

AHYMO PROGRAM (AHYMO-S4) - Version: S4.01a - Rel: 01a
RUN DATE (MON/DAY/YR) = 04/04/2013
START TIME (HR:MIN:SEC) = 15:05:04 USER NO.= AHYMO_Temp_User:20122010
INPUT FILE = C:\Users\Public\AHYMOdata\1941.DAT

*S*****
*S INLAND KENWORTH
*S 100-YR, 6-HR STORM
*S 1941.DAT
*S BY ASA NILSSON-WEBER
*S ISAACSON & ARFMAN, P.A.
*S APRIL, 2013
*S
*S LATITUDE: 35.095263; LONGITUDE: -106.723423
*S NOAA ATLAS 14
*S*****

START RAINFALL BEGINS AT 0.0 HRS
RAINFALL TYPE=1 RAIN QUARTER=0 RAIN ONE=1.74
RAIN SIX=2.19 RAIN DAY=2.49 DT=0.03333HR

6-HOUR RAINFALL DIST. - BASED ON NOAA ATLAS 14 FOR CONVECTIVE AREAS (NM & AZ) - D1
DT = 0.033330 HOURS END TIME = 5.999400 HOURS

0.0000	0.0020	0.0040	0.0061	0.0083	0.0105	0.0130
0.0154	0.0181	0.0209	0.0237	0.0299	0.0360	0.0426
0.0495	0.0564	0.0639	0.0714	0.0791	0.0870	0.0948
0.1031	0.1113	0.1200	0.1292	0.1384	0.1487	0.1590
0.1726	0.1893	0.2061	0.2286	0.2511	0.2780	0.3094
0.3409	0.3881	0.4353	0.4995	0.5810	0.6625	0.8792
1.0963	1.2655	1.3859	1.5062	1.5670	1.6275	1.6769
1.7150	1.7531	1.7795	1.8060	1.8289	1.8482	1.8675
1.8822	1.8968	1.9090	1.9188	1.9285	1.9372	1.9458
1.9538	1.9610	1.9682	1.9748	1.9815	1.9880	1.9944
2.0008	2.0038	2.0068	2.0098	2.0127	2.0156	2.0183
2.0210	2.0237	2.0263	2.0289	2.0315	2.0340	2.0365
2.0389	2.0413	2.0436	2.0460	2.0482	2.0505	2.0528
2.0549	2.0571	2.0592	2.0613	2.0634	2.0654	2.0675
2.0695	2.0714	2.0734	2.0753	2.0772	2.0791	2.0810
2.0828	2.0847	2.0865	2.0883	2.0901	2.0919	2.0936
2.0954	2.0971	2.0988	2.1005	2.1022	2.1039	2.1056
2.1072	2.1089	2.1105	2.1121	2.1137	2.1153	2.1169
2.1185	2.1200	2.1216	2.1231	2.1246	2.1262	2.1277
2.1292	2.1306	2.1321	2.1336	2.1350	2.1365	2.1379
2.1394	2.1408	2.1422	2.1436	2.1450	2.1463	2.1477
2.1491	2.1504	2.1518	2.1531	2.1545	2.1558	2.1571
2.1584	2.1597	2.1610	2.1623	2.1636	2.1648	2.1661
2.1674	2.1686	2.1698	2.1711	2.1723	2.1735	2.1747
2.1760	2.1772	2.1784	2.1795	2.1807	2.1819	2.1831
2.1842	2.1854	2.1866	2.1877	2.1888	2.1900	

*S
*S ONSITE BASINS-DEVELOPED CONDITION
*S
*S BASIN 1 - TO INLET 1 WEST OF ENTRANCE

COMPUTE NM HYD ID=1 HYD NO=100 AREA=0.003339 SQ MI
PER A=0 PER B=2 PER C=2 PER D=96
TP=-0.1333 HR MASS RAIN=-1

K = 0.072649HR TP = 0.133300HR K/TP RATIO = 0.545000 SHAPE CONSTANT, N = 7.106428
UNIT PEAK = 12.655 CFS UNIT VOLUME = 0.9985 B = 526.28 P60 = 1.7400
AREA = 0.003205 SQ MI IA = 0.10000 INCHES INF = 0.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.033330

K = 0.118840HR TP = 0.133300HR K/TP RATIO = 0.891522 SHAPE CONSTANT, N = 3.977611
UNIT PEAK = 0.35437 CFS UNIT VOLUME = 0.9634 B = 353.68 P60 = 1.7400
AREA = 0.000134 SQ MI IA = 0.42500 INCHES INF = 1.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.033330

PRINT HYD ID=1 CODE=1
PARTIAL HYDROGRAPH 100.00

RUNOFF VOLUME = 1.89545 INCHES = 0.3375 ACRE-FEET
PEAK DISCHARGE RATE = 8.84 CFS AT 1.500 HOURS BASIN AREA = 0.0033 SQ. MI.

*S BASIN 2 - TO PCC RUNDOWN AND ONSITE INLET 2
COMPUTE NM HYD ID=2 HYD NO=200 AREA=0.003782 SQ MI
PER A=0 PER B=3 PER C=3 PER D=94

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TP=-0.1333 HR    MASS RAIN=-1
K = 0.072649HR   TP = 0.133300HR   K/TP RATIO = 0.545000   SHAPE CONSTANT, N = 7.106428
UNIT PEAK = 14.036   CFS   UNIT VOLUME = 0.9985   B = 526.28   P60 = 1.7400
AREA = 0.003555 SQ MI   IA = 0.10000 INCHES   INF = 0.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.033330

K = 0.118840HR   TP = 0.133300HR   K/TP RATIO = 0.891522   SHAPE CONSTANT, N = 3.977611
UNIT PEAK = 0.60208   CFS   UNIT VOLUME = 0.9773   B = 353.68   P60 = 1.7400
AREA = 0.000227 SQ MI   IA = 0.42500 INCHES   INF = 1.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.033330
PRINT HYD          ID=2   CODE=1
                                PARTIAL HYDROGRAPH    200.00

RUNOFF VOLUME = 1.87409 INCHES   = 0.3780 ACRE-FEET
PEAK DISCHARGE RATE = 9.93 CFS   AT 1.500 HOURS   BASIN AREA = 0.0038 SQ. MI.

*S BASIN 3 - TO INLET 2
COMPUTE NM HYD          ID=3 HYD NO=300 AREA=0.001646 SQ MI
                        PER A=0 PER B=0 PER C=0 PER D=100
                        TP=-0.1333 HR    MASS RAIN=-1
K = 0.072649HR   TP = 0.133300HR   K/TP RATIO = 0.545000   SHAPE CONSTANT, N = 7.106428
UNIT PEAK = 6.4985   CFS   UNIT VOLUME = 0.9976   B = 526.28   P60 = 1.7400
AREA = 0.001646 SQ MI   IA = 0.10000 INCHES   INF = 0.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.033330
PRINT HYD          ID=3   CODE=1
                                HYDROGRAPH FROM AREA    300.00

RUNOFF VOLUME = 1.93818 INCHES   = 0.1701 ACRE-FEET
PEAK DISCHARGE RATE = 4.43 CFS   AT 1.500 HOURS   BASIN AREA = 0.0016 SQ. MI.

*S BASIN 4-TO INLET 3
*S * * *   AP 3   * * *
COMPUTE NM HYD          ID=4 HYD NO=400 AREA=0.001580 SQ MI
                        PER A=0 PER B=0 PER C=0 PER D=100
                        TP=-0.1333 HR    MASS RAIN=-1
K = 0.072649HR   TP = 0.133300HR   K/TP RATIO = 0.545000   SHAPE CONSTANT, N = 7.106428
UNIT PEAK = 6.2379   CFS   UNIT VOLUME = 0.9976   B = 526.28   P60 = 1.7400
AREA = 0.001580 SQ MI   IA = 0.10000 INCHES   INF = 0.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.033330
PRINT HYD          ID=4   CODE=1
                                HYDROGRAPH FROM AREA    400.00

RUNOFF VOLUME = 1.93818 INCHES   = 0.1633 ACRE-FEET
PEAK DISCHARGE RATE = 4.25 CFS   AT 1.500 HOURS   BASIN AREA = 0.0016 SQ. MI.

*S BASIN 5 - TO INLET 4
*S * * *   AP 4   * * *
COMPUTE NM HYD          ID=5 HYD NO=500 AREA=0.001198 SQ MI
                        PER A=0 PER B=3 PER C=3 PER D=94
                        TP=-0.1333 HR    MASS RAIN=-1
K = 0.072649HR   TP = 0.133300HR   K/TP RATIO = 0.545000   SHAPE CONSTANT, N = 7.106428
UNIT PEAK = 4.4460   CFS   UNIT VOLUME = 0.9969   B = 526.28   P60 = 1.7400
AREA = 0.001126 SQ MI   IA = 0.10000 INCHES   INF = 0.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.033330

K = 0.118840HR   TP = 0.133300HR   K/TP RATIO = 0.891522   SHAPE CONSTANT, N = 3.977611
UNIT PEAK = 0.19072   CFS   UNIT VOLUME = 0.9292   B = 353.68   P60 = 1.7400
AREA = 0.000072 SQ MI   IA = 0.42500 INCHES   INF = 1.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.033330
PRINT HYD          ID=5   CODE=1
                                OUTFLOW HYDROGRAPH RESERVOIR    500.00

RUNOFF VOLUME = 1.87409 INCHES   = 0.1197 ACRE-FEET
PEAK DISCHARGE RATE = 3.16 CFS   AT 1.500 HOURS   BASIN AREA = 0.0012 SQ. MI.

*S BASIN 6 - WATER HARVESTING LANDSCAPE AREA
COMPUTE NM HYD          ID=6 HYD NO=600 AREA=0.000533 SQ MI
                        PER A=0 PER B=35 PER C=65 PER D=0
                        TP=-0.1333 HR    MASS RAIN=-1
K = 0.114508HR   TP = 0.133300HR   K/TP RATIO = 0.859025   SHAPE CONSTANT, N = 4.139966
UNIT PEAK = 1.4570   CFS   UNIT VOLUME = 0.9916   B = 364.40   P60 = 1.7400
AREA = 0.000533 SQ MI   IA = 0.40250 INCHES   INF = 0.97700 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.033330

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PRINT HYD ID=6 CODE=1

HYDROGRAPH FROM AREA 600.00

RUNOFF VOLUME = 0.90465 INCHES = 0.0257 ACRE-FEET
PEAK DISCHARGE RATE = 0.93 CFS AT 1.533 HOURS BASIN AREA = 0.0005 SQ. MI.

*S BASIN 7 - TO INLET 1 WEST OF ENTRANCE

COMPUTE NM HYD ID=7 HYD NO=700 AREA=0.000502 SQ MI

PER A=0 PER B=35 PER C=65 PER D=0

TP=-0.1333 HR MASS RAIN=-1

K = 0.114508HR TP = 0.133300HR K/TP RATIO = 0.859025 SHAPE CONSTANT, N = 4.139966

UNIT PEAK = 1.3723 CFS UNIT VOLUME = 0.9907 B = 364.40 P60 = 1.7400

AREA = 0.000502 SQ MI IA = 0.40250 INCHES INF = 0.97700 INCHES PER HOUR

RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.033330

PRINT HYD ID=7 CODE=1

HYDROGRAPH FROM AREA 700.00

RUNOFF VOLUME = 0.90465 INCHES = 0.0242 ACRE-FEET
PEAK DISCHARGE RATE = 0.88 CFS AT 1.533 HOURS BASIN AREA = 0.0005 SQ. MI.

*S BASIN 8 - WATER HARVESTING LANDSCAPE AREA

COMPUTE NM HYD ID=8 HYD NO=800 AREA=0.000427 SQ MI

PER A=0 PER B=35 PER C=65 PER D=0

TP=-0.1333 HR MASS RAIN=-1

K = 0.114508HR TP = 0.133300HR K/TP RATIO = 0.859025 SHAPE CONSTANT, N = 4.139966

UNIT PEAK = 1.1673 CFS UNIT VOLUME = 0.9887 B = 364.40 P60 = 1.7400

AREA = 0.000427 SQ MI IA = 0.40250 INCHES INF = 0.97700 INCHES PER HOUR

RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.033330

PRINT HYD ID=8 CODE=1

HYDROGRAPH FROM AREA 800.00

RUNOFF VOLUME = 0.90465 INCHES = 0.0206 ACRE-FEET
PEAK DISCHARGE RATE = 0.75 CFS AT 1.533 HOURS BASIN AREA = 0.0004 SQ. MI.

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*S BASIN 9 - WATER HARVESTING LANDSCAPE AREA

COMPUTE NM HYD ID=9 HYD NO=900 AREA=0.000432 SQ MI

PER A=0 PER B=5 PER C=95 PER D=0

TP=-0.1333 HR MASS RAIN=-1

K = 0.105844HR TP = 0.133300HR K/TP RATIO = 0.794031 SHAPE CONSTANT, N = 4.515667

UNIT PEAK = 1.2581 CFS UNIT VOLUME = 0.9897 B = 388.20 P60 = 1.7400

AREA = 0.000432 SQ MI IA = 0.35750 INCHES INF = 0.85100 INCHES PER HOUR

RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.033330

PRINT HYD ID=9 CODE=1

HYDROGRAPH FROM AREA 900.00

RUNOFF VOLUME = 0.98012 INCHES = 0.0226 ACRE-FEET
PEAK DISCHARGE RATE = 0.82 CFS AT 1.533 HOURS BASIN AREA = 0.0004 SQ. MI.

*S BASIN 10-TO FORTUNA SD VIA FUTURE 76TH ST

COMPUTE NM HYD ID=10 HYD NO=110 AREA=0.000398 SQ MI

PER A=0 PER B=5 PER C=95 PER D=0

TP=-0.1333 HR MASS RAIN=-1

K = 0.105844HR TP = 0.133300HR K/TP RATIO = 0.794031 SHAPE CONSTANT, N = 4.515667

UNIT PEAK = 1.1591 CFS UNIT VOLUME = 0.9897 B = 388.20 P60 = 1.7400

AREA = 0.000398 SQ MI IA = 0.35750 INCHES INF = 0.85100 INCHES PER HOUR

RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.033330

PRINT HYD ID=10 CODE=1

PARTIAL HYDROGRAPH 110.00

RUNOFF VOLUME = 0.98012 INCHES = 0.0208 ACRE-FEET
PEAK DISCHARGE RATE = 0.75 CFS AT 1.533 HOURS BASIN AREA = 0.0004 SQ. MI.

*S ADD FLOWS AT INLET 1-TOTAL FLOWS AT WEST SD CONNECTION

*S * * * AP 1 * * *

ADD HYD ID=11 HYD NO=111 ID I=1 ID II=7

PRINT HYD ID=11 CODE=1

PARTIAL HYDROGRAPH 111.00

RUNOFF VOLUME = 1.76585 INCHES = 0.3617 ACRE-FEET
PEAK DISCHARGE RATE = 9.69 CFS AT 1.500 HOURS BASIN AREA = 0.0038 SQ. MI.

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*S ADD FLOWS AT INLET 2
*S * * * AP 2 * * *
ADD HYD ID=12 HYD NO=112 ID I=2 ID II=3
PRINT HYD ID=12 CODE=1
PARTIAL HYDROGRAPH 112.00

RUNOFF VOLUME = 1.89342 INCHES = 0.5481 ACRE-FEET
PEAK DISCHARGE RATE = 14.36 CFS AT 1.500 HOURS BASIN AREA = 0.0054 SQ. MI.

*S ADD FLOWS FROM INLETS 2, 3 & 4 -
*S TOTAL FLOWS AT EAST SD CONNECTION
*S * * * AP 5 * * *
ADD HYD ID=13 HYD NO=113 ID I=12 ID II=4
PRINT HYD ID=13 CODE=1
PARTIAL HYDROGRAPH 113.00

RUNOFF VOLUME = 1.90347 INCHES = 0.7114 ACRE-FEET
PEAK DISCHARGE RATE = 18.61 CFS AT 1.500 HOURS BASIN AREA = 0.0070 SQ. MI.

ADD HYD ID=14 HYD NO=114 ID I=13 ID II=5
PRINT HYD ID=14 CODE=1
PARTIAL HYDROGRAPH 114.00

RUNOFF VOLUME = 1.89915 INCHES = 0.8312 ACRE-FEET
PEAK DISCHARGE RATE = 21.76 CFS AT 1.500 HOURS BASIN AREA = 0.0082 SQ. MI.

*S TOTAL FLOW TO FORTUNA RD SD
ADD HYD ID=15 HYD NO=115 ID I=11 ID II=14
PRINT HYD ID=15 CODE=1
PARTIAL HYDROGRAPH 115.00

RUNOFF VOLUME = 1.85665 INCHES = 1.1929 ACRE-FEET
PEAK DISCHARGE RATE = 31.45 CFS AT 1.500 HOURS BASIN AREA = 0.0120 SQ. MI.

*S TOTAL FLOW RETAINED IN LANDSCAPE AREAS
ADD HYD ID=16 HYD NO=116 ID I=6 ID II=8
PRINT HYD ID=16 CODE=1
PARTIAL HYDROGRAPH 116.00

RUNOFF VOLUME = 0.90444 INCHES = 0.0463 ACRE-FEET
PEAK DISCHARGE RATE = 1.68 CFS AT 1.533 HOURS BASIN AREA = 0.0010 SQ. MI.

ADD HYD ID=17 HYD NO=117 ID I=16 ID II=9
PRINT HYD ID=17 CODE=1
PARTIAL HYDROGRAPH 117.00

RUNOFF VOLUME = 0.92787 INCHES = 0.0689 ACRE-FEET
PEAK DISCHARGE RATE = 2.49 CFS AT 1.533 HOURS BASIN AREA = 0.0014 SQ. MI.

FINISH
NORMAL PROGRAM FINISH END TIME (HR:MIN:SEC) = 15:05:04

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