

## Appendix E

### HEC-1 Model – 1,000-Year Event

- Full Output for  $Kn = 0.07$
- Abbreviated Output for  $Kn = 0.10$  and  $Kn = 0.13$

```

*****
*
* FLOOD HYDROGRAPH PACKAGE (HEC-1)
* JUN 1998
* VERSION 4.1
*
* RUN DATE 06DEC07 TIME 09:59:52
*
*****

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*****
*
* U.S. ARMY CORPS OF ENGINEERS
* HYDROLOGIC ENGINEERING CENTER
* 609 SECOND STREET
* DAVIS, CALIFORNIA 95616
* (916) 756-1104
*
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X X XXXXXXX XXXXX X
X X X X X XX
X X X X X
XXXXXXXX XXXX X XXXXX X
X X X X X
X X X X X
X X XXXXXXX XXXXX XXX

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THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE. THE DEFINITION OF -AMSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THIS IS THE FORTRAN77 VERSION NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE , SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY, DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL LOSS RATE:GREEN AND AMPT INFILTRATION KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM

1

HEC-1 INPUT

PAGE 1

LINE	ID	1	2	3	4	5	6	7	8	9	10
1	ID	ENERGY FUELS - PINON RIDGE URANIUM MILL									
2	ID	1000 YEAR PRE-PROJECT HYDROLOGY									
3	ID	ROCKY MOUNTAIN LOCAL STORM UNIT GRAPH KN=0.07									
4	IT	5	0	0	300						
5	IO	4	0								
6	KK	BASIN1									
7	BA	1.26									
8	IN	60									
9	PB	0									
10	PC	0.000	0.049	0.097	0.155	0.213	0.284	0.354	0.434	0.532	0.651
11	PC	0.802	1.041	2.937	3.420	3.633	3.766	3.898	3.978	4.058	4.138
12	PC	4.217	4.271	4.324	4.377	4.430					
13	LS	0	67	5							
14	UI	5	10	20	48	151	258	364	472	587	702
15	UI	816	810	725	636	548	461	369	295	245	207
16	UI	176	153	135	120	107	96	87	80	73	67
17	UI	61	57	53	50	47	44	41	38	36	34
18	UI	32	30	28	26	24	23	21	20	19	18
19	UI	17	15	14	13	13	12	11	10	10	9
20	UI	8	8	8	7	7	6	6	5	5	5
21	UI	5	4	4	4	4	4	3	3	3	3
22	UI	0	0	0	0	0	0	0	0	0	0
23	KK	BASIN2									
24	BA	0.24									
25	LS	0	53	5							
26	UI	2	4	13	50	86	123	162	202	205	175
27	UI	145	115	85	65	51	42	35	30	26	23
28	UI	20	18	16	14	13	12	11	10	9	8
29	UI	8	7	6	6	5	5	5	4	4	4
30	UI	3	3	3	2	2	2	2	2	2	1
31	UI	1	1	1	1	1	1	1	1	1	0
32	KK	BASIN3									
33	BA	0.13									
34	LS	0	51	5							
35	UI	3	17	69	121	177	162	120	77	51	36
36	UI	28	22	18	15	12	11	9	8	7	6
37	UI	5	5	4	3	3	3	2	2	2	2
38	UI	1	1	1	1	1	1	1	0	0	0
39	KK	BASIN4									

40	BA	0.62										
41	LS	0	62	5								
42	UI	3	5	11	30	86	141	197	255	315	375	
43	UI	435	395	349	303	256	210	166	134	112	94	
44	UI	82	71	63	55	50	45	41	37	34	31	
45	UI	29	27	25	24	22	21	19	18	17	16	
46	UI	15	14	13	12	11	11	10	9	9	8	
47	UI	8	7	7	6	6	5	5	5	4	4	
48	UI	4	4	3	3	3	3	3	2	2	2	
49	UI	2	2	2	2	2	2	1	1	0	0	

HEC-1 INPUT

1

LINE ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

50	KK	BASIN5										
51	BA	0.19										
52	LS	0	65	5								
53	UI	2	7	39	85	131	180	210	173	136	98	
54	UI	68	51	40	32	26	22	19	17	14	13	
55	UI	12	10	9	8	7	7	6	5	5	4	
56	UI	4	3	3	3	2	2	2	2	2	1	
57	UI	1	1	1	1	1	1	1	0	0	0	
58	ZZ											

```

*****
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* FLOOD HYDROGRAPH PACKAGE (HEC-1)
* JUN 1998
* VERSION 4.1
* RUN DATE 06DEC07 TIME 09:59:52
*
*****
*
* U.S. ARMY CORPS OF ENGINEERS
* HYDROLOGIC ENGINEERING CENTER
* 609 SECOND STREET
* DAVIS, CALIFORNIA 95616
* (916) 756-1104
*
*****

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ENERGY FUELS - PINON RIDGE URANIUM MILL  
1000 YEAR PRE-PROJECT HYDROLOGY  
ROCKY MOUNTAIN LOCAL STORM UNIT GRAPH KN=0.07

5 IO OUTPUT CONTROL VARIABLES  
IPRNT 4 PRINT CONTROL  
IPLLOT 0 PLOT CONTROL  
QSCAL 0. HYDROGRAPH PLOT SCALE

IT HYDROGRAPH TIME DATA  
NMIN 5 MINUTES IN COMPUTATION INTERVAL  
IDATE 1 0 STARTING DATE  
ITIME 0000 STARTING TIME  
NQ 300 NUMBER OF HYDROGRAPH ORDINATES  
NDDATE 2 0 ENDING DATE  
NDTIME 0055 ENDING TIME  
ICENT 19 CENTURY MARK

COMPUTATION INTERVAL .08 HOURS  
TOTAL TIME BASE 24.92 HOURS

ENGLISH UNITS  
DRAINAGE AREA SQUARE MILES  
PRECIPITATION DEPTH INCHES  
LENGTH, ELEVATION FEET  
FLOW CUBIC FEET PER SECOND  
STORAGE VOLUME ACRE-Feet  
SURFACE AREA ACRES  
TEMPERATURE DEGREES FAHRENHEIT

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*****
*
* 6 KK BASIN1
*
*****

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8 IN TIME DATA FOR INPUT TIME SERIES  
JXMIN 60 TIME INTERVAL IN MINUTES



.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.01
.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01
.02	.02	.02	.02	.02	.02	.02	.02	.02	.02	.02
.02	.02	.16	.16	.16	.16	.16	.16	.16	.16	.16
.16	.16	.16	.16	.04	.04	.04	.04	.04	.04	.04
.04	.04	.04	.04	.04	.04	.02	.02	.02	.02	.02
.02	.02	.02	.02	.02	.02	.02	.02	.02	.01	.01
.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

25 LS SCS LOSS RATE  
 STRTL 1.77 INITIAL ABSTRACTION  
 CRVNBR 53.00 CURVE NUMBER  
 RTIMP 5.00 PERCENT IMPERVIOUS AREA

26 UI INPUT UNITGRAPH, 59 ORDINATES, VOLUME = 1.00

2.0	4.0	13.0	50.0	86.0	123.0	162.0	202.0	205.0	175.0
145.0	115.0	85.0	65.0	51.0	42.0	35.0	30.0	26.0	23.0
20.0	18.0	16.0	14.0	13.0	12.0	11.0	10.0	9.0	8.0
8.0	7.0	6.0	6.0	5.0	5.0	5.0	4.0	4.0	4.0
3.0	3.0	3.0	2.0	2.0	2.0	2.0	2.0	2.0	1.0
1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	

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 \* \*  
 32 KK \* BASIN3 \*  
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SUBBASIN RUNOFF DATA

33 BA SUBBASIN CHARACTERISTICS  
 TAREA .13 SUBBASIN AREA

PRECIPITATION DATA

9 PB STORM 4.43 BASIN TOTAL PRECIPITATION

10 PI INCREMENTAL PRECIPITATION PATTERN

.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.01
.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01
.02	.02	.02	.02	.02	.02	.02	.02	.02	.02	.02
.02	.02	.16	.16	.16	.16	.16	.16	.16	.16	.16
.16	.16	.16	.16	.04	.04	.04	.04	.04	.04	.04





RUNOFF SUMMARY  
 FLOW IN CUBIC FEET PER SECOND  
 TIME IN HOURS, AREA IN SQUARE MILES

+	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD			BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
					6-HOUR	24-HOUR	72-HOUR			
+	HYDROGRAPH AT	BASIN1	405.	12.67	159.	52.	51.	1.26		
+	HYDROGRAPH AT	BASIN2	36.	12.50	14.	5.	5.	.24		
+	HYDROGRAPH AT	BASIN3	20.	12.25	7.	2.	2.	.13		
+	HYDROGRAPH AT	BASIN4	155.	12.67	62.	21.	20.	.62		
+	HYDROGRAPH AT	BASIN5	70.	12.33	22.	7.	7.	.19		

\*\*\* NORMAL END OF HEC-1 \*\*\*

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*****
*
* FLOOD HYDROGRAPH PACKAGE (HEC-1)
* JUN 1998
* VERSION 4.1
*
* RUN DATE 15JAN08 TIME 16:37:40
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*****
*
* U.S. ARMY CORPS OF ENGINEERS
* HYDROLOGIC ENGINEERING CENTER
* 609 SECOND STREET
* DAVIS, CALIFORNIA 95616
* (916) 756-1104
*
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X X XXXXXXX XXXXX X
X X X X X XX
X X X X X
XXXXXXXX XXXX X XXXXX X
X X X X X
X X X X X
X X XXXXXXX XXXXX XXX

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THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE. THE DEFINITION OF -AMSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THIS IS THE FORTRAN77 VERSION NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE , SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY, DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL LOSS RATE:GREEN AND AMPT INFILTRATION KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM

1

HEC-1 INPUT

PAGE 1

LINE	ID	1	2	3	4	5	6	7	8	9	10
1	ID	ENERGY FUELS - PINON RIDGE URANIUM MILL									
2	ID	1000 YEAR PRE-PROJECT HYDROLOGY									
3	ID	ROCKY MOUNTAIN LOCAL STORM UNIT GRAPH KN=0.10									
4	IT	5	0	0	300						
5	IO	5	0								
6	KK	BASIN1									
7	BA	1.26									
8	IN	60									
9	PB	0									
10	PC	0.000	0.049	0.097	0.155	0.213	0.284	0.354	0.434	0.532	0.651
11	PC	0.802	1.041	2.937	3.420	3.633	3.766	3.898	3.978	4.058	4.138
12	PC	4.217	4.271	4.324	4.377	4.430					
13	LS	0	67	5							
14	UI	3	5	7	12	21	45	95	151	200	252
15	UI	304	359	414	470	526	582	573	533	489	447
16	UI	404	360	319	273	233	200	176	156	139	124
17	UI	113	102	94	87	80	73	68	64	60	56
18	UI	53	50	47	44	42	39	37	36	34	33
19	UI	31	30	29	27	26	25	24	23	22	21
20	UI	20	19	18	17	17	16	15	15	14	13
21	UI	13	12	12	11	11	10	10	9	9	8
22	UI	8	8	7	7	7	6	6	6	6	5
23	UI	5	5	5	4	4	4	4	4	4	3
24	UI	3	3	3	3	3	3	3	3	2	2
25	UI	2	2	2	2	2	0	0	0	0	0
26	KK	BASIN2									
27	BA	0.24									
28	LS	0	53	5							
29	UI	1	2	3	7	20	39	56	74	93	112
30	UI	131	150	142	128	113	98	84	68	55	46
31	UI	39	33	29	26	23	21	18	17	15	14
32	UI	13	12	11	10	10	9	9	8	8	7
33	UI	7	6	6	6	5	5	5	4	4	4
34	UI	4	3	3	3	3	3	3	2	2	2
35	UI	2	2	2	2	2	1	1	1	1	1
36	UI	1	1	1	1	1	1	1	1	1	1
37	UI	1	1	1	1	0	0	0	0	0	0
38	KK	BASIN3									
39	BA	0.13									
40	LS	0	51	5							

41	UI	1	3	13	37	60	85	110	126	107	88
42	UI	68	49	37	29	23	20	16	14	12	11
43	UI	9	8	8	7	6	6	5	5	4	4
44	UI	4	3	3	3	2	2	2	2	2	1
45	UI	1	1	1	1	1	1	1	1	1	1
46	UI	1	1	0	0	0	0	0	0	0	0

1

HEC-1 INPUT

PAGE 2

LINE ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

47	KK BASIN4										
48	BA	0.62									
49	LS	0	62	5							
50	UI	2	2	4	7	12	28	55	83	109	136
51	UI	164	193	222	252	281	301	280	258	235	213
52	UI	190	168	145	123	105	91	81	71	63	58
53	UI	52	48	44	40	37	34	32	30	28	26
54	UI	25	23	22	21	19	19	18	17	16	15
55	UI	15	14	13	13	12	12	11	11	10	10
56	UI	9	9	8	8	8	7	7	7	6	6
57	UI	6	6	5	5	5	5	4	4	4	4
58	UI	4	3	3	3	3	3	3	3	3	2
59	UI	2	2	2	2	2	2	2	2	2	2
60	UI	2	1	1	1	1	1	1	1	1	1
61	UI	1	1	0	0	0	0	0	0	0	0
62	KK BASIN5										
63	BA	0.19									
64	LS	0	65	5							
65	UI	1	2	5	18	40	61	82	105	128	148
66	UI	131	113	96	79	61	48	39	32	27	23
67	UI	20	18	16	14	13	12	11	10	9	8
68	UI	8	7	7	6	6	5	5	5	4	4
69	UI	4	3	3	3	3	3	2	2	2	2
70	UI	2	2	1	1	1	1	1	1	1	1
71	UI	1	1	1	1	1	1	1	1	0	0
72	ZZ										

1\*\*\*\*\*  
 \*  
 \* FLOOD HYDROGRAPH PACKAGE (HEC-1) \*  
 \* JUN 1998 \*  
 \* VERSION 4.1 \*  
 \*  
 \* RUN DATE 15JAN08 TIME 16:37:40 \*  
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 \*  
 \* U.S. ARMY CORPS OF ENGINEERS \*  
 \* HYDROLOGIC ENGINEERING CENTER \*  
 \* 609 SECOND STREET \*  
 \* DAVIS, CALIFORNIA 95616 \*  
 \* (916) 756-1104 \*  
 \*  
 \*\*\*\*\*

ENERGY FUELS - PINON RIDGE URANIUM MILL  
 1000 YEAR PRE-PROJECT HYDROLOGY  
 ROCKY MOUNTAIN LOCAL STORM UNIT GRAPH KN=0.10

5 IO OUTPUT CONTROL VARIABLES  
 IPRNT 5 PRINT CONTROL  
 IPLOT 0 PLOT CONTROL  
 QSCAL 0. HYDROGRAPH PLOT SCALE

IT HYDROGRAPH TIME DATA  
 NMIN 5 MINUTES IN COMPUTATION INTERVAL  
 IDATE 1 0 STARTING DATE  
 ITIME 0000 STARTING TIME  
 NQ 300 NUMBER OF HYDROGRAPH ORDINATES  
 NDDATE 2 0 ENDING DATE  
 NDTIME 0055 ENDING TIME  
 ICENT 19 CENTURY MARK

COMPUTATION INTERVAL .08 HOURS  
 TOTAL TIME BASE 24.92 HOURS

ENGLISH UNITS  
 DRAINAGE AREA SQUARE MILES  
 PRECIPITATION DEPTH INCHES  
 LENGTH, ELEVATION FEET  
 FLOW CUBIC FEET PER SECOND  
 STORAGE VOLUME ACRE-Feet  
 SURFACE AREA ACRES  
 TEMPERATURE DEGREES FAHRENHEIT

RUNOFF SUMMARY  
 FLOW IN CUBIC FEET PER SECOND  
 TIME IN HOURS, AREA IN SQUARE MILES

OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD			BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
				6-HOUR	24-HOUR	72-HOUR			
+	HYDROGRAPH AT								
	BASIN1	337.	13.17	155.	52.	50.	1.26		
+	HYDROGRAPH AT								
	BASIN2	30.	12.83	14.	5.	5.	.24		
+	HYDROGRAPH AT								
	BASIN3	17.	12.50	7.	2.	2.	.13		
+	HYDROGRAPH AT								
	BASIN4	128.	13.17	60.	21.	20.	.62		
+	HYDROGRAPH AT								
	BASIN5	59.	12.58	22.	7.	7.	.19		

\*\*\* NORMAL END OF HEC-1 \*\*\*

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1*****
*
* FLOOD HYDROGRAPH PACKAGE (HEC-1) *
* JUN 1998 *
* VERSION 4.1 *
*
* RUN DATE 15JAN08 TIME 16:39:51 *
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*****
*
* U.S. ARMY CORPS OF ENGINEERS *
* HYDROLOGIC ENGINEERING CENTER *
* 609 SECOND STREET *
* DAVIS, CALIFORNIA 95616 *
* (916) 756-1104 *
*
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X X XXXXXXX XXXXX X
X X X X X XX
X X X X X
XXXXXXXX XXXX X XXXXX X
X X X X X
X X X X X
X X XXXXXXX XXXXX XXXX

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9	PB	0									
10	PC	0.000	0.049	0.097	0.155	0.213	0.284	0.354	0.434	0.532	0.651
11	PC	0.802	1.041	2.937	3.420	3.633	3.766	3.898	3.978	4.058	4.138
12	PC	4.217	4.271	4.324	4.377	4.430					
13	LS	0	67	5							
14	UI	2	3	4	6	9	13	23	45	77	112
15	UI	142	173	205	237	270	304	338	373	407	441
16	UI	466	442	417	390	364	338	312	284	259	232
17	UI	205	181	160	144	131	120	109	99	92	86
18	UI	79	74	70	65	61	57	54	51	49	46
19	UI	44	42	40	38	36	35	33	32	30	29
20	UI	28	27	26	26	25	24	23	22	21	20
21	UI	20	19	18	18	17	17	16	16	15	14
22	UI	14	13	13	13	12	12	11	11	10	10
23	UI	10	9	9	9	8	8	8	8	7	7
24	UI	7	7	6	6	6	5	5	5	5	5
25	UI	5	5	4	4	4	4	4	4	4	4
26	KK	BASIN2									
27	BA	0.24									
28	LS	0	53	5							
29	UI	1	1	2	3	5	12	24	35	46	57
30	UI	68	80	92	104	116	116	108	98	89	80
31	UI	71	62	52	44	38	33	29	26	23	21
32	UI	19	18	16	15	14	13	12	11	10	10
33	UI	9	9	8	8	7	7	7	6	6	6
34	UI	6	5	5	5	5	4	4	4	4	4
35	UI	3	3	3	3	3	3	3	2	2	2
36	UI	2	2	2	2	2	2	2	1	1	1
37	UI	1	1	1	1	1	1	1	1	1	1
38	UI	1	1	1	1	1	1	1	1	1	1
39	UI	1	1	0	0	0	0	0	0	0	0
40	KK	BASIN3									
41	BA	0.13									
42	LS	0	51	5							

43	UI	1	1	4	13	28	42	57	73	89	101
44	UI	90	77	65	53	41	32	26	22	18	16
45	UI	14	12	11	10	9	8	7	7	6	6
46	UI	5	5	5	4	4	4	3	3	3	3
47	UI	2	2	2	2	2	2	2	1	1	1
48	UI	1	1	1	1	1	1	1	1	1	1
49	UI	1	1	1	0	0	0	0	0	0	0

HEC-1 INPUT

1

LINE	ID	1	2	3	4	5	6	7	8	9	10
50	KK	BASIN4									
51	BA	0.62									
52	LS	0	62	5							
53	UI	1	2	2	3	5	7	13	27	44	62
54	UI	78	94	111	128	146	164	182	200	218	236
55	UI	228	215	202	188	174	160	146	133	119	104
56	UI	92	81	73	66	60	54	50	46	43	39
57	UI	37	35	32	30	28	27	25	24	23	22
58	UI	21	20	19	18	17	16	15	15	14	14
59	UI	13	13	13	12	12	11	11	10	10	10
60	UI	9	9	9	8	8	8	7	7	7	7
61	UI	6	6	6	6	6	5	5	5	5	5
62	UI	4	4	4	4	4	4	4	3	3	3
63	UI	3	3	3	3	3	3	2	2	2	2
64	UI	2	2	2	2	2	2	2	2	2	2
65	KK	BASIN5									
66	BA	0.19									
67	LS	0	65	5							
68	UI	1	1	2	4	11	23	35	47	60	73
69	UI	86	99	112	104	94	84	74	64	54	44
70	UI	37	31	27	23	21	18	17	15	14	12
71	UI	11	11	10	9	8	8	7	7	7	6
72	UI	6	6	5	5	5	4	4	4	4	4
73	UI	3	3	3	3	3	2	2	2	2	2
74	UI	2	2	2	2	1	1	1	1	1	1
75	UI	1	1	1	1	1	1	1	1	1	1
76	UI	1	1	1	1	1	0	0	0	0	0
77	UI	0	0	0	0	0	0	0	0	0	0
78	ZZ										

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1*****
*
* FLOOD HYDROGRAPH PACKAGE (HEC-1) *
* JUN 1998 *
* VERSION 4.1 *
*
* RUN DATE 15JAN08 TIME 16:39:51 *
*
*****

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*****
*
* U.S. ARMY CORPS OF ENGINEERS *
* HYDROLOGIC ENGINEERING CENTER *
* 609 SECOND STREET *
* DAVIS, CALIFORNIA 95616 *
* (916) 756-1104 *
*
*****

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ENERGY FUELS - PINON RIDGE URANIUM MILL  
1000 YEAR PRE-PROJECT HYDROLOGY  
ROCKY MOUNTAIN LOCAL STORM UNIT GRAPH KN=0.13

5 IO OUTPUT CONTROL VARIABLES  
IPRNT 5 PRINT CONTROL  
IPLOT 0 PLOT CONTROL  
QSCAL 0. HYDROGRAPH PLOT SCALE

IT HYDROGRAPH TIME DATA  
NMIN 5 MINUTES IN COMPUTATION INTERVAL  
IDATE 1 0 STARTING DATE  
ITIME 0000 STARTING TIME  
NQ 300 NUMBER OF HYDROGRAPH ORDINATES  
NDDATE 2 0 ENDING DATE  
NDTIME 0055 ENDING TIME  
ICENT 19 CENTURY MARK  
COMPUTATION INTERVAL .08 HOURS  
TOTAL TIME BASE 24.92 HOURS

ENGLISH UNITS  
DRAINAGE AREA SQUARE MILES  
PRECIPITATION DEPTH INCHES  
LENGTH, ELEVATION FEET  
FLOW CUBIC FEET PER SECOND  
STORAGE VOLUME ACRE-FEET

SURFACE AREA  
TEMPERATURE

ACRES  
DEGREES FAHRENHEIT

RUNOFF SUMMARY  
FLOW IN CUBIC FEET PER SECOND  
TIME IN HOURS, AREA IN SQUARE MILES

1

+	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD			BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
					6-HOUR	24-HOUR	72-HOUR			
+	HYDROGRAPH AT	BASIN1	295.	13.58	150.	51.	49.	1.26		
+	HYDROGRAPH AT	BASIN2	27.	13.17	14.	5.	5.	.24		
+	HYDROGRAPH AT	BASIN3	15.	12.67	7.	2.	2.	.13		
+	HYDROGRAPH AT	BASIN4	112.	13.58	58.	20.	19.	.62		
+	HYDROGRAPH AT	BASIN5	51.	12.83	22.	7.	7.	.19		

\*\*\* NORMAL END OF HEC-1 \*\*\*