.	.
8.583	1560.7502	3450.09	. V Q.	.	.	.	.
8.667	1584.6287	3467.14	. V Q.	.	.	.	.
8.750	1608.6246	3484.21	. V Q.	.	.	.	.

8.833	1632.7413	3501.74	. V Q.	.	.	.	.
8.917	1656.9789	3519.30	. V Q.	.	.	.	.
9.000	1681.3407	3537.34	. V Q.	.	.	.	.
9.083	1705.8269	3555.40	. V Q.	.	.	.	.
9.167	1730.4410	3573.97	. V Q.	.	.	.	.
9.250	1755.1832	3592.57	. V Q.	.	.	.	.
9.333	1780.0571	3611.70	. V Q.	.	.	.	.
9.417	1805.0631	3630.86	. V Q.	.	.	.	.
9.500	1830.2048	3650.58	. V Q.	.	.	.	.
9.583	1855.4827	3670.33	. V Q.	.	.	.	.
9.667	1880.9004	3690.66	. V Q.	.	.	.	.
9.750	1906.4585	3711.04	. V Q.	.	.	.	.
9.833	1932.1611	3732.02	. V Q.	.	.	.	.
9.917	1958.0087	3753.06	. V Q	.	.	.	.
10.000	1984.0054	3774.71	. V Q	.	.	.	.
10.083	2010.1517	3796.45	. V Q	.	.	.	.
10.167	2036.4521	3818.82	. V Q	.	.	.	.
10.250	2062.9072	3841.29	. V Q	.	.	.	.
10.333	2089.5217	3864.43	. V Q	.	.	.	.
10.417	2116.2964	3887.67	. V Q	.	.	.	.
10.500	2143.2358	3911.62	. V Q	.	.	.	.
10.583	2170.3411	3935.68	. V Q	.	.	.	.
10.667	2197.6172	3960.48	. V Q	.	.	.	.
10.750	2225.0649	3985.40	. V Q	.	.	.	.
10.833	2252.6897	4011.11	. V Q	.	.	.	.
10.917	2280.4924	4036.96	. V Q	.	.	.	.
11.000	2308.4788	4063.63	. V Q	.	.	.	.
11.083	2336.6499	4090.46	. V Q	.	.	.	.
11.167	2365.0120	4118.16	. V Q	.	.	.	.
11.250	2393.5659	4146.03	. V .Q	.	.	.	.
11.333	2422.3181	4174.82	. V .Q	.	.	.	.
11.417	2451.2700	4203.81	. V .Q	.	.	.	.
11.500	2480.4282	4233.77	. V .Q	.	.	.	.
11.583	2509.7942	4263.95	. V .Q	.	.	.	.
11.667	2539.3752	4295.16	. V .Q	.	.	.	.
11.750	2569.1729	4326.62	. V .Q	.	.	.	.
11.833	2599.1946	4359.16	. V .Q	.	.	.	.
11.917	2629.4424	4391.99	. V .Q	.	.	.	.
12.000	2659.9243	4425.97	. V .Q	.	.	.	.
12.083	2690.7087	4469.88	. V.Q	.	.	.	.
12.167	2721.8699	4524.59	. V. Q	.	.	.	.
12.250	2753.4097	4579.57	. V. Q	.	.	.	.
12.333	2785.3364	4635.76	. V. Q	.	.	.	.
12.417	2817.6628	4693.78	. V. Q	.	.	.	.
12.500	2850.4492	4760.57	. V. Q	.	.	.	.
12.583	2883.7046	4828.69	. V. Q	.	.	.	.
12.667	2917.4714	4902.95	. V. Q	.	.	.	.
12.750	2951.8762	4995.58	. V. Q	.	.	.	.
12.833	2987.0027	5100.36	. V Q	.	.	.	.
12.917	3022.9512	5219.72	. V Q	.	.	.	.
13.000	3059.7996	5350.37	. V Q	.	.	.	.
13.083	3097.5271	5478.02	. V Q	.	.	.	.
13.167	3136.2590	5623.88	. V Q	.	.	.	.
13.250	3176.0117	5772.10	. V Q	.	.	.	.
13.333	3216.7083	5909.14	. V Q	.	.	.	.
13.417	3258.4817	6065.49	. .V Q	.	.	.	.
13.500	3301.3884	6230.06	. .V Q	.	.	.	.
13.583	3345.2915	6374.73	. .V Q	.	.	.	.

13.667	3390.3428	6541.44	. .V Q . . .
13.750	3436.6255	6720.25	. .V Q . . .
13.833	3484.1946	6907.02	. .V Q . . .
13.917	3532.9119	7073.77	. .V Q . . .
14.000	3583.0759	7283.81	. . V Q. . .
14.083	3634.7385	7501.42	. . V Q . .
14.167	3688.1138	7750.10	. . V Q . .
14.250	3742.9080	7956.11	. . V .Q . .
14.333	3799.0420	8150.67	. . V .Q . .
14.417	3856.6533	8365.16	. . V . Q . .
14.500	3915.9966	8616.64	. . V . Q . .
14.583	3976.8203	8831.61	. . V . Q . .
14.667	4039.0989	9042.84	. . V . Q . .
14.750	4102.9585	9272.42	. . V . Q . .
14.833	4168.4116	9503.82	. . V . Q . .
14.917	4235.5254	9744.89	. . V . Q . .
15.000	4304.2134	9973.51	. . V . Q . .
15.083	4374.4087	10192.38	. . V . Q . .
15.167	4446.2529	10431.78	. . V . Q . .
15.250	4519.7080	10665.65	. . V . Q . .
15.333	4594.6143	10876.40	. . V . Q. .
15.417	4670.9541	11084.55	. . V . Q. .
15.500	4748.6064	11275.13	. . V . Q .
15.583	4827.3516	11433.78	. . V . Q .
15.667	4907.3110	11610.08	. . V . Q .
15.750	4988.4976	11788.26	. . V . .Q .
15.833	5070.8247	11953.88	. . V . .Q .
15.917	5154.1572	12099.92	. . V . . Q .
16.000	5238.8652	12299.63	. . V . . Q .
16.083	5325.6050	12594.65	. . V . . Q .
16.167	5414.2471	12870.82	. . V . . Q .
16.250	5503.3291	12934.72	. . V . . Q .
16.333	5592.6709	12972.45	. . V . . Q .
16.417	5682.6768	13068.87	. . V. . Q .
16.500	5773.9966	13259.63	. . V. . Q .
16.583	5865.7344	13320.36	. . V. . Q .
16.667	5958.4385	13460.60	. . V . Q .
16.750	6053.1968	13758.88	. . V . Q .
16.833	6149.1748	13936.00	. . V . Q .
16.917	6246.8408	14181.12	. . .V . Q .
17.000	6345.3838	14308.45	. . .V . Q .
17.083	6443.4849	14244.28	. . .V . Q .
17.167	6542.8315	14425.17	. . . V . Q .
17.250	6642.3984	14457.13	. . . V . Q .
17.333	6740.5864	14256.92	. . . V . Q .
17.417	6840.1782	14460.71	. . . V . Q .
17.500	6939.7334	14455.38	. . . V . Q .
17.583	7037.6284	14214.33	. . . V . Q .
17.667	7137.4819	14498.75	. . . V . Q .
17.750	7238.1162	14612.13	. . . V . Q .
17.833	7338.6562	14598.43	. . . V . Q .
17.917	7437.2236	14311.97	. . . V . Q .
18.000	7539.7061	14880.44	. . . V . Q.
18.083	7641.5439	14786.85	. . . V . Q.
18.167	7744.2856	14918.11	. . . V . Q.
18.250	7842.2451	14223.71	. . . V . Q .
18.333	7939.4561	14115.03	. . . V . Q .
18.417	8038.4990	14381.06	. . . V . Q .

18.500	8139.7646	14703.74	. . . V . Q.
18.583	8237.0117	14120.28	. . . V . Q .
18.667	8332.7188	13896.68	. . . V . Q .
18.750	8427.5049	13762.98	. . . V . Q .
18.833	8520.7080	13533.09	. . . V . Q .
18.917	8612.5703	13338.35	. . . V. Q .
19.000	8701.0918	12853.28	. . . V. Q .
19.083	8788.2197	12650.92	. . . V. Q .
19.167	8874.0332	12460.06	. . . V. Q .
19.250	8958.0879	12204.69	. . . V Q .
19.333	9040.1455	11914.79	. . . VQ .
19.417	9119.8066	11566.76	. . . Q .
19.500	9196.5498	11143.04	. . . Q.V .
19.583	9271.0547	10818.09	. . . Q .V .
19.667	9343.2646	10484.91	. . . Q .V .
19.750	9413.5127	10200.05	. . . Q .V .
19.833	9481.6504	9893.54	. . . Q . V .
19.917	9548.0723	9644.47	. . . Q . V .
20.000	9612.3750	9336.76	. . . Q . V .
20.083	9674.7090	9050.90	. . . Q . V .
20.167	9734.6367	8701.53	. . . Q . V .
20.250	9792.1152	8345.82	. . . Q . V .
20.333	9847.9248	8103.54	. . .Q . V .
20.417	9902.0410	7857.63	. . Q . V .
20.500	9954.1230	7562.26	. . Q . V .
20.583	10004.1113	7258.31	. . Q. . V .
20.667	10052.6426	7046.77	. . Q . . V .
20.750	10099.7939	6846.41	. . Q . . V .
20.833	10145.6523	6658.60	. . Q . . V .
20.917	10190.1562	6461.92	. . Q . . V .
21.000	10233.3887	6277.37	. . Q . . V .
21.083	10274.7852	6010.75	. . Q . . V .
21.167	10314.7744	5806.42	. . Q . . V .
21.250	10353.7314	5656.50	. . Q . . V .
21.333	10391.7109	5514.66	. . Q . . V .
21.417	10428.6904	5369.45	. . Q . . V .
21.500	10464.7256	5232.29	. . Q . . V .
21.583	10499.9209	5110.33	. . Q . . V .
21.667	10534.3271	4995.79	. . Q . . V .
21.750	10567.9629	4883.94	. . Q . . V .
21.833	10600.8516	4775.49	. . Q . . V .
21.917	10633.0146	4670.05	. . Q . . V .
22.000	10664.4668	4566.89	. . Q . . V .
22.083	10695.2871	4475.14	. .Q . . V .
22.167	10725.5176	4389.46	. .Q . . V .
22.250	10755.2285	4314.03	. .Q . . V .
22.333	10784.4336	4240.57	. .Q . . V .
22.417	10813.1445	4168.84	. .Q . . V .
22.500	10841.3867	4100.82	. Q . . V .
22.583	10869.2100	4039.92	. Q . . V .
22.667	10896.6416	3983.05	. Q . . V .
22.750	10923.7061	3929.82	. Q . . V .
22.833	10950.4102	3877.45	. Q . . V .
22.917	10976.7578	3825.69	. Q . . V .
23.000	11002.7627	3775.89	. Q . . V .
23.083	11028.4814	3734.32	. Q. . . V .
23.167	11053.9297	3695.10	. Q. . . V .
23.250	11079.0947	3653.98	. Q. . . V .

23.333	11103.8389	3592.86	. Q.	.	.	V	.
23.417	11128.1758	3533.69	. Q.	.	.	V	.
23.500	11152.2686	3498.34	. Q.	.	.	V	.
23.583	11176.1260	3464.16	. Q.	.	.	V	.
23.667	11199.7432	3429.21	. Q.	.	.	V	.
23.750	11223.1084	3392.66	. Q.	.	.	V	.
23.833	11246.2256	3356.63	. Q .	.	.	V	.
23.917	11269.0977	3321.00	. Q .	.	.	V	.
24.000	11291.7275	3285.91	. Q .	.	.	V	.
24.083	11314.0781	3245.37	. Q .	.	.	V	.
24.167	11336.1133	3199.55	. Q .	.	.	V	.
24.250	11357.8369	3154.23	. Q .	.	.	V	.
24.333	11379.2637	3111.17	. Q .	.	.	V	.
24.417	11400.4043	3069.67	. Q .	.	.	V	.
24.500	11421.2334	3024.32	. Q .	.	.	V	.
24.583	11441.7500	2979.06	. Q .	.	.	V	.
24.667	11461.9395	2931.55	. Q .	.	.	V	.
24.750	11481.7314	2873.75	. Q .	.	.	V	.
24.833	11501.0850	2810.08	. Q .	.	.	V	.
24.917	11519.9443	2738.40	. Q .	.	.	V	.
25.000	11538.2734	2661.41	. Q .	.	.	V	.
25.083	11556.0908	2587.08	. Q .	.	.	V	.
25.167	11573.3311	2503.23	. Q .	.	.	V	.
25.250	11589.9893	2418.79	. Q .	.	.	V	.
25.333	11606.1338	2344.22	. Q .	.	.	V	.
25.417	11621.7012	2260.35	. Q .	.	.	V	.
25.500	11636.6680	2173.13	. Q .	.	.	V	.
25.583	11651.1230	2098.81	. Q .	.	.	V	.
25.667	11664.9854	2012.74	. Q .	.	.	V	.
25.750	11678.2100	1920.17	. Q .	.	.	V	.
25.833	11690.7754	1824.46	. Q .	.	.	V	.
25.917	11702.7705	1741.76	. Q .	.	.	V	.
26.000	11714.0273	1634.46	. Q .	.	.	V	.
26.083	11724.5654	1530.14	. Q .	.	.	V	.
26.167	11734.3115	1415.17	. Q .	.	.	V	.
26.250	11743.4473	1326.56	. Q .	.	.	V	.
26.333	11752.0293	1246.11	. Q .	.	.	V	.
26.417	11759.9834	1155.00	. Q .	.	.	V	.
26.500	11767.2002	1047.83	. Q .	.	.	V	.
26.583	11773.8379	963.80	. Q .	.	.	V	.
26.667	11779.9414	886.27	. Q .	.	.	V	.
26.750	11785.5215	810.18	. Q .	.	.	V	.
26.833	11790.6240	740.91	.Q .	.	.	V	.
26.917	11795.2725	674.90	.Q .	.	.	V	.
27.000	11799.5635	623.12	.Q .	.	.	V	.
27.083	11803.5127	573.43	.Q .	.	.	V	.
27.167	11807.1094	522.31	.Q .	.	.	V	.
27.250	11810.3740	474.06	.Q .	.	.	V	.
27.333	11813.3340	429.77	.Q .	.	.	V	.
27.417	11816.0166	389.46	.Q .	.	.	V	.
27.500	11818.4609	354.90	Q .	.	.	V	.
27.583	11820.6963	324.63	Q .	.	.	V	.
27.667	11822.7510	298.41	Q .	.	.	V	.
27.750	11824.6328	273.22	Q .	.	.	V	.
27.833	11826.3535	249.83	Q .	.	.	V	.
27.917	11827.9160	226.82	Q .	.	.	V	.
28.000	11829.3311	205.48	Q .	.	.	V	.
28.083	11830.6025	184.64	Q .	.	.	V	.

28.167	11831.7432	165.69	Q .	.	.	V	.
28.250	11832.7861	151.37	Q .	.	.	V	.
28.333	11833.7324	137.38	Q .	.	.	V	.
28.417	11834.5830	123.48	Q .	.	.	V	.
28.500	11835.3477	111.00	Q .	.	.	V	.
28.583	11836.0508	102.05	Q .	.	.	V	.
28.667	11836.6934	93.36	Q .	.	.	V	.
28.750	11837.2764	84.72	Q .	.	.	V	.
28.833	11837.8008	76.14	Q .	.	.	V	.
28.917	11838.2666	67.61	Q .	.	.	V	.
29.000	11838.6748	59.32	Q .	.	.	V	.
29.083	11839.0557	55.26	Q .	.	.	V	.
29.167	11839.4209	52.97	Q .	.	.	V	.
29.250	11839.7705	50.70	Q .	.	.	V	.
29.333	11840.1045	48.44	Q .	.	.	V	.
29.417	11840.4229	46.20	Q .	.	.	V	.
29.500	11840.7256	44.00	Q .	.	.	V	.
29.583	11841.0137	41.79	Q .	.	.	V	.
29.667	11841.2861	39.59	Q .	.	.	V	.
29.750	11841.5439	37.41	Q .	.	.	V	.
29.833	11841.7871	35.27	Q .	.	.	V	.
29.917	11842.0156	33.11	Q .	.	.	V	.
30.000	11842.2295	31.01	Q .	.	.	V	.
30.083	11842.4287	28.88	Q .	.	.	V	.
30.167	11842.6133	26.80	Q .	.	.	V	.
30.250	11842.7832	24.74	Q .	.	.	V	.
30.333	11842.9395	22.69	Q .	.	.	V	.
30.417	11843.0820	20.65	Q .	.	.	V	.
30.500	11843.2100	18.63	Q .	.	.	V	.
30.583	11843.3242	16.62	Q .	.	.	V	.
30.667	11843.4248	14.62	Q .	.	.	V	.
30.750	11843.5117	12.64	Q .	.	.	V	.
30.833	11843.5850	10.66	Q .	.	.	V	.
30.917	11843.6445	8.70	Q .	.	.	V	.
31.000	11843.6914	6.76	Q .	.	.	V	.
31.083	11843.7246	4.82	Q .	.	.	V	.
31.167	11843.7441	2.90	Q .	.	.	V	.
31.250	11843.7510	0.98	Q .	.	.	V	.

TIME DURATION(minutes) OF PERCENTILES OF ESTIMATED PEAK FLOW RATE:
(Note: 100% of Peak Flow Rate estimate assumed to have
an instantaneous time duration)

Percentile of Estimated Peak Flow Rate	Duration (minutes)
0%	1875.0
10%	1430.0
20%	1115.0
30%	595.0
40%	465.0
50%	390.0
60%	330.0
70%	270.0
80%	210.0
90%	135.0

END OF FLOODSCx ROUTING ANALYSIS

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             F L O O D    R O U T I N G    A N A L Y S I S
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             Ver. 20.0  Release Date: 06/01/2013  License ID 1237

                        Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RMV PA-3 ROMP AMENDMENT 2022 - NODE 126                                *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL              *
* 25-YR EV NOV 2022 ROKAMOTO                                             *
 ************************************************************************

  FILE NAME: EV25126S.DAT
  TIME/DATE OF STUDY: 18:08 11/07/2022


                       ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    126.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =   50438.699 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.211 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.297; LOW LOSS FRACTION = 0.434
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.41; 30-MINUTE =  0.78;  1-HOUR =  1.08
    3-HOUR =  2.01;    6-HOUR =  2.99; 24-HOUR =  5.27
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.341; 30-MINUTE = 0.392;  1-HOUR = 0.432
    3-HOUR = 0.782;    6-HOUR = 0.902; 24-HOUR = 0.943
==========================================================================
```



```
 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV25126S.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 10100.00     126.00| Subarea (UH) Added to Stream #1|       0.0     14916.8|
18.250 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
-------------------------------------+

   END OF FLOODSCx ROUTING ANALYSIS
```

```
****************************************************************************

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                          Analysis prepared by:






 ************************** DESCRIPTION OF STUDY **************************
* RMV PA-3 ROMP AMENDMENT 2022 - NODE 127                                  *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL                *
* 25-YR EV NOV 2022 ROKAMOTO                                               *
 **************************************************************************

  FILE NAME: EV25127S.DAT
  TIME/DATE OF STUDY: 18:08 11/07/2022


                         ** INPUT SUMMARY **


****************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    127.00 IS CODE =   1
----------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
============================================================================
  WATERSHED AREA =   53506.199 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.333 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.286; LOW LOSS FRACTION = 0.447
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.41; 30-MINUTE =  0.77;  1-HOUR =  1.08
    3-HOUR =  1.99;    6-HOUR =  2.94; 24-HOUR =  5.18
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.331; 30-MINUTE = 0.383;  1-HOUR = 0.424
    3-HOUR = 0.773;    6-HOUR = 0.898; 24-HOUR = 0.941
============================================================================
```



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 +---------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV25127S.DAT   ]
Page:   1 of    |
 +---------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +---------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 10100.00     127.00| Subarea (UH) Added to Stream #1|       0.0     14961.8|
18.167 |             |           |
 +---------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                               |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                       |
 +---------------------------------------------------------------------------
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   END OF FLOODSCx ROUTING ANALYSIS
```

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**************************************************************************

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                        Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RMV PA-3 ROMP AMENDMENT 2022 - NODE 137                                *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL              *
* 25-YR EV AUG 2023 ROKAMOTO                                             *
 ************************************************************************

  FILE NAME: EV25137S.DAT
  TIME/DATE OF STUDY: 08:06 08/10/2023


                       ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    137.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =   67798.297 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.709 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.284; LOW LOSS FRACTION = 0.449
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.40; 30-MINUTE =  0.76;  1-HOUR =  1.04
    3-HOUR =  1.90;    6-HOUR =  2.79; 24-HOUR =  4.86
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.291; 30-MINUTE = 0.350;  1-HOUR = 0.394
    3-HOUR = 0.738;    6-HOUR = 0.886; 24-HOUR = 0.933
==========================================================================
```



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 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV25137S.DAT   ]
Page:   1 of    |
 +-------------------+---------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                 | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+---------------------------------+----------------------+-
-----------+-------------+-----------+
 | 10100.00     137.00| Subarea (UH) Added to Stream #1|       0.0     16749.7|
18.500 |             |           |
 +-------------------+---------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
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   END OF FLOODSCx ROUTING ANALYSIS
```

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                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RMV PA-3 ROMP AMENDMENT 2022 - NODE 138                                  *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL                *
* 25-YR EV AUG 2023 ROKAMOTO                                               *
 ************************************************************************

  FILE NAME: EV25138S.DAT
  TIME/DATE OF STUDY: 08:06 08/10/2023


                        ** INPUT SUMMARY **


****************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    138.00 IS CODE =   1
----------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
============================================================================
  WATERSHED AREA =   69102.000 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.802 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.284; LOW LOSS FRACTION = 0.450
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.40; 30-MINUTE =  0.76;  1-HOUR =  1.04
    3-HOUR =  1.90;    6-HOUR =  2.78; 24-HOUR =  4.84
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.287; 30-MINUTE = 0.348;  1-HOUR = 0.392
    3-HOUR = 0.734;    6-HOUR = 0.885; 24-HOUR = 0.932
============================================================================
```



```
 +-------------------------------------------------------------------------------
------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV25138S.DAT   ]
Page:   1 of    |
 +--------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +--------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 10100.00     138.00| Subarea (UH) Added to Stream #1|       0.0     16837.4|
17.917 |             |           |
 +--------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                           |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                   |
 +-------------------------------------------------------------------------------
------------------------------------+


   END OF FLOODSCx ROUTING ANALYSIS
```

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************************************************************************

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                         Analysis prepared by:




 ************************** DESCRIPTION OF STUDY **************************
* RMV PA-3 ROMP AMENDMENT 2022 - NODE 139                                *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL              *
* 25-YR EV AUG 2023 ROKAMOTO                                             *
 **************************************************************************

  FILE NAME: EV25139S.DAT
  TIME/DATE OF STUDY: 08:05 08/10/2023


                        ** INPUT SUMMARY **


****************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    139.00 IS CODE =   1
----------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
============================================================================
  WATERSHED AREA =   69529.797 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.854 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.283; LOW LOSS FRACTION = 0.450
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.40; 30-MINUTE =  0.76;  1-HOUR =  1.04
    3-HOUR =  1.89;    6-HOUR =  2.77; 24-HOUR =  4.83
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.286; 30-MINUTE = 0.348;  1-HOUR = 0.391
    3-HOUR = 0.733;    6-HOUR = 0.885; 24-HOUR = 0.932
============================================================================
```



```
 +--------------------------------------------------------------------------------
-----------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV25139S.DAT   ]
Page:   1 of    |
 +---------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                 | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +---------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 10100.00     139.00| Subarea (UH) Added to Stream #1|       0.0     16830.0|
17.917 |             |           |
 +---------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                           |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                   |
 +--------------------------------------------------------------------------------
-----------------------------------+


   END OF FLOODSCx ROUTING ANALYSIS
```

```
******************************************************************************

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                          Analysis prepared by:

                        Michael Baker International
                      5 Hutton Centre Drive Suite 500
                            Santa Ana, CA92707


 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJJO - SINGLE AREA UH                                 *
* PHASE CONDITION NO PA5 - REGIONAL NODE 119                             *
* 50-YR EV JANUARY 2019 CCHIU                                            *
 ************************************************************************

  FILE NAME: EV50119S.DAT
  TIME/DATE OF STUDY: 14:20 01/02/2019


******************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    119.00 IS CODE =   1
------------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS)<<<<<
==============================================================================

      (UNIT-HYDROGRAPH ADDED TO STREAM #1)

         WATERSHED AREA =   49495.699 ACRES
         BASEFLOW =   0.000 CFS/SQUARE-MILE
         *USER ENTERED "LAG" TIME =    2.043 HOURS
         VALLEY(DEVELOPED) S-GRAPH SELECTED
         MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.298
         LOW LOSS FRACTION = 0.399
         *HYDROGRAPH MODEL #1 SPECIFIED*

         SPECIFIED PEAK  5-MINUTES RAINFALL(INCH)=  0.46
         SPECIFIED PEAK 30-MINUTES RAINFALL(INCH)=  0.87
         SPECIFIED PEAK  1-HOUR RAINFALL(INCH) =  1.21
         SPECIFIED PEAK  3-HOUR RAINFALL(INCH) =  2.28
         SPECIFIED PEAK  6-HOUR RAINFALL(INCH) =  3.40
         SPECIFIED PEAK 24-HOUR RAINFALL(INCH) =  5.99

         *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
           5-MINUTE FACTOR = 0.345
          30-MINUTE FACTOR = 0.395
           1-HOUR FACTOR = 0.435
           3-HOUR FACTOR = 0.785
           6-HOUR FACTOR = 0.904
          24-HOUR FACTOR = 0.944

         UNIT HYDROGRAPH TIME UNIT =   5.000 MINUTES
         UNIT INTERVAL PERCENTAGE OF LAG-TIME =   4.079
```


UNIT HYDROGRAPH DETERMINATION

INTERVAL NUMBER	"S" GRAPH MEAN VALUES	UNIT HYDROGRAPH ORDINATES(CFS)
1	0.233	1395.215
2	0.699	2790.427
3	1.165	2790.428
4	1.632	2790.430
5	2.159	3157.066
6	2.858	4184.957
7	3.568	4246.297
8	4.513	5660.116
9	5.841	7949.957
10	7.482	9823.601
11	9.504	12100.033
12	11.579	12422.426
13	13.678	12566.875
14	16.386	16208.730
15	18.611	13314.900
16	20.992	14255.629
17	23.920	17523.658
18	26.361	14614.003
19	28.979	15669.029
20	31.997	18064.832
21	35.430	20548.764
22	38.098	15970.705
23	41.854	22486.143
24	45.545	22095.789
25	49.687	24788.598
26	52.917	19335.461
27	55.772	17091.027
28	59.079	19792.262
29	63.017	23575.660
30	66.033	18051.760
31	68.904	17189.010
32	71.611	16203.753
33	74.182	15385.142
34	76.492	13830.534
35	78.322	10952.858
36	80.152	10956.786
37	82.034	11260.620
38	83.762	10346.333
39	85.348	9491.460
40	86.729	8268.271
41	87.949	7302.423
42	88.947	5977.483
43	89.899	5695.844
44	90.776	5248.063
45	91.634	5138.367
46	92.446	4860.381
47	93.223	4651.858
48	93.968	4455.528

49	94.518	3294.722
50	95.036	3099.808
51	95.554	3099.808
52	96.032	2860.458
53	96.364	1990.607
54	96.684	1916.030
55	97.004	1914.660
56	97.324	1914.614
57	97.644	1916.075
58	97.945	1804.279
59	98.068	730.882
60	98.144	460.021
61	98.221	455.728
62	98.297	458.605
63	98.374	461.436
64	98.450	455.728
65	98.527	458.605
66	98.604	458.605
67	98.680	455.728
68	98.756	458.559
69	98.833	458.605
70	98.910	458.605
71	98.986	455.728
72	99.062	458.605
73	99.138	455.728
74	99.215	455.728
75	99.291	455.728
76	99.367	455.728
77	99.443	455.728
78	99.519	455.728
79	99.595	455.728
80	99.671	455.728
81	99.748	455.728
82	99.824	455.728
83	99.900	455.728
84	99.976	455.728
85	100.000	143.902

TOTAL SOIL-LOSS VOLUME(ACRE-FEET) = 9142.8164
TOTAL STORM RUNOFF VOLUME(ACRE-FEET) = 14162.9131

==========

2 4 - H O U R S T O R M
R U N O F F H Y D R O G R A P H

==========

HYDROGRAPH IN FIVE-MINUTE UNIT INTERVALS(CFS)
(Note: Time indicated is at END of Each Unit Intervals)

TIME(HRS)	VOLUME(AF)	Q(CFS)	0. 4475.0 8950.0 13425.0 17900.0
0.083	0.0499	7.25	Q . . . .
0.167	0.1999	21.77	Q . . . .
0.250	0.4501	36.33	Q . . . .
0.333	0.8008	50.93	Q . . . .
0.417	1.2656	67.48	Q . . . .
0.500	1.8814	89.42	Q . . . .
0.583	2.6510	111.75	Q . . . .
0.667	3.6254	141.49	Q . . . .
0.750	4.8872	183.21	Q . . . .
0.833	6.5042	234.79	Q . . . .
0.917	8.5589	298.35	Q . . . .
1.000	11.0642	363.77	Q . . . .
1.083	14.0265	430.13	Q . . . .
1.167	17.5777	515.63	VQ . . . .
1.250	21.6158	586.33	VQ . . . .
1.333	26.1761	662.16	VQ . . . .
1.417	31.3770	755.17	VQ . . . .
1.500	37.1165	833.37	VQ . . . .
1.583	43.4338	917.28	V Q . . . .
1.667	50.4167	1013.91	V Q . . . .
1.750	58.1559	1123.73	V Q . . . .
1.833	66.4899	1210.09	V Q . . . .
1.917	75.6539	1330.62	V Q . . . .
2.000	85.6363	1449.43	V Q . . . .
2.083	96.5362	1582.67	V Q . . . .
2.167	108.1609	1687.91	V Q . . . .
2.250	120.4332	1781.93	V Q . . . .
2.333	133.4510	1890.19	V Q . . . .
2.417	147.3528	2018.55	V Q . . . .
2.500	161.9431	2118.50	V Q . . . .
2.583	177.1940	2214.43	V Q . . . .
2.667	193.0717	2305.43	V Q . . . .
2.750	209.5498	2392.62	V Q . . . .
2.833	226.5738	2471.90	V Q . . . .
2.917	244.0437	2536.63	V Q . . . .
3.000	261.9603	2601.49	V Q . . . .
3.083	280.3370	2668.30	V Q . . . .
3.167	299.1419	2730.47	V Q . . . .
3.250	318.3469	2788.57	V Q . . . .
3.333	337.9089	2840.40	V Q . . . .
3.417	357.7956	2887.55	.V Q . . . .
3.500	377.9601	2927.88	.V Q . . . .
3.583	398.3944	2967.06	.V Q . . . .
3.667	419.0828	3003.95	.V Q . . . .
3.750	440.0235	3040.58	.V Q . . . .
3.833	461.2067	3075.80	.V Q . . . .
3.917	482.6270	3110.24	.V Q . . . .

4.000	504.2777	3143.68	.V	Q	.	.	.
4.083	526.1193	3171.40	.V	Q	.	.	.
4.167	548.1449	3198.11	.V	Q	.	.	.
4.250	570.3564	3225.12	.V	Q	.	.	.
4.333	592.7455	3250.89	.V	Q	.	.	.
4.417	615.2829	3272.43	.V	Q	.	.	.
4.500	637.9660	3293.58	.V	Q	.	.	.
4.583	660.7966	3315.01	.V	Q	.	.	.
4.667	683.7748	3336.43	.V	Q	.	.	.
4.750	706.9026	3358.15	.V	Q	.	.	.
4.833	730.1759	3379.28	. V	Q	.	.	.
4.917	753.5583	3395.13	. V	Q	.	.	.
5.000	777.0402	3409.56	. V	Q	.	.	.
5.083	800.6231	3424.24	. V	Q	.	.	.
5.167	824.3071	3438.92	. V	Q	.	.	.
5.250	848.0943	3453.90	. V	Q	.	.	.
5.333	871.9843	3468.83	. V	Q	.	.	.
5.417	895.9792	3484.06	. V	Q	.	.	.
5.500	920.0789	3499.28	. V	Q	.	.	.
5.583	944.2854	3514.78	. V	Q	.	.	.
5.667	968.5987	3530.29	. V	Q	.	.	.
5.750	993.0209	3546.10	. V	Q	.	.	.
5.833	1017.5518	3561.89	. V	Q	.	.	.
5.917	1042.1937	3578.00	. V	Q	.	.	.
6.000	1066.9464	3594.10	. V	Q	.	.	.
6.083	1091.8121	3610.51	. V	Q	.	.	.
6.167	1116.7909	3626.91	. V	Q	.	.	.
6.250	1141.8849	3643.65	. V	Q	.	.	.
6.333	1167.0941	3660.38	. V	Q	.	.	.
6.417	1192.4209	3677.46	. V	Q	.	.	.
6.500	1217.8652	3694.52	. V	Q	.	.	.
6.583	1243.4296	3711.94	. V	Q	.	.	.
6.667	1269.1139	3729.37	. V	Q	.	.	.
6.750	1294.9207	3747.15	. V	Q	.	.	.
6.833	1320.8500	3764.93	. V	Q	.	.	.
6.917	1346.9043	3783.10	. V	Q	.	.	.
7.000	1373.0837	3801.26	. V	Q	.	.	.
7.083	1399.3798	3818.19	. V	Q	.	.	.
7.167	1425.7872	3834.37	. V	Q	.	.	.
7.250	1452.3090	3850.95	. V	Q	.	.	.
7.333	1478.9448	3867.53	. V	Q	.	.	.
7.417	1505.6976	3884.52	. V	Q	.	.	.
7.500	1532.5675	3901.50	. V	Q	.	.	.
7.583	1559.5573	3918.92	. V	Q	.	.	.
7.667	1586.6670	3936.33	. V	Q	.	.	.
7.750	1613.8997	3954.18	. V	Q	.	.	.
7.833	1641.2554	3972.05	. V	Q	.	.	.
7.917	1668.7372	3990.36	. V	Q	.	.	.
8.000	1696.3452	4008.69	. V	Q	.	.	.
8.083	1724.0828	4027.49	. V	Q	.	.	.
8.167	1751.9498	4046.30	. V	Q.	.	.	.
8.250	1779.9498	4065.61	. V	Q.	.	.	.
8.333	1808.0830	4084.93	. V	Q.	.	.	.
8.417	1836.3527	4104.76	. V	Q.	.	.	.
8.500	1864.7590	4124.61	. V	Q.	.	.	.
8.583	1893.3058	4144.99	. V	Q.	.	.	.
8.667	1921.9930	4165.40	. V	Q.	.	.	.
8.750	1950.8247	4186.35	. V	Q.	.	.	.

8.833	1979.8009	4207.34	. V	Q.	.	.	.
8.917	2008.9255	4228.89	. V	Q.	.	.	.
9.000	2038.1989	4250.49	. V	Q.	.	.	.
9.083	2067.6250	4272.69	. V	Q.	.	.	.
9.167	2097.2043	4294.92	. V	Q.	.	.	.
9.250	2126.9412	4317.78	. V	Q.	.	.	.
9.333	2156.8357	4340.69	. V	Q.	.	.	.
9.417	2186.8926	4364.24	. V	Q.	.	.	.
9.500	2217.1121	4387.86	. V	Q.	.	.	.
9.583	2247.4988	4412.14	. V	Q.	.	.	.
9.667	2278.0532	4436.50	. V	Q.	.	.	.
9.750	2308.7803	4461.56	. V	Q.	.	.	.
9.833	2339.6804	4486.71	. V	Q	.	.	.
9.917	2370.7588	4512.58	. V	Q	.	.	.
10.000	2402.0159	4538.55	. V	Q	.	.	.
10.083	2433.4573	4565.28	. V	Q	.	.	.
10.167	2465.0835	4592.12	. V	Q	.	.	.
10.250	2496.8999	4619.76	. V	Q	.	.	.
10.333	2528.9077	4647.52	. V	Q	.	.	.
10.417	2561.1123	4676.12	. V	Q	.	.	.
10.500	2593.5149	4704.86	. V	Q	.	.	.
10.583	2626.1216	4734.48	. V	Q	.	.	.
10.667	2658.9331	4764.25	. V	Q	.	.	.
10.750	2691.9561	4794.95	. V	Q	.	.	.
10.833	2725.1917	4825.82	. V	Q	.	.	.
10.917	2758.6467	4857.66	. V	Q	.	.	.
11.000	2792.3223	4889.70	. V	Q	.	.	.
11.083	2826.2256	4922.76	. V	.Q	.	.	.
11.167	2860.3582	4956.04	. V	.Q	.	.	.
11.250	2894.7273	4990.40	. V	.Q	.	.	.
11.333	2929.3347	5025.01	. V	.Q	.	.	.
11.417	2964.1885	5060.76	. V	.Q	.	.	.
11.500	2999.2903	5096.78	. V	.Q	.	.	.
11.583	3034.6484	5134.01	. V	.Q	.	.	.
11.667	3070.2651	5171.55	. V	.Q	.	.	.
11.750	3106.1492	5210.37	. V	.Q	.	.	.
11.833	3142.3030	5249.54	. V	.Q	.	.	.
11.917	3178.7358	5290.07	. V	.Q	.	.	.
12.000	3215.4507	5330.99	. V.Q		.	.	.
12.083	3252.5403	5385.41	. V. Q		.	.	.
12.167	3290.0906	5452.30	. V. Q		.	.	.
12.250	3328.1113	5520.60	. V. Q		.	.	.
12.333	3366.6050	5589.29	. V. Q		.	.	.
12.417	3405.6040	5662.65	. V. Q		.	.	.
12.500	3445.1724	5745.32	. V. Q		.	.	.
12.583	3485.3245	5830.09	. V. Q		.	.	.
12.667	3526.1475	5927.49	. V. Q		.	.	.
12.750	3567.7888	6046.32	. V Q		.	.	.
12.833	3610.3623	6181.67	. V Q		.	.	.
12.917	3654.0144	6338.27	. V Q		.	.	.
13.000	3698.7656	6497.87	. V Q		.	.	.
13.083	3744.6353	6660.26	. V Q		.	.	.
13.167	3791.8416	6854.37	. V Q		.	.	.
13.250	3840.2231	7025.02	. V Q		.	.	.
13.333	3889.8372	7203.94	. V Q		.	.	.
13.417	3940.8904	7412.93	. .V Q		.	.	.
13.500	3993.2100	7596.80	. .V Q		.	.	.
13.583	4046.8716	7791.66	. .V Q		.	.	.

13.667	4102.0190	8007.43	. .V Q . . .
13.750	4158.8135	8246.56	. .V Q . . .
13.833	4216.9829	8446.19	. .V Q . . .
13.917	4276.9287	8704.16	. . V Q. . .
14.000	4338.6294	8958.97	. . V Q . .
14.083	4402.3525	9252.61	. . V Q . .
14.167	4467.8672	9512.71	. . V .Q . .
14.250	4535.0459	9754.34	. . V .Q . .
14.333	4604.0464	10018.89	. . V . Q . .
14.417	4675.1265	10320.83	. . V . Q . .
14.500	4748.0215	10584.37	. . V . Q . .
14.583	4822.6895	10841.76	. . V . Q . .
14.667	4899.1602	11103.55	. . V . Q . .
14.750	4977.5435	11381.24	. . V . Q . .
14.833	5057.8579	11661.67	. . V . Q . .
14.917	5140.0791	11938.55	. . V . Q . .
15.000	5224.2036	12214.87	. . V . Q . .
15.083	5310.2437	12492.99	. . V . Q . .
15.167	5398.3613	12794.71	. . V . Q . .
15.250	5488.2866	13057.15	. . V . Q. .
15.333	5579.9702	13312.48	. . V . Q. .
15.417	5673.4370	13571.39	. . V . Q .
15.500	5768.2456	13766.20	. . V . Q .
15.583	5864.4531	13969.33	. . V . .Q .
15.667	5962.1782	14189.67	. . V . .Q .
15.750	6061.4956	14420.86	. . V . . Q .
15.833	6161.9155	14580.96	. . V . . Q .
15.917	6263.9277	14812.18	. . V . . Q .
16.000	6367.4819	15036.09	. . V . . Q .
16.083	6473.4951	15393.09	. . V . . Q .
16.167	6581.2461	15645.46	. . V . . Q .
16.250	6689.3198	15692.32	. . V . . Q .
16.333	6797.8887	15764.17	. . V. . Q .
16.417	6907.5063	15916.49	. . V. . Q .
16.500	7018.0527	16051.34	. . V. . Q .
16.583	7129.1167	16126.50	. . V . Q .
16.667	7241.7490	16354.24	. . V . Q .
16.750	7356.2866	16630.87	. . V . Q .
16.833	7472.5342	16879.12	. . .V . Q .
16.917	7590.3887	17112.49	. . .V . Q .
17.000	7708.2729	17116.83	. . .V . Q .
17.083	7825.8955	17078.81	. . . V . Q .
17.167	7946.0884	17451.99	. . . V . Q .
17.250	8063.7075	17078.28	. . . V . Q .
17.333	8181.7036	17133.04	. . . V . Q .
17.417	8301.1191	17339.19	. . . V . Q .
17.500	8418.4795	17040.76	. . . V . Q .
17.583	8536.7998	17180.07	. . . V . Q .
17.667	8656.5605	17389.20	. . . V . Q .
17.750	8777.3701	17541.61	. . . V . Q.
17.833	8894.8252	17054.46	. . . V . Q .
17.917	9017.1104	17755.83	. . . V . Q.
18.000	9138.8008	17669.43	. . . V . Q.
18.083	9261.7334	17849.79	. . . V . Q.
18.167	9379.5078	17100.83	. . . V . Q .
18.250	9496.0850	16927.05	. . . V . Q .
18.333	9614.8838	17249.52	. . . V . Q .
18.417	9736.0010	17586.28	. . . V . Q.

18.500	9852.3965	16900.58	. . . V . Q .
18.583	9967.5244	16716.59	. . . V . Q .
18.667	10081.1748	16502.10	. . . V . Q .
18.750	10193.4600	16303.78	. . . V . Q .
18.833	10303.6494	15999.51	. . . V. Q .
18.917	10410.2598	15479.77	. . . V. Q .
19.000	10515.4307	15270.79	. . . V. Q .
19.083	10618.9736	15034.40	. . . V. Q .
19.167	10719.9648	14663.99	. . . V Q .
19.250	10818.4707	14303.05	. . . VQ .
19.333	10913.9209	13859.31	. . . Q .
19.417	11006.1416	13390.44	. . . Q.V .
19.500	11095.3809	12957.50	. . . Q .V .
19.583	11182.3525	12628.25	. . . Q .V .
19.667	11266.7705	12257.44	. . . Q .V .
19.750	11348.8086	11911.96	. . . Q . V .
19.833	11428.5742	11581.96	. . . Q . V .
19.917	11505.8281	11217.29	. . . Q . V .
20.000	11580.4912	10841.12	. . . Q . V .
20.083	11651.7188	10342.28	. . . Q . V .
20.167	11720.6260	10005.36	. . . Q . V .
20.250	11787.5693	9720.20	. . .Q . V .
20.333	11852.2676	9394.13	. . Q . V .
20.417	11914.0342	8968.47	. . Q . V .
20.500	11973.8896	8690.99	. . Q. . V .
20.583	12031.9912	8436.37	. . Q . . V .
20.667	12088.4189	8193.28	. . Q . . V .
20.750	12143.1025	7940.06	. . Q . . V .
20.833	12195.9922	7679.58	. . Q . . V .
20.917	12246.6035	7348.73	. . Q . . V .
21.000	12295.6064	7115.25	. . Q . . V .
21.083	12343.2568	6918.88	. . Q . . V .
21.167	12389.6406	6734.91	. . Q . . V .
21.250	12434.7383	6548.18	. . Q . . V .
21.333	12478.6172	6371.19	. . Q . . V .
21.417	12521.4072	6213.13	. . Q . . V .
21.500	12563.2012	6068.54	. . Q . . V .
21.583	12604.0264	5927.85	. . Q . . V .
21.667	12643.9238	5793.11	. . Q . . V .
21.750	12682.9082	5660.55	. . Q . . V .
21.833	12721.0137	5532.94	. . Q . . V .
21.917	12758.3350	5419.09	. . Q . . V .
22.000	12794.9219	5312.42	. .Q . . V .
22.083	12830.8545	5217.46	. .Q . . V .
22.167	12866.1621	5126.65	. .Q . . V .
22.250	12900.8584	5037.84	. .Q . . V .
22.333	12934.9707	4953.13	. .Q . . V .
22.417	12968.5918	4881.75	. Q . . V .
22.500	13001.7490	4814.38	. Q . . V .
22.583	13034.4492	4748.08	. Q . . V .
22.667	13066.6992	4682.74	. Q . . V .
22.750	13098.5166	4619.85	. Q . . V .
22.833	13129.9160	4559.20	. Q . . . V .
22.917	13160.9541	4506.67	. Q . . . V .
23.000	13191.6289	4453.99	. Q. . . . V .
23.083	13221.7246	4369.96	. Q. . . . V .
23.167	13251.3945	4308.03	. Q. . . . V .
23.250	13280.7568	4263.46	. Q. . . . V .

23.333	13309.8262	4220.81	.	Q.	.	.	V .
23.417	13338.5859	4175.89	.	Q.	.	.	V .
23.500	13367.0293	4130.02	.	Q.	.	.	V .
23.583	13395.1611	4084.79	.	Q.	.	.	V .
23.667	13422.9854	4040.14	.	Q.	.	.	V .
23.750	13450.5068	3996.11	.	Q .	.	.	V .
23.833	13477.7295	3952.67	.	Q .	.	.	V .
23.917	13504.6562	3909.83	.	Q .	.	.	V .
24.000	13531.2920	3867.54	.	Q .	.	.	V .
24.083	13557.6123	3821.72	.	Q .	.	.	V .
24.167	13583.5830	3770.90	.	Q .	.	.	V .
24.250	13609.2100	3720.98	.	Q .	.	.	V .
24.333	13634.4990	3671.91	.	Q .	.	.	V .
24.417	13659.4424	3621.75	.	Q .	.	.	V .
24.500	13684.0088	3567.06	.	Q .	.	.	V .
24.583	13708.2021	3512.83	.	Q .	.	.	V .
24.667	13731.9766	3452.05	.	Q .	.	.	V .
24.750	13755.2559	3380.16	.	Q .	.	.	V .
24.833	13777.9785	3299.36	.	Q .	.	.	V .
24.917	13800.0693	3207.61	.	Q .	.	.	V .
25.000	13821.5234	3115.08	.	Q .	.	.	V.
25.083	13842.3594	3025.38	.	Q .	.	.	V.
25.167	13862.4619	2918.91	.	Q .	.	.	V.
25.250	13881.9414	2828.42	.	Q .	.	.	V.
25.333	13900.7695	2733.91	.	Q .	.	.	V.
25.417	13918.8369	2623.32	.	Q .	.	.	V.
25.500	13936.2529	2528.75	.	Q .	.	.	V.
25.583	13952.9854	2429.54	.	Q .	.	.	V.
25.667	13968.9551	2318.74	.	Q .	.	.	V.
25.750	13984.0791	2195.94	.	Q .	.	.	V.
25.833	13998.5273	2097.83	.	Q .	.	.	V.
25.917	14012.0723	1966.71	.	Q .	.	.	V.
26.000	14024.7344	1838.57	.	Q .	.	.	V.
26.083	14036.4248	1697.40	.	Q .	.	.	V.
26.167	14047.3438	1585.50	.	Q .	.	.	V.
26.250	14057.5781	1486.04	.	Q .	.	.	V.
26.333	14067.0361	1373.30	.	Q .	.	.	V.
26.417	14075.5879	1241.72	.	Q .	.	.	V.
26.500	14083.4365	1139.68	.	Q .	.	.	V.
26.583	14090.6182	1042.82	.	Q .	.	.	V.
26.667	14097.1729	951.73	.	Q .	.	.	V.
26.750	14103.1338	865.51	.	Q .	.	.	V.
26.833	14108.5605	787.93	.	Q .	.	.	V.
26.917	14113.5596	725.81	.	Q .	.	.	V.
27.000	14118.1328	664.10	.	Q .	.	.	V.
27.083	14122.2734	601.23	.	Q .	.	.	V.
27.167	14126.0166	543.53	.	Q .	.	.	V.
27.250	14129.3955	490.64	.	Q .	.	.	V.
27.333	14132.4561	444.46	Q	.	.	.	V.
27.417	14135.2354	403.60	Q	.	.	.	V.
27.500	14137.7832	369.88	Q	.	.	.	V.
27.583	14140.1104	337.86	Q	.	.	.	V.
27.667	14142.2344	308.37	Q	.	.	.	V.
27.750	14144.1602	279.66	Q	.	.	.	V.
27.833	14145.8994	252.58	Q	.	.	.	V.
27.917	14147.4609	226.76	Q	.	.	.	V.
28.000	14148.8525	202.13	Q	.	.	.	V.
28.083	14150.1172	183.68	Q	.	.	.	V.

28.167	14151.2627	166.37	Q	.	.	.	V.
28.250	14152.2900	149.18	Q	.	.	.	V.
28.333	14153.2080	133.34	Q	.	.	.	V.
28.417	14154.0488	122.12	Q	.	.	.	V.
28.500	14154.8154	111.36	Q	.	.	.	V.
28.583	14155.5088	100.68	Q	.	.	.	V.
28.667	14156.1289	90.08	Q	.	.	.	V.
28.750	14156.6768	79.53	Q	.	.	.	V.
28.833	14157.1562	69.63	Q	.	.	.	V.
28.917	14157.6064	65.37	Q	.	.	.	V.
29.000	14158.0371	62.54	Q	.	.	.	V.
29.083	14158.4482	59.76	Q	.	.	.	V.
29.167	14158.8408	56.98	Q	.	.	.	V.
29.250	14159.2139	54.21	Q	.	.	.	V.
29.333	14159.5684	51.49	Q	.	.	.	V.
29.417	14159.9043	48.77	Q	.	.	.	V.
29.500	14160.2217	46.08	Q	.	.	.	V.
29.583	14160.5205	43.42	Q	.	.	.	V.
29.667	14160.8008	40.76	Q	.	.	.	V.
29.750	14161.0635	38.12	Q	.	.	.	V.
29.833	14161.3076	35.50	Q	.	.	.	V.
29.917	14161.5342	32.91	Q	.	.	.	V.
30.000	14161.7432	30.33	Q	.	.	.	V.
30.083	14161.9346	27.78	Q	.	.	.	V.
30.167	14162.1084	25.24	Q	.	.	.	V.
30.250	14162.2646	22.72	Q	.	.	.	V.
30.333	14162.4043	20.22	Q	.	.	.	V.
30.417	14162.5264	17.73	Q	.	.	.	V.
30.500	14162.6318	15.26	Q	.	.	.	V.
30.583	14162.7197	12.81	Q	.	.	.	V.
30.667	14162.7910	10.37	Q	.	.	.	V.
30.750	14162.8457	7.94	Q	.	.	.	V.
30.833	14162.8838	5.53	Q	.	.	.	V.
30.917	14162.9053	3.13	Q	.	.	.	V.
31.000	14162.9102	0.75	Q	.	.	.	V.

TIME DURATION(minutes) OF PERCENTILES OF ESTIMATED PEAK FLOW RATE:
(Note: 100% of Peak Flow Rate estimate assumed to have
an instantaneous time duration)

Percentile of Estimated Peak Flow Rate	Duration (minutes)
0%	1860.0
10%	1425.0
20%	1115.0
30%	595.0
40%	460.0
50%	390.0
60%	330.0
70%	270.0
80%	215.0
90%	135.0

END OF FLOODSCx ROUTING ANALYSIS

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                         Analysis prepared by:





 ************************** DESCRIPTION OF STUDY **************************
* RMV PA-3 ROMP AMENDMENT 2022 - NODE 126                                  *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL                 *
* 50-YR EV NOV 2022 ROKAMOTO                                               *
 **************************************************************************

  FILE NAME: EV50126S.DAT
  TIME/DATE OF STUDY: 16:14 11/07/2022


                        ** INPUT SUMMARY **


****************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    126.00 IS CODE =   1
----------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
============================================================================
  WATERSHED AREA =   50438.699 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.130 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.297; LOW LOSS FRACTION = 0.401
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.46; 30-MINUTE =  0.87;  1-HOUR =  1.21
    3-HOUR =  2.27;    6-HOUR =  3.38; 24-HOUR =  5.95
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.341; 30-MINUTE = 0.392;  1-HOUR = 0.432
    3-HOUR = 0.782;    6-HOUR = 0.902; 24-HOUR = 0.943
============================================================================
```



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 +--------------------------------------------------------------------------
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 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV50126S.DAT   ]
Page:   1 of    |
 +--------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|            |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +--------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 10100.00     126.00| Subarea (UH) Added to Stream #1|       0.0     17836.1|
18.167 |             |           |
 +--------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                           |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                   |
 +--------------------------------------------------------------------------
-----------------------------------+


   END OF FLOODSCx ROUTING ANALYSIS
```

```
**************************************************************************

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                        Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RMV PA-3 ROMP AMENDMENT 2022 - NODE 127                                *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL              *
* 50-YR EV NOV 2022 ROKAMOTO                                             *
 ************************************************************************

  FILE NAME: EV50127S.DAT
  TIME/DATE OF STUDY: 16:17 11/07/2022


                         ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    127.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =   53506.199 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.245 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.286; LOW LOSS FRACTION = 0.415
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.46; 30-MINUTE =  0.87;  1-HOUR =  1.20
    3-HOUR =  2.24;    6-HOUR =  3.33; 24-HOUR =  5.85
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.331; 30-MINUTE = 0.383;  1-HOUR = 0.424
    3-HOUR = 0.773;    6-HOUR = 0.898; 24-HOUR = 0.941
==========================================================================
```



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 +-------------------------------------------------------------------------------
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 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV50127S.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 10100.00     127.00| Subarea (UH) Added to Stream #1|       0.0     17847.6|
18.250 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
-------------------------------------+

   END OF FLOODSCx ROUTING ANALYSIS
```

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                        Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RMV PA-3 ROMP AMENDMENT 2022 - NODE 137                                *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL              *
* 50-YR EV AUG 2023 ROKAMOTO                                             *
 ************************************************************************

  FILE NAME: EV50137S.DAT
  TIME/DATE OF STUDY: 07:30 08/10/2023


                         ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    137.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =   67798.297 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.601 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.284; LOW LOSS FRACTION = 0.416
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.44; 30-MINUTE =  0.85;  1-HOUR =  1.17
    3-HOUR =  2.14;    6-HOUR =  3.15; 24-HOUR =  5.48
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.291; 30-MINUTE = 0.350;  1-HOUR = 0.394
    3-HOUR = 0.738;    6-HOUR = 0.886; 24-HOUR = 0.933
==========================================================================
```



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 +-------------------------------------------------------------------------------
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 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV50137S.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 10100.00     137.00| Subarea (UH) Added to Stream #1|       0.0     20115.0|
18.167 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
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   END OF FLOODSCx ROUTING ANALYSIS
```

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                        Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RMV PA-3 ROMP AMENDMENT 2022 - NODE 138                                *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL              *
* 50-YR EV AUG 2023 ROKAMOTO                                             *
 **************************************************************************

  FILE NAME: EV50138S.DAT
  TIME/DATE OF STUDY: 07:32 08/10/2023


                       ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    138.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =   69102.000 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.690 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.284; LOW LOSS FRACTION = 0.417
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.44; 30-MINUTE =  0.85;  1-HOUR =  1.17
    3-HOUR =  2.14;    6-HOUR =  3.13; 24-HOUR =  5.46
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.287; 30-MINUTE = 0.348;  1-HOUR = 0.392
    3-HOUR = 0.734;    6-HOUR = 0.885; 24-HOUR = 0.932
==========================================================================
```



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 +-------------------------------------------------------------------------------
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 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV50138S.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 10100.00     138.00| Subarea (UH) Added to Stream #1|       0.0     20214.2|
18.250 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
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   END OF FLOODSCx ROUTING ANALYSIS
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                        Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RMV PA-3 ROMP AMENDMENT 2022 - NODE 139                                *
* PHASE NO PA5 REGIONAL UNIT HYDROGRAPH - SINGLE AREA MODEL              *
* 50-YR EV AUG 2023 ROKAMOTO                                             *
 ************************************************************************

  FILE NAME: EV50139S.DAT
  TIME/DATE OF STUDY: 07:22 08/10/2023


                       ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    139.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =   69529.797 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.739 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.283; LOW LOSS FRACTION = 0.417
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.44; 30-MINUTE =  0.85;  1-HOUR =  1.17
    3-HOUR =  2.14;    6-HOUR =  3.13; 24-HOUR =  5.45
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.286; 30-MINUTE = 0.348;  1-HOUR = 0.391
    3-HOUR = 0.733;    6-HOUR = 0.885; 24-HOUR = 0.932
==========================================================================
```



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 +-------------------------------------------------------------------------------
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 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV50139S.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 10100.00     139.00| Subarea (UH) Added to Stream #1|       0.0     20147.4|
18.333 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
-------------------------------------+

   END OF FLOODSCx ROUTING ANALYSIS
```