

# **Appendix A**

## **UCI Files For HSPF**

# Baseline

RUN

GLOBAL

```
Back Creek above Dundee, VA
START      1956 10 1 0 0  END      1999  9 30  0  0
RUN INTERP OUTPUT LEVEL    3    2
RESUME     0 RUN    1                UNIT SYSTEM    1
END GLOBAL
```

FILES

```
<FILE> <UN#>***<----FILE NAME----->
WDM      16  backcr.wdm
MESSU    24  scenario.ech
          91  scenario.out
          92  backcr1.plt
          93  backcr2.plt
          94  backcr3.plt
END FILES
```

OPN SEQUENCE

```
INGRP          INDELT 01:00
  PERLND        11
  PERLND        12
  PERLND        13
  PERLND        14
  IMPLND        11
  RCHRES         1
  PERLND        21
  PERLND        22
  PERLND        23
  PERLND        24
  IMPLND        21
  RCHRES         2
  PERLND        31
  PERLND        32
  PERLND        33
  PERLND        34
  IMPLND        31
  RCHRES         3
  PERLND        41
  PERLND        42
  PERLND        43
  PERLND        44
  IMPLND        41
  RCHRES         4
  PERLND        51
  PERLND        52
  PERLND        53
  PERLND        54
  IMPLND        51
  RCHRES         5
  PERLND        61
  PERLND        62
  PERLND        63
  PERLND        64
  IMPLND        61
  RCHRES         6
  PERLND        71
  PERLND        72
  PERLND        73
  PERLND        74
  IMPLND        71
  RCHRES         7
  PERLND        81
  PERLND        82
  PERLND        83
  PERLND        84
```

```

IMPLND      81
RCHRES      8
PERLND      91
PERLND      92
PERLND      93
PERLND      94
IMPLND      91
RCHRES      9
PERLND     101
PERLND     102
PERLND     103
PERLND     104
IMPLND     101
RCHRES     10
COPY        100
COPY        101
COPY        102
COPY        103
COPY        104
COPY        105
COPY        106
COPY        107
COPY        108
COPY        109
COPY        110
PLTGEN     100
PLTGEN     200
PLTGEN     300
END INGRP
END OPN SEQUENCE

```

```

PERLND
ACTIVITY
# # ATMP SNOW PWAT SED PST PWG PQAL MSTL PEST NITR PHOS TRAC ***
11 104 0 0 1 0 0 0 0 0 0 0 0 0 0
END ACTIVITY

```

```

PRINT-INFO
# # ATMP SNOW PWAT SED PST PWG PQAL MSTL PEST NITR PHOS TRAC PIVL***PY
11 104 6 6 5 6 6 6 6 6 6 6 6 6 1 9
END PRINT-INFO

```

```

GEN-INFO
# # NAME NBLKS UCI IN OUT ENGL METR ***
11 FOREST 1 1 1 1 91 0
21 FOREST 1 1 1 1 91 0
31 FOREST 1 1 1 1 91 0
41 FOREST 1 1 1 1 91 0
51 FOREST 1 1 1 1 91 0
61 FOREST 1 1 1 1 91 0
71 FOREST 1 1 1 1 91 0
81 FOREST 1 1 1 1 91 0
91 FOREST 1 1 1 1 91 0
101 FOREST 1 1 1 1 91 0
12 HERBACEOUS/AG 1 1 1 1 91 0
22 HERBACEOUS/AG 1 1 1 1 91 0
32 HERBACEOUS/AG 1 1 1 1 91 0
42 HERBACEOUS/AG 1 1 1 1 91 0
52 HERBACEOUS/AG 1 1 1 1 91 0
62 HERBACEOUS/AG 1 1 1 1 91 0
72 HERBACEOUS/AG 1 1 1 1 91 0
82 HERBACEOUS/AG 1 1 1 1 91 0
92 HERBACEOUS/AG 1 1 1 1 91 0
102 HERBACEOUS/AG 1 1 1 1 91 0
13 DISTURBED 1 1 1 1 91 0
23 DISTURBED 1 1 1 1 91 0
33 DISTURBED 1 1 1 1 91 0
43 DISTURBED 1 1 1 1 91 0
53 DISTURBED 1 1 1 1 91 0
63 DISTURBED 1 1 1 1 91 0
73 DISTURBED 1 1 1 1 91 0

```

83	DISTURBED	1	1	1	1	91	0
93	DISTURBED	1	1	1	1	91	0
103	DISTURBED	1	1	1	1	91	0
14	MIXED FOREST/AG	1	1	1	1	91	0
24	MIXED FOREST/AG	1	1	1	1	91	0
34	MIXED FOREST/AG	1	1	1	1	91	0
44	MIXED FOREST/AG	1	1	1	1	91	0
54	MIXED FOREST/AG	1	1	1	1	91	0
64	MIXED FOREST/AG	1	1	1	1	91	0
74	MIXED FOREST/AG	1	1	1	1	91	0
84	MIXED FOREST/AG	1	1	1	1	91	0
94	MIXED FOREST/AG	1	1	1	1	91	0
104	MIXED FOREST/AG	1	1	1	1	91	0

END GEN-INFO

PWAT-PARM1

#	#	CSNO	RTOP	UZFG	VCS	VUZ	NVV	VIFW	VIRC	VLE	***
11		0	1	1	1	0	0	0	0	1	0
12		0	1	1	1	1	0	0	0	1	0
13		0	1	1	1	0	0	0	0	1	0
14		0	1	1	1	1	0	0	0	1	0
21		0	1	1	1	0	0	0	0	1	0
22		0	1	1	1	1	0	0	0	1	0
23		0	1	1	1	0	0	0	0	1	0
24		0	1	1	1	1	0	0	0	1	0
31		0	1	1	1	0	0	0	0	1	0
32		0	1	1	1	1	0	0	0	1	0
33		0	1	1	1	0	0	0	0	1	0
34		0	1	1	1	1	0	0	0	1	0
41		0	1	1	1	0	0	0	0	1	0
42		0	1	1	1	1	0	0	0	1	0
43		0	1	1	1	0	0	0	0	1	0
44		0	1	1	1	1	0	0	0	1	0
51		0	1	1	1	0	0	0	0	1	0
52		0	1	1	1	1	0	0	0	1	0
53		0	1	1	1	0	0	0	0	1	0
54		0	1	1	1	1	0	0	0	1	0
61		0	1	1	1	0	0	0	0	1	0
62		0	1	1	1	1	0	0	0	1	0
63		0	1	1	1	0	0	0	0	1	0
64		0	1	1	1	1	0	0	0	1	0
71		0	1	1	1	0	0	0	0	1	0
72		0	1	1	1	1	0	0	0	1	0
73		0	1	1	1	0	0	0	0	1	0
74		0	1	1	1	1	0	0	0	1	0
81		0	1	1	1	0	0	0	0	1	0
82		0	1	1	1	1	0	0	0	1	0
83		0	1	1	1	0	0	0	0	1	0
84		0	1	1	1	1	0	0	0	1	0
91		0	1	1	1	0	0	0	0	1	0
92		0	1	1	1	1	0	0	0	1	0
93		0	1	1	1	0	0	0	0	1	0
94		0	1	1	1	1	0	0	0	1	0
101		0	1	1	1	0	0	0	0	1	0
102		0	1	1	1	1	0	0	0	1	0
103		0	1	1	1	0	0	0	0	1	0
104		0	1	1	1	1	0	0	0	1	0

END PWAT-PARM1

PWAT-PARM2

#	#	***FOREST	LZSN	INFILT	LSUR	SLSUR	KVARY	AGWR
11		0.000	9.5	0.105	200.	0.24000	0.000	.960
21		0.000	9.5	0.105	200.	0.24000	0.000	.960
31		0.000	9.5	0.105	200.	0.22000	0.000	.960
41		0.000	9.5	0.105	300.	0.14000	0.000	.960
51		0.000	9.5	0.105	250.	0.19000	0.000	.960
61		0.000	9.5	0.105	200.	0.20000	0.000	.960
71		0.000	9.5	0.105	250.	0.19000	0.000	.960
81		0.000	9.5	0.105	250.	0.19000	0.000	.960
91		0.000	9.5	0.105	200.	0.22000	0.000	.960
101		0.000	9.5	0.105	250.	0.16000	0.000	.960

12	0.000	9.5	0.086	200.	0.24000	0.000	.960
22	0.000	9.5	0.086	200.	0.24000	0.000	.960
32	0.000	9.5	0.086	200.	0.22000	0.000	.960
42	0.000	9.5	0.086	300.	0.14000	0.000	.960
52	0.000	9.5	0.086	250.	0.19000	0.000	.960
62	0.000	9.5	0.086	200.	0.20000	0.000	.960
72	0.000	9.5	0.086	250.	0.19000	0.000	.960
82	0.000	9.5	0.086	250.	0.19000	0.000	.960
92	0.000	9.5	0.086	200.	0.22000	0.000	.960
102	0.000	9.5	0.086	250.	0.16000	0.000	.960
13	0.000	9.5	0.067	200.	0.24000	0.000	.960
23	0.000	9.5	0.067	200.	0.24000	0.000	.960
33	0.000	9.5	0.067	200.	0.22000	0.000	.960
43	0.000	9.5	0.067	300.	0.14000	0.000	.960
53	0.000	9.5	0.067	250.	0.19000	0.000	.960
63	0.000	9.5	0.067	200.	0.20000	0.000	.960
73	0.000	9.5	0.067	250.	0.19000	0.000	.960
83	0.000	9.5	0.067	250.	0.19000	0.000	.960
93	0.000	9.5	0.067	200.	0.22000	0.000	.960
103	0.000	9.5	0.067	250.	0.16000	0.000	.960
14	0.000	9.5	0.096	200.	0.24000	0.000	.960
24	0.000	9.5	0.096	200.	0.24000	0.000	.960
34	0.000	9.5	0.096	200.	0.22000	0.000	.960
44	0.000	9.5	0.096	300.	0.14000	0.000	.960
54	0.000	9.5	0.096	250.	0.19000	0.000	.960
64	0.000	9.5	0.096	200.	0.20000	0.000	.960
74	0.000	9.5	0.096	250.	0.19000	0.000	.960
84	0.000	9.5	0.096	250.	0.19000	0.000	.960
94	0.000	9.5	0.096	200.	0.22000	0.000	.960
104	0.000	9.5	0.096	250.	0.16000	0.000	.960

END PWAT-PARM2

PWAT-PARM3

***<PLS>	PETMAX	PETMIN	INFEXP	INFILD	DEEPPR	BASETP	AGWETP
***x - x	(deg F)	(deg F)					
11 104	40.0	35.0	2.0	2.0	0.210	0.000	0.000

END PWAT-PARM3

PWAT-PARM4

#	#	CEPSC	UZSN	NSUR	INTFW	IRC	LZETP	***
11		0.200	1.30	0.40	3.7	0.65	0.90	
21		0.200	1.30	0.40	3.7	0.65	0.90	
31		0.200	1.30	0.40	3.7	0.65	0.90	
41		0.200	1.30	0.40	3.7	0.65	0.90	
51		0.200	1.30	0.40	3.7	0.65	0.90	
61		0.200	1.30	0.40	3.7	0.65	0.90	
71		0.200	1.30	0.40	3.7	0.65	0.90	
81		0.200	1.30	0.40	3.7	0.65	0.90	
91		0.200	1.30	0.40	3.7	0.65	0.90	
101		0.200	1.30	0.40	3.7	0.65	0.90	
12		0.200	1.00	0.20	2.8	0.60	0.90	
22		0.200	1.00	0.20	2.8	0.60	0.90	
32		0.200	1.00	0.20	2.8	0.60	0.90	
42		0.200	1.00	0.20	2.8	0.60	0.90	
52		0.200	1.00	0.20	2.8	0.60	0.90	
62		0.200	1.00	0.20	2.8	0.60	0.90	
72		0.200	1.00	0.20	2.8	0.60	0.90	
82		0.200	1.00	0.20	2.8	0.60	0.90	
92		0.200	1.00	0.20	2.8	0.60	0.90	
102		0.200	1.00	0.20	2.8	0.60	0.90	
13		0.200	0.92	0.15	2.8	0.60	0.90	
23		0.200	0.92	0.15	2.8	0.60	0.90	
33		0.200	0.92	0.15	2.8	0.60	0.90	
43		0.200	0.92	0.15	2.8	0.60	0.90	
53		0.200	0.92	0.15	2.8	0.60	0.90	
63		0.200	0.92	0.15	2.8	0.60	0.90	
73		0.200	0.92	0.15	2.8	0.60	0.90	
83		0.200	0.92	0.15	2.8	0.60	0.90	
93		0.200	0.92	0.15	2.8	0.60	0.90	
103		0.200	0.92	0.15	2.8	0.60	0.90	
14		0.200	1.00	0.30	3.3	0.63	0.90	

24	0.200	1.00	0.30	3.3	0.63	0.90
34	0.200	1.00	0.30	3.3	0.63	0.90
44	0.200	1.00	0.30	3.3	0.63	0.90
54	0.200	1.00	0.30	3.3	0.63	0.90
64	0.200	1.00	0.30	3.3	0.63	0.90
74	0.200	1.00	0.30	3.3	0.63	0.90
84	0.200	1.00	0.30	3.3	0.63	0.90
94	0.200	1.00	0.30	3.3	0.63	0.90
104	0.200	1.00	0.30	3.3	0.63	0.90

END PWAT-PARM4

PWAT-PARM5  
 \*\*\* <PLS > FZG FZGL  
 \*\*\* x - x  
 11 104 1.0 0.1  
 END PWAT-PARM5

MON-INTERCEP  
 \*\*\* <PLS > Interception storage capacity at start of each month (in)  
 \*\*\* x - x JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

11	0.0250	0.0250	0.0250	1.000	3.500	4.000	4.000	4.000	3.500	1.000	0.0250	0.0250
21	0.0250	0.0250	0.0250	1.000	3.500	4.000	4.000	4.000	3.500	1.000	0.0250	0.0250
31	0.0250	0.0250	0.0250	1.000	3.500	4.000	4.000	4.000	3.500	1.000	0.0250	0.0250
41	0.0250	0.0250	0.0250	1.000	3.500	4.000	4.000	4.000	3.500	1.000	0.0250	0.0250
51	0.0250	0.0250	0.0250	1.000	3.500	4.000	4.000	4.000	3.500	1.000	0.0250	0.0250
61	0.0250	0.0250	0.0250	1.000	3.500	4.000	4.000	4.000	3.500	1.000	0.0250	0.0250
71	0.0250	0.0250	0.0250	1.000	3.500	4.000	4.000	4.000	3.500	1.000	0.0250	0.0250
81	0.0250	0.0250	0.0250	1.000	3.500	4.000	4.000	4.000	3.500	1.000	0.0250	0.0250
91	0.0250	0.0250	0.0250	1.000	3.500	4.000	4.000	4.000	3.500	1.000	0.0250	0.0250
101	0.0250	0.0250	0.0250	1.000	3.500	4.000	4.000	4.000	3.500	1.000	0.0250	0.0250
12	0.0250	0.0250	0.0250	1.000	2.500	3.000	3.000	3.000	2.500	1.000	0.0250	0.0250
22	0.0250	0.0250	0.0250	1.000	2.500	3.000	3.000	3.000	2.500	1.000	0.0250	0.0250
32	0.0250	0.0250	0.0250	1.000	2.500	3.000	3.000	3.000	2.500	1.000	0.0250	0.0250
42	0.0250	0.0250	0.0250	1.000	2.500	3.000	3.000	3.000	2.500	1.000	0.0250	0.0250
52	0.0250	0.0250	0.0250	1.000	2.500	3.000	3.000	3.000	2.500	1.000	0.0250	0.0250
62	0.0250	0.0250	0.0250	1.000	2.500	3.000	3.000	3.000	2.500	1.000	0.0250	0.0250
72	0.0250	0.0250	0.0250	1.000	2.500	3.000	3.000	3.000	2.500	1.000	0.0250	0.0250
82	0.0250	0.0250	0.0250	1.000	2.500	3.000	3.000	3.000	2.500	1.000	0.0250	0.0250
92	0.0250	0.0250	0.0250	1.000	2.500	3.000	3.000	3.000	2.500	1.000	0.0250	0.0250
102	0.0250	0.0250	0.0250	1.000	2.500	3.000	3.000	3.000	2.500	1.000	0.0250	0.0250
13	0.0250	0.0250	0.0250	1.000	1.500	1.500	1.500	1.500	1.000	1.000	0.0250	0.0250
23	0.0250	0.0250	0.0250	1.000	1.500	1.500	1.500	1.500	1.000	1.000	0.0250	0.0250
33	0.0250	0.0250	0.0250	1.000	1.500	1.500	1.500	1.500	1.000	1.000	0.0250	0.0250
43	0.0250	0.0250	0.0250	1.000	1.500	1.500	1.500	1.500	1.000	1.000	0.0250	0.0250
53	0.0250	0.0250	0.0250	1.000	1.500	1.500	1.500	1.500	1.000	1.000	0.0250	0.0250
63	0.0250	0.0250	0.0250	1.000	1.500	1.500	1.500	1.500	1.000	1.000	0.0250	0.0250
73	0.0250	0.0250	0.0250	1.000	1.500	1.500	1.500	1.500	1.000	1.000	0.0250	0.0250
83	0.0250	0.0250	0.0250	1.000	1.500	1.500	1.500	1.500	1.000	1.000	0.0250	0.0250
93	0.0250	0.0250	0.0250	1.000	1.500	1.500	1.500	1.500	1.000	1.000	0.0250	0.0250
103	0.0250	0.0250	0.0250	1.000	1.500	1.500	1.500	1.500	1.000	1.000	0.0250	0.0250
14	0.0250	0.0250	0.0250	1.000	3.000	3.500	3.500	3.500	3.000	1.000	0.0250	0.0250
24	0.0250	0.0250	0.0250	1.000	3.000	3.500	3.500	3.500	3.000	1.000	0.0250	0.0250
34	0.0250	0.0250	0.0250	1.000	3.000	3.500	3.500	3.500	3.000	1.000	0.0250	0.0250
44	0.0250	0.0250	0.0250	1.000	3.000	3.500	3.500	3.500	3.000	1.000	0.0250	0.0250
54	0.0250	0.0250	0.0250	1.000	3.000	3.500	3.500	3.500	3.000	1.000	0.0250	0.0250
64	0.0250	0.0250	0.0250	1.000	3.000	3.500	3.500	3.500	3.000	1.000	0.0250	0.0250
74	0.0250	0.0250	0.0250	1.000	3.000	3.500	3.500	3.500	3.000	1.000	0.0250	0.0250
84	0.0250	0.0250	0.0250	1.000	3.000	3.500	3.500	3.500	3.000	1.000	0.0250	0.0250
94	0.0250	0.0250	0.0250	1.000	3.000	3.500	3.500	3.500	3.000	1.000	0.0250	0.0250
104	0.0250	0.0250	0.0250	1.000	3.000	3.500	3.500	3.500	3.000	1.000	0.0250	0.0250

END MON-INTERCEP

MON-UZSN  
 \*\*\* <PLS > Upper zone storage at start of each month  
 \*\*\* x - x JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

12	0.1000	1.000	2.000	4.001	0.401	2.801	2.801	2.501	0.400	4.000	2.000	1.00
22	0.1000	1.000	2.000	4.001	0.401	2.801	2.801	2.801	0.400	4.000	2.000	1.00
32	0.1000	1.000	2.000	4.001	0.401	2.801	2.801	2.801	0.400	4.000	2.000	1.00
42	0.1000	1.000	2.000	4.001	0.401	2.801	2.801	2.801	0.400	4.000	2.000	1.00
52	0.1000	1.000	2.000	4.001	0.401	2.801	2.801	2.801	0.400	4.000	2.000	1.00
62	0.1000	1.000	2.000	4.001	0.401	2.801	2.801	2.801	0.400	4.000	2.000	1.00

```

72      0.1000.1000.2000.4001.0401.2801.2801.2801.0400.4000.2000.100
82      0.1000.1000.2000.4001.0401.2801.2801.2801.0400.4000.2000.100
92      0.1000.1000.2000.4001.0401.2801.2801.2801.0400.4000.2000.100
102     0.1000.1000.2000.4001.0401.2801.2801.2801.0400.4000.2000.100
14      0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
24      0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
34      0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
44      0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
54      0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
64      0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
74      0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
84      0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
94      0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
104     0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
END MON-UZSN

```

MON-LZETPARM

```

*** <PLS > Lower zone evapotransp   parm at start of each month
*** x - x  JAN  FEB  MAR  APR  MAY  JUN  JUL  AUG  SEP  OCT  NOV  DEC
11      0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
21      0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
31      0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
41      0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
51      0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
61      0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
71      0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
81      0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
91      0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
101     0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
12      0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
22      0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
32      0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
42      0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
52      0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
62      0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
72      0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
82      0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
92      0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
102     0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
13      0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
23      0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
33      0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
43      0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
53      0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
63      0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
73      0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
83      0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
93      0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
103     0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
14      0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
24      0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
34      0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
44      0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
54      0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
64      0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
74      0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
84      0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
94      0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
104     0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
END MON-LZETPARM

```

PWAT-STATE1

#	# ***	CEPS	SURS	UZS	IFWS	LZS	AGWS	GWVS
11		0.020	0.020	0.550	0.000	7.470	0.319	0.000
21		0.020	0.020	0.550	0.000	7.470	0.319	0.000
31		0.020	0.020	0.550	0.000	7.470	0.319	0.000
41		0.020	0.020	0.550	0.000	7.470	0.319	0.000
51		0.020	0.020	0.550	0.000	7.470	0.319	0.000
61		0.020	0.020	0.550	0.000	7.470	0.319	0.000
71		0.020	0.020	0.550	0.000	7.470	0.319	0.000
81		0.020	0.020	0.550	0.000	7.470	0.319	0.000

91	0.020	0.020	0.550	0.000	7.470	0.319	0.000
101	0.020	0.020	0.550	0.000	7.470	0.319	0.000
12	0.020	0.020	0.340	0.001	6.450	0.224	0.000
22	0.020	0.020	0.340	0.001	6.450	0.224	0.000
32	0.020	0.020	0.340	0.001	6.450	0.224	0.000
42	0.020	0.020	0.340	0.001	6.450	0.224	0.000
52	0.020	0.020	0.340	0.001	6.450	0.224	0.000
62	0.020	0.020	0.340	0.001	6.450	0.224	0.000
72	0.020	0.020	0.340	0.001	6.450	0.224	0.000
82	0.020	0.020	0.340	0.001	6.450	0.224	0.000
92	0.020	0.020	0.340	0.001	6.450	0.224	0.000
102	0.020	0.020	0.340	0.001	6.450	0.224	0.000
13	0.020	0.020	0.940	0.004	8.630	0.411	0.000
23	0.020	0.020	0.940	0.004	8.630	0.411	0.000
33	0.020	0.020	0.940	0.004	8.630	0.411	0.000
43	0.020	0.020	0.940	0.004	8.630	0.411	0.000
53	0.020	0.020	0.940	0.004	8.630	0.411	0.000
63	0.020	0.020	0.940	0.004	8.630	0.411	0.000
73	0.020	0.020	0.940	0.004	8.630	0.411	0.000
83	0.020	0.020	0.940	0.004	8.630	0.411	0.000
93	0.020	0.020	0.940	0.004	8.630	0.411	0.000
103	0.020	0.020	0.940	0.004	8.630	0.411	0.000
14	0.020	0.020	0.420	0.001	6.560	0.261	0.000
24	0.020	0.020	0.420	0.001	6.560	0.261	0.000
34	0.020	0.020	0.420	0.001	6.560	0.261	0.000
44	0.020	0.020	0.420	0.001	6.560	0.261	0.000
54	0.020	0.020	0.420	0.001	6.560	0.261	0.000
64	0.020	0.020	0.420	0.001	6.560	0.261	0.000
74	0.020	0.020	0.420	0.001	6.560	0.261	0.000
84	0.020	0.020	0.420	0.001	6.560	0.261	0.000
94	0.020	0.020	0.420	0.001	6.560	0.261	0.000
104	0.020	0.020	0.420	0.001	6.560	0.261	0.000

END PWAT-STATE1

END PERLND

IMPLND

ACTIVITY  
# # ATMP SNOW IWAT SLD IWG IQAL \*\*\*  
11 1017 0 0 1 0 0 0  
END ACTIVITY

PRINT-INFO  
# # ATMP SNOW IWAT SLD IWG IQAL PIVL PYR \*\*\*  
11 101 6 6 5 6 6 6 1 9  
END PRINT-INFO

GEN-INFO  
# # NAME UCI IN OUT ENGL METR \*\*\*  
11 101IMPERV LAND 1 1 1 91 0  
END GEN-INFO

IWAT-PARM1  
# # CSNO RTOP VRS VNN RTLI \*\*\*  
11 101 0 1 0 0 0  
END IWAT-PARM1

IWAT-PARM2  
# # LSUR SLSUR NSUR RETSC \*\*\*  
11 200.0 0.2400 0.10 0.05  
21 200.0 0.2400 0.10 0.05  
31 200.0 0.2200 0.10 0.05  
41 300.0 0.1400 0.10 0.05  
51 250.0 0.1900 0.10 0.05  
61 200.0 0.2000 0.10 0.05  
71 250.0 0.1900 0.10 0.05  
81 250.0 0.1900 0.10 0.05  
91 200.0 0.2200 0.10 0.05  
101 250.0 0.1600 0.10 0.05  
END IWAT-PARM2



```

IWAT-PARM3
*** <ILS >      PETMAX      PETMIN
*** x - x      (deg F)      (deg F)
    11 101      40.0        35.0
END IWAT-PARM3

```

```

IWAT-STATE1
*** <ILS >      IWATER state variables (inches)
*** x - x      RETS        SURS
    11 101      0.03       0.01
END IWAT-STATE1

```

END IMPLND

```

RCHRES
ACTIVITY
  RCHRES Active Sections (1=Active; 0=Inactive)      ***
  # - # HYFG ADFG CNFG HTFG SDFG GQFG OXFG NUFG PKFG PHFG ***
    1 10 1 0 0 0 0 0 0 0 0
END ACTIVITY

```

```

PRINT-INFO
  RCHRES Print-flags      ***
  # - # HYDR ADCA CONS HEAT SED  GQL OXRX NUTR PLNK PHCB PIVL  PYR ***
    1 10 5 5 5 5 5 5 5 5 5 12
END PRINT-INFO

```

```

GEN-INFO
  RCHRES<-----Name----->Nexit  Unit Systems  Printer      ***
  # - #      User t-series  Engr Metr LKFG ***
                in out      ***
    1 Little Back Creek      1 1 1 1 91 0 0
    2 Upper Back Creek      1 1 1 1 91 0 0
    3 Poages Mill          1 1 1 1 91 0 0
    4 Cave Spring          1 1 1 1 91 0 0
    5 Blue Ridge Parkway    1 1 1 1 91 0 0
    6 Cattail Hollow       1 1 1 1 91 0 0
    7 State Rd #676        1 1 1 1 91 0 0
    8 Red Hill Church      1 1 1 1 91 0 0
    9 State Rd #667        1 1 1 1 91 0 0
   10 Dundee              1 1 1 1 91 0 0
END GEN-INFO

```

```

HYDR-PARM1
  RCHRES Flags for HYDR section      ***
  # - # VC A1 A2 A3  ODFVFG for each  ODGTFG for each *** FUNCT for each
        FG FG FG FG  possible exit  possible exit *** possible exit
                1 2 3 4 5                1 2 3 4 5 *** 1 2 3 4 5
    1 10 0 1 1 1  4 0 0 0 0  0 0 0 0 0  1 1 1 1 1
END HYDR-PARM1

```

```

HYDR-PARM2
  RCHRES      ***
  # - # FTABNO  LEN  DELTH  STCOR  KS  DB50 ***
    1 1 2.62 387.0 0.0 0.5 0.01
    2 2 2.99 561.0 0.0 0.5 0.01
    3 3 2.08 69.0 0.0 0.5 0.01
    4 4 2.35 85.0 0.0 0.5 0.01
    5 5 2.78 85.0 0.0 0.5 0.01
    6 6 1.94 36.0 0.0 0.5 0.01
    7 7 2.29 56.0 0.0 0.5 0.01
    8 8 1.96 26.0 0.0 0.5 0.01
    9 9 2.97 52.0 0.0 0.5 0.01
   10 10 3.05 56.0 0.0 0.5 0.01
END HYDR-PARM2

```

```

HYDR-INIT
  RCHRES Initial conditions for HYDR section      ***
  # - # VOL  Initial value of COLIND *** Initial value of OUTDGT
        (ac-ft) for each possible exit *** for each possible exit
                EX1 EX2 EX3 EX4 EX5 *** EX1 EX2 EX3 EX4 EX5

```

```

1          0.10
2          0.25
3          0.45
4          0.65
5          0.85
6          1.00
7          1.50
8          2.00
9          2.50
10         3.00

```

```

END HYDR-INIT
END RCHRES

```

```

COPY

```

```

TIMESERIES
Copy-opn***
*** x - x NPT NMN
100      0   7
101 110   0   2
END TIMESERIES
END COPY

```

```

PLTGEN

```

```

PLOTINFO
*** x - x FILE NPT NMN LABL PYR PIVL
100      92   0   10
200      93   0   10
300      94   0   10
END PLOTINFO

```

```

GEN-LABELS

```

```

*** x - x<-----title-----> <-----y-axis lab---->
100      Reach Outflows          Flow (cfs)
200      Land Segment Outflows   Runoff (in/hr)
300      Groundwater Recharge    Recharge (in/hr)
END GEN-LABELS

```

```

SCALING

```

```

*** x - x<--ymin--><--ymax--><--ivlin--><--thresh-->
100      0   100000   10
200      0   1.0000   10
300      0   1.0000   10
END SCALING

```

```

CURV-DATA

```

```

*** x - x <----label----> LIN INT COL TR
100 300 Outflow
END CURV-DATA
END PLTGEN

```

```

EXT SOURCES

```

```

<-Volume-> <Member> SsysSgap<--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name> x <Name> x tem strg<-factor->strg <Name> x x <Name> x x ***
WDM 210 EVAP ENGL PERLND 11 104 EXTNL PETINP 1 1
WDM 210 EVAP ENGL IMPLND 11 101 EXTNL PETINP 1 1

WDM 82 PRCP ENGL PERLND 11 104 EXTNL PREC 1 1
WDM 82 PRCP ENGL IMPLND 11 101 EXTNL PREC 1 1

WDM 541 FLOW ENGL PLTGEN 100 INPUT MEAN 1 1
WDM 542 FLOW ENGL PLTGEN 100 INPUT MEAN 2 1
WDM 543 FLOW ENGL PLTGEN 100 INPUT MEAN 3 1
WDM 544 FLOW ENGL PLTGEN 100 INPUT MEAN 4 1
WDM 545 FLOW ENGL PLTGEN 100 INPUT MEAN 5 1
WDM 546 FLOW ENGL PLTGEN 100 INPUT MEAN 6 1
WDM 547 FLOW ENGL PLTGEN 100 INPUT MEAN 7 1
WDM 548 FLOW ENGL PLTGEN 100 INPUT MEAN 8 1
WDM 549 FLOW ENGL PLTGEN 100 INPUT MEAN 9 1
WDM 550 FLOW ENGL PLTGEN 100 INPUT MEAN 10 1

WDM 531 SIMQ ENGL PLTGEN 200 INPUT MEAN 1 1
WDM 532 SIMQ ENGL PLTGEN 200 INPUT MEAN 2 1
WDM 533 SIMQ ENGL PLTGEN 200 INPUT MEAN 3 1

```

WDM	534	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	4	1
WDM	535	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	5	1
WDM	536	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	6	1
WDM	537	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	7	1
WDM	538	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	8	1
WDM	539	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	9	1
WDM	540	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	10	1
WDM	551	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	1	1
WDM	552	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	2	1
WDM	553	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	3	1
WDM	554	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	4	1
WDM	555	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	5	1
WDM	556	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	6	1
WDM	557	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	7	1
WDM	558	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	8	1
WDM	559	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	9	1
WDM	560	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	10	1

END EXT SOURCES

EXT TARGETS

<-Volume->	<-Grp>	<-Member->	<--Mult-->	Tran	<-Volume->	<Member>	Tsys	Aggr	Amd	***		
<Name>	x	<Name>	x	<-factor->	strg	<Name>	x	<Name>	qf	tem	strg	strg***
RCHRES	10	ROFLOW	ROVOL	1	13.35965E-4	WDM	320	SIMQ	1	ENGL		REPL
COPY	100	OUTPUT	MEAN	1	12.79971E-5	WDM	321	SURO	1	ENGL		REPL
COPY	100	OUTPUT	MEAN	2	12.79971E-5	WDM	322	IFWO	1	ENGL		REPL
COPY	100	OUTPUT	MEAN	3	12.79971E-5	WDM	323	AGWO	1	ENGL		REPL
COPY	100	OUTPUT	MEAN	4	12.79971E-5	WDM	325	PETX	1	ENGL	AGGR	REPL
COPY	100	OUTPUT	MEAN	5	12.79971E-5	WDM	326	SAET	1	ENGL	AGGR	REPL
COPY	100	OUTPUT	MEAN	6	12.79971E-5	WDM	327	UZSX	1	ENGL	AGGR	REPL
COPY	100	OUTPUT	MEAN	7	12.79971E-5	WDM	328	LZSX	1	ENGL	AGGR	REPL
RCHRES	1	ROFLOW	ROVOL	1	1	12.1	WDM	541	FLOW	1	ENGL	REPL
RCHRES	2	ROFLOW	ROVOL	1	1	12.1	WDM	542	FLOW	1	ENGL	REPL
RCHRES	3	ROFLOW	ROVOL	1	1	12.1	WDM	543	FLOW	1	ENGL	REPL
RCHRES	4	ROFLOW	ROVOL	1	1	12.1	WDM	544	FLOW	1	ENGL	REPL
RCHRES	5	ROFLOW	ROVOL	1	1	12.1	WDM	545	FLOW	1	ENGL	REPL
RCHRES	6	ROFLOW	ROVOL	1	1	12.1	WDM	546	FLOW	1	ENGL	REPL
RCHRES	7	ROFLOW	ROVOL	1	1	12.1	WDM	547	FLOW	1	ENGL	REPL
RCHRES	8	ROFLOW	ROVOL	1	1	12.1	WDM	548	FLOW	1	ENGL	REPL
RCHRES	9	ROFLOW	ROVOL	1	1	12.1	WDM	549	FLOW	1	ENGL	REPL
RCHRES	10	ROFLOW	ROVOL	1	1	12.1	WDM	550	FLOW	1	ENGL	REPL
COPY	101	OUTPUT	MEAN	1	13.96983E-4	WDM	531	SIMQ	1	ENGL		REPL
COPY	102	OUTPUT	MEAN	1	12.14041E-4	WDM	532	SIMQ	1	ENGL		REPL
COPY	103	OUTPUT	MEAN	1	11.74398E-4	WDM	533	SIMQ	1	ENGL		REPL
COPY	104	OUTPUT	MEAN	1	15.00000E-4	WDM	534	SIMQ	1	ENGL		REPL
COPY	105	OUTPUT	MEAN	1	12.26809E-4	WDM	535	SIMQ	1	ENGL		REPL
COPY	106	OUTPUT	MEAN	1	12.80820E-4	WDM	536	SIMQ	1	ENGL		REPL
COPY	107	OUTPUT	MEAN	1	13.25407E-4	WDM	537	SIMQ	1	ENGL		REPL
COPY	108	OUTPUT	MEAN	1	13.15560E-4	WDM	538	SIMQ	1	ENGL		REPL
COPY	109	OUTPUT	MEAN	1	13.39789E-4	WDM	539	SIMQ	1	ENGL		REPL
COPY	110	OUTPUT	MEAN	1	12.72554E-4	WDM	540	SIMQ	1	ENGL		REPL
COPY	101	OUTPUT	MEAN	2	13.96983E-4	WDM	551	SIMQ	1	ENGL		REPL
COPY	102	OUTPUT	MEAN	2	12.14041E-4	WDM	552	SIMQ	1	ENGL		REPL
COPY	103	OUTPUT	MEAN	2	11.74398E-4	WDM	553	SIMQ	1	ENGL		REPL
COPY	104	OUTPUT	MEAN	2	15.00000E-4	WDM	554	SIMQ	1	ENGL		REPL
COPY	105	OUTPUT	MEAN	2	12.26809E-4	WDM	555	SIMQ	1	ENGL		REPL
COPY	106	OUTPUT	MEAN	2	12.80820E-4	WDM	556	SIMQ	1	ENGL		REPL
COPY	107	OUTPUT	MEAN	2	13.25407E-4	WDM	557	SIMQ	1	ENGL		REPL
COPY	108	OUTPUT	MEAN	2	13.15560E-4	WDM	558	SIMQ	1	ENGL		REPL
COPY	109	OUTPUT	MEAN	2	13.39789E-4	WDM	559	SIMQ	1	ENGL		REPL
COPY	110	OUTPUT	MEAN	2	12.72554E-4	WDM	560	SIMQ	1	ENGL		REPL

END EXT TARGETS

SCHEMATIC

<-Volume->	<--Area-->	<-Volume->	<ML#>	***
------------	------------	------------	-------	-----

<Name>	x	<-factor->	<Name>	x	***
PERLND	11	2109.	RCHRES	1	1
PERLND	12	137.	RCHRES	1	1
PERLND	13	19.	RCHRES	1	1
PERLND	14	250.	RCHRES	1	1
IMPLND	11	4.	RCHRES	1	3
PERLND	21	3535.	RCHRES	2	1
PERLND	22	432.	RCHRES	2	1
PERLND	23	37.	RCHRES	2	1
PERLND	24	661.	RCHRES	2	1
IMPLND	21	8.	RCHRES	2	3
PERLND	31	4432.	RCHRES	3	1
PERLND	32	500.	RCHRES	3	1
PERLND	33	72.	RCHRES	3	1
PERLND	34	715.	RCHRES	3	1
IMPLND	31	15.	RCHRES	3	3
PERLND	41	1286.	RCHRES	4	1
PERLND	42	226.	RCHRES	4	1
PERLND	43	85.	RCHRES	4	1
PERLND	44	386.	RCHRES	4	1
IMPLND	41	17.	RCHRES	4	3
PERLND	51	2717.	RCHRES	5	1
PERLND	52	247.	RCHRES	5	1
PERLND	53	591.	RCHRES	5	1
PERLND	54	733.	RCHRES	5	1
IMPLND	51	121.	RCHRES	5	3
PERLND	61	2781.	RCHRES	6	1
PERLND	62	193.	RCHRES	6	1
PERLND	63	71.	RCHRES	6	1
PERLND	64	501.	RCHRES	6	1
IMPLND	61	14.	RCHRES	6	3
PERLND	71	2320.	RCHRES	7	1
PERLND	72	148.	RCHRES	7	1
PERLND	73	65.	RCHRES	7	1
PERLND	74	499.	RCHRES	7	1
IMPLND	71	13.	RCHRES	7	3
PERLND	81	2120.	RCHRES	8	1
PERLND	82	191.	RCHRES	8	1
PERLND	83	328.	RCHRES	8	1
PERLND	84	459.	RCHRES	8	1
IMPLND	81	67.	RCHRES	8	3
PERLND	91	2201.	RCHRES	9	1
PERLND	92	251.	RCHRES	9	1
PERLND	93	103.	RCHRES	9	1
PERLND	94	366.	RCHRES	9	1
IMPLND	91	21.	RCHRES	9	3
PERLND	101	1576.	RCHRES	10	1
PERLND	102	532.	RCHRES	10	1
PERLND	103	272.	RCHRES	10	1
PERLND	104	933.	RCHRES	10	1
IMPLND	101	56.	RCHRES	10	3
RCHRES	1		RCHRES	3	5
RCHRES	2		RCHRES	3	5
RCHRES	3		RCHRES	4	5
RCHRES	4		RCHRES	5	5
RCHRES	5		RCHRES	6	5
RCHRES	6		RCHRES	7	5
RCHRES	7		RCHRES	8	5
RCHRES	8		RCHRES	9	5
RCHRES	9		RCHRES	10	5

PERLND	11	2109.	COPY	100	90
PERLND	12	137.	COPY	100	90
PERLND	13	19.	COPY	100	90
PERLND	14	250.	COPY	100	90
IMPLND	11	4.	COPY	100	91
PERLND	11	2109.	COPY	101	92
PERLND	12	137.	COPY	101	92
PERLND	13	19.	COPY	101	92
PERLND	14	250.	COPY	101	92
IMPLND	11	4.	COPY	101	93
PERLND	21	3535.	COPY	100	90
PERLND	22	432.	COPY	100	90
PERLND	23	37.	COPY	100	90
PERLND	24	661.	COPY	100	90
IMPLND	21	8.	COPY	100	91
PERLND	21	3535.	COPY	102	92
PERLND	22	432.	COPY	102	92
PERLND	23	37.	COPY	102	92
PERLND	24	661.	COPY	102	92
IMPLND	21	8.	COPY	102	93
PERLND	31	4432.	COPY	100	90
PERLND	32	500.	COPY	100	90
PERLND	33	72.	COPY	100	90
PERLND	34	715.	COPY	100	90
IMPLND	31	15.	COPY	100	91
PERLND	31	4432.	COPY	103	92
PERLND	32	500.	COPY	103	92
PERLND	33	72.	COPY	103	92
PERLND	34	715.	COPY	103	92
IMPLND	31	15.	COPY	103	93
PERLND	41	1286.	COPY	100	90
PERLND	42	226.	COPY	100	90
PERLND	43	85.	COPY	100	90
PERLND	44	386.	COPY	100	90
IMPLND	41	17.	COPY	100	91
PERLND	41	1286.	COPY	104	92
PERLND	42	226.	COPY	104	92
PERLND	43	85.	COPY	104	92
PERLND	44	386.	COPY	104	92
IMPLND	41	17.	COPY	104	93
PERLND	51	2717.	COPY	100	90
PERLND	52	247.	COPY	100	90
PERLND	53	591.	COPY	100	90
PERLND	54	733.	COPY	100	90
IMPLND	51	121.	COPY	100	91
PERLND	51	2717.	COPY	105	92
PERLND	52	247.	COPY	105	92
PERLND	53	591.	COPY	105	92
PERLND	54	733.	COPY	105	92
IMPLND	51	121.	COPY	105	93
PERLND	61	2781.	COPY	100	90
PERLND	62	193.	COPY	100	90
PERLND	63	71.	COPY	100	90
PERLND	64	501.	COPY	100	90
IMPLND	61	14.	COPY	100	91
PERLND	61	2781.	COPY	106	92
PERLND	62	193.	COPY	106	92
PERLND	63	71.	COPY	106	92
PERLND	64	501.	COPY	106	92
IMPLND	61	14.	COPY	106	93
PERLND	71	2320.	COPY	100	90
PERLND	72	148.	COPY	100	90
PERLND	73	65.	COPY	100	90
PERLND	74	499.	COPY	100	90
IMPLND	71	13.	COPY	100	91

PERLND	71	2320.	COPY	107	92
PERLND	72	148.	COPY	107	92
PERLND	73	65.	COPY	107	92
PERLND	74	499.	COPY	107	92
IMPLND	71	13.	COPY	107	93
PERLND	81	2120.	COPY	100	90
PERLND	82	191.	COPY	100	90
PERLND	83	328.	COPY	100	90
PERLND	84	459.	COPY	100	90
IMPLND	81	67.	COPY	100	91
PERLND	81	2120.	COPY	108	92
PERLND	82	191.	COPY	108	92
PERLND	83	328.	COPY	108	92
PERLND	84	459.	COPY	108	92
IMPLND	81	67.	COPY	108	93
PERLND	91	2201.	COPY	100	90
PERLND	92	251.	COPY	100	90
PERLND	93	103.	COPY	100	90
PERLND	94	366.	COPY	100	90
IMPLND	91	21.	COPY	100	91
PERLND	91	2201.	COPY	109	92
PERLND	92	251.	COPY	109	92
PERLND	93	103.	COPY	109	92
PERLND	94	366.	COPY	109	92
IMPLND	91	21.	COPY	109	93
PERLND	101	1576.	COPY	100	90
PERLND	102	532.	COPY	100	90
PERLND	103	272.	COPY	100	90
PERLND	104	933.	COPY	100	90
IMPLND	101	56.	COPY	100	91
PERLND	101	1576.	COPY	110	92
PERLND	102	532.	COPY	110	92
PERLND	103	272.	COPY	110	92
PERLND	104	933.	COPY	110	92
IMPLND	101	56.	COPY	110	93

END SCHEMATIC

MASS-LINK

```

MASS-LINK      1
<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name>      <Name> x x<-factor->strg <Name>      <Name> x x ***
PERLND      PWATER PERO      0.0533333      RCHRES      INFLOW IVOL
END MASS-LINK      1

```

```

MASS-LINK      3
<Src>      <-Grp> <-Member-><--Mult-->      <Targ>      <-Grp> <-Member-> ***
<Name>      <Name> <Name> # #<-factor->      <Name>      <Name> <Name> # # ***
IMPLND      IWATER SURO      0.0533333      RCHRES      INFLOW IVOL
END MASS-LINK      3

```

```

MASS-LINK      5
<Src>      <-Grp> <-Member-><--Mult-->      <Targ>      <-Grp> <-Member-> ***
<Name>      <Name> <Name> # #<-factor->      <Name>      <Name> <Name> # # ***
RCHRES      ROFLOW      RCHRES      INFLOW
END MASS-LINK      5

```

```

MASS-LINK      90
<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name>      <Name> x x<-factor->strg <Name>      <Name> x x ***
PERLND      PWATER SURO      COPY      INPUT MEAN 1
PERLND      PWATER IFWO      COPY      INPUT MEAN 2
PERLND      PWATER AGWO      COPY      INPUT MEAN 3
PERLND      PWATER PET       COPY      INPUT MEAN 4
PERLND      PWATER TAET      COPY      INPUT MEAN 5
PERLND      PWATER UZS       COPY      INPUT MEAN 6
PERLND      PWATER LZS       COPY      INPUT MEAN 7
END MASS-LINK      90

```

```

MASS-LINK          91
<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name>          <Name> x x<-factor->strg <Name>          <Name> x x ***
IMPLND          IWATER SURO          COPY          INPUT MEAN 1
IMPLND          IWATER PET          COPY          INPUT MEAN 4
IMPLND          IWATER IMPEV        COPY          INPUT MEAN 5
END MASS-LINK     91

```

```

MASS-LINK          92
<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name>          <Name> x x<-factor->strg <Name>          <Name> x x ***
PERLND          PWATER PERO          COPY          INPUT MEAN 1
PERLND          PWATER AGWI         COPY          INPUT MEAN 2
END MASS-LINK     92

```

```

MASS-LINK          93
<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name>          <Name> x x<-factor->strg <Name>          <Name> x x ***
IMPLND          IWATER SURO          COPY          INPUT MEAN 1
END MASS-LINK     93
END MASS-LINK

```

FTABLES

```

FTABLE          1
ROWS COLS ***
15          4
DEPTH          AREA          VOLUME          DISCH          ***
(F)          (ACRES)          (AC-FT)          (CFS)          ***
0.00          1.90          0.00          0.00
0.20          1.97          0.39          2.66
0.40          2.03          0.79          8.43
0.60          2.09          1.20          16.54
0.80          2.16          1.62          26.70
1.00          2.22          2.06          38.73
1.20          2.28          2.51          52.50
1.40          2.35          2.97          67.95
1.60          2.41          3.45          85.02
1.80          2.47          3.94          103.65
2.00          2.54          4.44          123.83
4.00          3.17          10.14          408.06
8.00          4.44          25.36          1443.51
12.00         5.71          45.65          3184.35
18.00         7.61          85.59          7362.11
END FTABLE      1

```

```

FTABLE          2
ROWS COLS ***
15          4
DEPTH          AREA          VOLUME          DISCH          ***
(F)          (ACRES)          (AC-FT)          (CFS)          ***
0.00          2.53          0.00          0.00
0.20          2.61          0.51          3.43
0.40          2.68          1.04          10.87
0.60          2.75          1.59          21.33
0.80          2.82          2.14          34.41
1.00          2.90          2.72          49.89
1.20          2.97          3.30          67.61
1.40          3.04          3.90          87.46
1.60          3.11          4.52          109.35
1.80          3.19          5.15          133.23
2.00          3.26          5.79          159.04
4.00          3.98          13.03          519.10
8.00          5.43          31.86          1799.90
12.00         6.88          56.48          3905.86
21.00         10.35         134.42         12263.77
END FTABLE      2

```

```

FTABLE          3
ROWS COLS ***
16          4
DEPTH          AREA          VOLUME          DISCH          ***
(F)          (ACRES)          (AC-FT)          (CFS)          ***

```

0.00	4.29	0.00	0.00
0.20	4.42	0.87	3.68
0.40	4.55	1.77	11.69
0.60	4.67	2.69	23.02
0.80	4.80	3.64	37.28
1.00	4.92	4.61	54.22
1.30	5.11	6.11	84.35
1.70	5.37	8.21	132.84
2.00	5.56	9.85	175.20
2.30	5.75	11.54	222.55
2.70	6.00	13.89	293.34
3.00	6.19	15.72	352.14
6.00	8.08	37.12	1211.65
9.00	9.98	64.21	2596.60
12.00	11.87	96.98	4566.48
36.00	27.02	563.67	48712.37

END FTABLE 3  
FTABLE 4  
ROWS COLS \*\*\*  
16 4

DEPTH (FT)	AREA (ACRES)	VOLUME (AC-FT)	DISCH (CFS)	***
0.00	6.12	0.00	0.00	***
0.20	6.29	1.24	4.15	
0.40	6.46	2.52	13.20	
0.60	6.63	3.83	25.99	
0.80	6.80	5.17	42.06	
1.00	6.98	6.55	61.14	
1.30	7.23	8.68	95.03	
1.70	7.57	11.64	149.46	
2.00	7.83	13.95	196.90	
2.30	8.09	16.34	249.83	
2.70	8.43	19.64	328.77	
3.00	8.68	22.21	394.17	
6.00	11.25	52.10	1338.90	
9.00	13.81	89.68	2535.59	
12.00	16.37	134.95	4936.63	
36.00	36.87	773.82	50457.43	

END FTABLE 4  
FTABLE 5  
ROWS COLS \*\*\*  
16 4

DEPTH (FT)	AREA (ACRES)	VOLUME (AC-FT)	DISCH (CFS)	***
0.00	8.94	0.00	0.00	***
0.20	9.15	1.81	4.64	
0.40	9.35	3.66	14.75	
0.60	9.55	5.55	29.03	
0.80	9.75	7.48	46.94	
1.00	9.96	9.45	68.19	
1.30	10.26	12.48	105.86	
1.70	10.66	16.67	166.19	
2.00	10.97	19.91	218.59	
2.30	11.27	23.25	276.88	
2.70	11.68	27.84	363.51	
3.00	11.98	31.39	435.02	
6.00	15.02	71.89	1448.46	
9.00	18.06	121.50	3008.60	
12.00	21.09	180.22	5147.54	
58.00	67.67	2221.75	142706.41	

END FTABLE 5  
FTABLE 6  
ROWS COLS \*\*\*  
17 4

DEPTH (FT)	AREA (ACRES)	VOLUME (AC-FT)	DISCH (CFS)	***
0.00	7.64	0.00	0.00	***
0.20	7.78	1.54	5.06	
0.40	7.92	3.11	16.08	
0.60	8.06	4.71	31.63	
0.80	8.20	6.34	51.14	



1.00	8.34	7.99	74.27	
1.30	8.56	10.53	115.24	
1.70	8.84	14.01	180.76	
2.00	9.05	16.69	237.60	
2.30	9.26	19.44	300.75	
2.70	9.54	23.20	394.44	
3.00	9.76	26.09	471.65	
6.00	11.87	58.53	1556.19	
9.00	13.99	97.32	3202.02	
12.00	16.10	142.45	5430.19	
15.00	18.22	193.93	8276.35	
58.00	48.54	1629.24	141041.23	

END FTABLE 6  
 FTABLE 7  
 ROWS COLS \*\*\*  
 16 4

DEPTH	AREA	VOLUME	DISCH	***
(FT)	(ACRES)	(AC-FT)	(CFS)	***
0.00	10.53	0.00	0.00	
0.20	10.73	2.13	8.35	
0.40	10.92	4.29	26.56	
0.60	11.11	6.49	52.31	
0.80	11.31	8.74	84.68	
1.00	11.50	11.02	123.11	
1.30	11.79	14.51	191.34	
1.70	12.18	19.31	300.81	
2.00	12.47	23.00	396.05	
2.30	12.76	26.79	502.14	
2.70	13.15	31.97	660.01	
3.00	13.44	35.96	790.47	
6.00	16.35	80.66	2647.03	
9.00	19.26	134.08	5515.92	
12.00	22.17	196.24	9455.89	
24.00	33.81	532.16	37571.06	

END FTABLE 7  
 FTABLE 8  
 ROWS COLS \*\*\*  
 17 4

DEPTH	AREA	VOLUME	DISCH	***
(FT)	(ACRES)	(AC-FT)	(CFS)	***
0.00	10.34	0.00	0.00	
0.20	10.53	2.09	8.49	
0.40	10.72	4.21	27.01	
0.60	10.91	6.37	53.19	
0.80	11.10	8.57	86.08	
1.00	11.29	10.81	125.11	
1.30	11.57	14.24	194.36	
1.70	11.95	18.95	305.34	
2.00	12.24	22.57	401.78	
2.30	12.52	26.29	509.10	
2.70	12.90	31.37	668.59	
3.00	13.19	35.29	800.22	
6.00	16.04	79.13	2660.86	
9.00	18.89	131.53	5505.65	
12.00	21.74	192.48	9376.55	
15.00	24.59	261.98	14339.04	
25.00	34.10	555.45	39708.38	

END FTABLE 8  
 FTABLE 9  
 ROWS COLS \*\*\*  
 18 4

DEPTH	AREA	VOLUME	DISCH	***
(FT)	(ACRES)	(AC-FT)	(CFS)	***
0.00	17.26	0.00	0.00	
0.20	17.55	3.48	9.93	
0.40	17.83	7.02	31.59	
0.60	18.12	10.61	62.19	
0.80	18.41	14.27	100.62	
1.00	18.70	17.98	146.22	
1.30	19.13	23.65	227.07	
1.70	19.70	31.42	356.56	

2.00	20.14	37.39	469.02
2.30	20.57	43.50	594.06
2.70	21.14	51.84	779.75
3.00	21.57	58.25	932.87
6.00	25.89	129.44	3087.80
9.00	30.20	213.58	6359.15
12.00	34.52	310.67	10782.20
15.00	38.83	420.69	16421.67
25.00	53.22	880.94	44979.76
50.00	89.17	2660.79	197754.51

END FTABLE 9  
 FTABLE 10  
 ROWS COLS \*\*\*  
 18 4

DEPTH (FT)	AREA (ACRES)	VOLUME (AC-FT)	DISCH (CFS)	***
0.00	19.58	0.00	0.00	***
0.20	19.88	3.95	11.22	
0.40	20.18	7.95	35.67	
0.60	20.47	12.02	70.22	
0.80	20.77	16.14	113.60	
1.00	21.06	20.32	165.03	
1.30	21.51	26.71	256.20	
1.70	22.10	35.43	402.07	
2.00	22.54	42.12	528.65	
2.30	22.98	48.95	669.29	
2.70	23.57	58.26	877.93	
3.00	24.02	65.40	1049.81	
6.00	28.45	144.11	3455.64	
9.00	32.89	236.12	7075.47	
12.00	37.32	341.43	11929.84	
15.00	41.75	460.04	18075.19	
25.00	56.53	951.48	48802.16	
50.00	93.49	2826.74	209904.75	

END FTABLE 10  
 END FTABLES  
 END RUN

# High Density Full Build Out without Restrictions

RUN

GLOBAL

```
Back Creek above Dundee, VA
START      1956 10  1  0  0  END      1999  9 30  0  0
RUN INTERP OUTPUT LEVEL  3  2
RESUME     0 RUN      1              UNIT SYSTEM  1
END GLOBAL
```

FILES

```
<FILE> <UN#>***<----FILE NAME----->
WDM      16  backcr.wdm
MESSU    24  scenario.ech
          91  scenario.out
          92  backcr1.plt
          93  backcr2.plt
          94  backcr3.plt
END FILES
```

OPN SEQUENCE

```
INGRP      INDELT 01:00
PERLND     11
PERLND     12
PERLND     13
PERLND     14
IMPLND     11
RCHRES      1
PERLND     21
PERLND     22
PERLND     23
PERLND     24
IMPLND     21
RCHRES      2
PERLND     31
PERLND     32
PERLND     33
PERLND     34
IMPLND     31
RCHRES      3
PERLND     41
PERLND     42
PERLND     43
PERLND     44
IMPLND     41
RCHRES      4
PERLND     51
PERLND     52
PERLND     53
PERLND     54
IMPLND     51
RCHRES      5
PERLND     61
PERLND     62
PERLND     63
PERLND     64
IMPLND     61
RCHRES      6
PERLND     71
PERLND     72
PERLND     73
PERLND     74
IMPLND     71
RCHRES      7
PERLND     81
PERLND     82
PERLND     83
```

```

PERLND      84
IMPLND      81
RCHRES       8
PERLND      91
PERLND      92
PERLND      93
PERLND      94
IMPLND      91
RCHRES       9
PERLND     101
PERLND     102
PERLND     103
PERLND     104
IMPLND     101
RCHRES     10
COPY       100
COPY       101
COPY       102
COPY       103
COPY       104
COPY       105
COPY       106
COPY       107
COPY       108
COPY       109
COPY       110
PLTGEN     100
PLTGEN     200
PLTGEN     300
END INGRP
END OPN SEQUENCE

```

```

PERLND
ACTIVITY
# # ATMP SNOW PWAT SED PST PWG PQAL MSTL PEST NITR PHOS TRAC ***
11 104 0 0 1 0 0 0 0 0 0 0 0 0 0
END ACTIVITY

```

```

PRINT-INFO
# # ATMP SNOW PWAT SED PST PWG PQAL MSTL PEST NITR PHOS TRAC PIVL***PY
11 104 6 6 5 6 6 6 6 6 6 6 6 6 1 9
END PRINT-INFO

```

```

GEN-INFO
# # NAME NBLKS UCI IN OUT ENGL METR ***
11 FOREST 1 1 1 1 91 0
21 FOREST 1 1 1 1 91 0
31 FOREST 1 1 1 1 91 0
41 FOREST 1 1 1 1 91 0
51 FOREST 1 1 1 1 91 0
61 FOREST 1 1 1 1 91 0
71 FOREST 1 1 1 1 91 0
81 FOREST 1 1 1 1 91 0
91 FOREST 1 1 1 1 91 0
101 FOREST 1 1 1 1 91 0
12 HERBACEOUS/AG 1 1 1 1 91 0
22 HERBACEOUS/AG 1 1 1 1 91 0
32 HERBACEOUS/AG 1 1 1 1 91 0
42 HERBACEOUS/AG 1 1 1 1 91 0
52 HERBACEOUS/AG 1 1 1 1 91 0
62 HERBACEOUS/AG 1 1 1 1 91 0
72 HERBACEOUS/AG 1 1 1 1 91 0
82 HERBACEOUS/AG 1 1 1 1 91 0
92 HERBACEOUS/AG 1 1 1 1 91 0
102 HERBACEOUS/AG 1 1 1 1 91 0
13 DISTURBED 1 1 1 1 91 0
23 DISTURBED 1 1 1 1 91 0
33 DISTURBED 1 1 1 1 91 0
43 DISTURBED 1 1 1 1 91 0
53 DISTURBED 1 1 1 1 91 0
63 DISTURBED 1 1 1 1 91 0

```

73	DISTURBED	1	1	1	1	91	0
83	DISTURBED	1	1	1	1	91	0
93	DISTURBED	1	1	1	1	91	0
103	DISTURBED	1	1	1	1	91	0
14	MIXED FOREST/AG	1	1	1	1	91	0
24	MIXED FOREST/AG	1	1	1	1	91	0
34	MIXED FOREST/AG	1	1	1	1	91	0
44	MIXED FOREST/AG	1	1	1	1	91	0
54	MIXED FOREST/AG	1	1	1	1	91	0
64	MIXED FOREST/AG	1	1	1	1	91	0
74	MIXED FOREST/AG	1	1	1	1	91	0
84	MIXED FOREST/AG	1	1	1	1	91	0
94	MIXED FOREST/AG	1	1	1	1	91	0
104	MIXED FOREST/AG	1	1	1	1	91	0

END GEN-INFO

PWAT-PARM1

#	#	CSNO	RTOP	UZFG	VCS	VUZ	NVV	VIFW	VIRC	VLE	***
11		0	1	1	1	0	0	0	0	1	0
12		0	1	1	1	1	0	0	0	1	0
13		0	1	1	1	0	0	0	0	1	0
14		0	1	1	1	1	0	0	0	1	0
21		0	1	1	1	0	0	0	0	1	0
22		0	1	1	1	1	0	0	0	1	0
23		0	1	1	1	0	0	0	0	1	0
24		0	1	1	1	1	0	0	0	1	0
31		0	1	1	1	0	0	0	0	1	0
32		0	1	1	1	1	0	0	0	1	0
33		0	1	1	1	0	0	0	0	1	0
34		0	1	1	1	1	0	0	0	1	0
41		0	1	1	1	0	0	0	0	1	0
42		0	1	1	1	1	0	0	0	1	0
43		0	1	1	1	0	0	0	0	1	0
44		0	1	1	1	1	0	0	0	1	0
51		0	1	1	1	0	0	0	0	1	0
52		0	1	1	1	1	0	0	0	1	0
53		0	1	1	1	0	0	0	0	1	0
54		0	1	1	1	1	0	0	0	1	0
61		0	1	1	1	0	0	0	0	1	0
62		0	1	1	1	1	0	0	0	1	0
63		0	1	1	1	0	0	0	0	1	0
64		0	1	1	1	1	0	0	0	1	0
71		0	1	1	1	0	0	0	0	1	0
72		0	1	1	1	1	0	0	0	1	0
73		0	1	1	1	0	0	0	0	1	0
74		0	1	1	1	1	0	0	0	1	0
81		0	1	1	1	0	0	0	0	1	0
82		0	1	1	1	1	0	0	0	1	0
83		0	1	1	1	0	0	0	0	1	0
84		0	1	1	1	1	0	0	0	1	0
91		0	1	1	1	0	0	0	0	1	0
92		0	1	1	1	1	0	0	0	1	0
93		0	1	1	1	0	0	0	0	1	0
94		0	1	1	1	1	0	0	0	1	0
101		0	1	1	1	0	0	0	0	1	0
102		0	1	1	1	1	0	0	0	1	0
103		0	1	1	1	0	0	0	0	1	0
104		0	1	1	1	1	0	0	0	1	0

END PWAT-PARM1

PWAT-PARM2

#	#	***FOREST	LZSN	INFILT	LSUR	SLSUR	KVARY	AGWR
11		0.000	9.5	0.105	200.	0.24000	0.000	.960
21		0.000	9.5	0.105	200.	0.24000	0.000	.960
31		0.000	9.5	0.105	200.	0.22000	0.000	.960
41		0.000	9.5	0.105	300.	0.14000	0.000	.960
51		0.000	9.5	0.105	250.	0.19000	0.000	.960
61		0.000	9.5	0.105	200.	0.20000	0.000	.960
71		0.000	9.5	0.105	250.	0.19000	0.000	.960
81		0.000	9.5	0.105	250.	0.19000	0.000	.960
91		0.000	9.5	0.105	200.	0.22000	0.000	.960

101	0.000	9.5	0.105	250.	0.16000	0.000	.960
12	0.000	9.5	0.086	200.	0.24000	0.000	.960
22	0.000	9.5	0.086	200.	0.24000	0.000	.960
32	0.000	9.5	0.086	200.	0.22000	0.000	.960
42	0.000	9.5	0.086	300.	0.14000	0.000	.960
52	0.000	9.5	0.086	250.	0.19000	0.000	.960
62	0.000	9.5	0.086	200.	0.20000	0.000	.960
72	0.000	9.5	0.086	250.	0.19000	0.000	.960
82	0.000	9.5	0.086	250.	0.19000	0.000	.960
92	0.000	9.5	0.086	200.	0.22000	0.000	.960
102	0.000	9.5	0.086	250.	0.16000	0.000	.960
13	0.000	9.5	0.067	200.	0.24000	0.000	.960
23	0.000	9.5	0.067	200.	0.24000	0.000	.960
33	0.000	9.5	0.067	200.	0.22000	0.000	.960
43	0.000	9.5	0.067	300.	0.14000	0.000	.960
53	0.000	9.5	0.067	250.	0.19000	0.000	.960
63	0.000	9.5	0.067	200.	0.20000	0.000	.960
73	0.000	9.5	0.067	250.	0.19000	0.000	.960
83	0.000	9.5	0.067	250.	0.19000	0.000	.960
93	0.000	9.5	0.067	200.	0.22000	0.000	.960
103	0.000	9.5	0.067	250.	0.16000	0.000	.960
14	0.000	9.5	0.096	200.	0.24000	0.000	.960
24	0.000	9.5	0.096	200.	0.24000	0.000	.960
34	0.000	9.5	0.096	200.	0.22000	0.000	.960
44	0.000	9.5	0.096	300.	0.14000	0.000	.960
54	0.000	9.5	0.096	250.	0.19000	0.000	.960
64	0.000	9.5	0.096	200.	0.20000	0.000	.960
74	0.000	9.5	0.096	250.	0.19000	0.000	.960
84	0.000	9.5	0.096	250.	0.19000	0.000	.960
94	0.000	9.5	0.096	200.	0.22000	0.000	.960
104	0.000	9.5	0.096	250.	0.16000	0.000	.960

END PWAT-PARM2

PWAT-PARM3

***<PLS>	PETMAX	PETMIN	INFEXP	INFILD	DEEPFR	BASETP	AGWETP
***x - x	(deg F)	(deg F)					
11 104	40.0	35.0	2.0	2.0	0.210	0.000	0.000

END PWAT-PARM3

PWAT-PARM4

#	#	CEPSC	UZSN	NSUR	INTFW	IRC	LZETP	***
11		0.200	1.30	0.40	3.7	0.65	0.90	
21		0.200	1.30	0.40	3.7	0.65	0.90	
31		0.200	1.30	0.40	3.7	0.65	0.90	
41		0.200	1.30	0.40	3.7	0.65	0.90	
51		0.200	1.30	0.40	3.7	0.65	0.90	
61		0.200	1.30	0.40	3.7	0.65	0.90	
71		0.200	1.30	0.40	3.7	0.65	0.90	
81		0.200	1.30	0.40	3.7	0.65	0.90	
91		0.200	1.30	0.40	3.7	0.65	0.90	
101		0.200	1.30	0.40	3.7	0.65	0.90	
12		0.200	1.00	0.20	2.8	0.60	0.90	
22		0.200	1.00	0.20	2.8	0.60	0.90	
32		0.200	1.00	0.20	2.8	0.60	0.90	
42		0.200	1.00	0.20	2.8	0.60	0.90	
52		0.200	1.00	0.20	2.8	0.60	0.90	
62		0.200	1.00	0.20	2.8	0.60	0.90	
72		0.200	1.00	0.20	2.8	0.60	0.90	
82		0.200	1.00	0.20	2.8	0.60	0.90	
92		0.200	1.00	0.20	2.8	0.60	0.90	
102		0.200	1.00	0.20	2.8	0.60	0.90	
13		0.200	0.92	0.15	2.8	0.60	0.90	
23		0.200	0.92	0.15	2.8	0.60	0.90	
33		0.200	0.92	0.15	2.8	0.60	0.90	
43		0.200	0.92	0.15	2.8	0.60	0.90	
53		0.200	0.92	0.15	2.8	0.60	0.90	
63		0.200	0.92	0.15	2.8	0.60	0.90	
73		0.200	0.92	0.15	2.8	0.60	0.90	
83		0.200	0.92	0.15	2.8	0.60	0.90	
93		0.200	0.92	0.15	2.8	0.60	0.90	
103		0.200	0.92	0.15	2.8	0.60	0.90	

14	0.200	1.00	0.30	3.3	0.63	0.90
24	0.200	1.00	0.30	3.3	0.63	0.90
34	0.200	1.00	0.30	3.3	0.63	0.90
44	0.200	1.00	0.30	3.3	0.63	0.90
54	0.200	1.00	0.30	3.3	0.63	0.90
64	0.200	1.00	0.30	3.3	0.63	0.90
74	0.200	1.00	0.30	3.3	0.63	0.90
84	0.200	1.00	0.30	3.3	0.63	0.90
94	0.200	1.00	0.30	3.3	0.63	0.90
104	0.200	1.00	0.30	3.3	0.63	0.90

END PWAT-PARM4

PWAT-PARM5  
 \*\*\* <PLS > FZG FZGL  
 \*\*\* x - x  
 11 104 1.0 0.1  
 END PWAT-PARM5

MON-INTERCEP  
 \*\*\* <PLS > Interception storage capacity at start of each month (in)  
 \*\*\* x - x JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

11	0.0250	.0250	.0250	.1000	.3500	.4000	.4000	.4000	.3500	.1000	.0250	.0250
21	0.0250	.0250	.0250	.1000	.3500	.4000	.4000	.4000	.3500	.1000	.0250	.0250
31	0.0250	.0250	.0250	.1000	.3500	.4000	.4000	.4000	.3500	.1000	.0250	.0250
41	0.0250	.0250	.0250	.1000	.3500	.4000	.4000	.4000	.3500	.1000	.0250	.0250
51	0.0250	.0250	.0250	.1000	.3500	.4000	.4000	.4000	.3500	.1000	.0250	.0250
61	0.0250	.0250	.0250	.1000	.3500	.4000	.4000	.4000	.3500	.1000	.0250	.0250
71	0.0250	.0250	.0250	.1000	.3500	.4000	.4000	.4000	.3500	.1000	.0250	.0250
81	0.0250	.0250	.0250	.1000	.3500	.4000	.4000	.4000	.3500	.1000	.0250	.0250
91	0.0250	.0250	.0250	.1000	.3500	.4000	.4000	.4000	.3500	.1000	.0250	.0250
101	0.0250	.0250	.0250	.1000	.3500	.4000	.4000	.4000	.3500	.1000	.0250	.0250
12	0.0250	.0250	.0250	.1000	.2500	.3000	.3000	.3000	.2500	.1000	.0250	.0250
22	0.0250	.0250	.0250	.1000	.2500	.3000	.3000	.3000	.2500	.1000	.0250	.0250
32	0.0250	.0250	.0250	.1000	.2500	.3000	.3000	.3000	.2500	.1000	.0250	.0250
42	0.0250	.0250	.0250	.1000	.2500	.3000	.3000	.3000	.2500	.1000	.0250	.0250
52	0.0250	.0250	.0250	.1000	.2500	.3000	.3000	.3000	.2500	.1000	.0250	.0250
62	0.0250	.0250	.0250	.1000	.2500	.3000	.3000	.3000	.2500	.1000	.0250	.0250
72	0.0250	.0250	.0250	.1000	.2500	.3000	.3000	.3000	.2500	.1000	.0250	.0250
82	0.0250	.0250	.0250	.1000	.2500	.3000	.3000	.3000	.2500	.1000	.0250	.0250
92	0.0250	.0250	.0250	.1000	.2500	.3000	.3000	.3000	.2500	.1000	.0250	.0250
102	0.0250	.0250	.0250	.1000	.2500	.3000	.3000	.3000	.2500	.1000	.0250	.0250
13	0.0250	.0250	.0250	.1000	.1500	.1500	.1500	.1500	.1000	.1000	.0250	.0250
23	0.0250	.0250	.0250	.1000	.1500	.1500	.1500	.1500	.1000	.1000	.0250	.0250
33	0.0250	.0250	.0250	.1000	.1500	.1500	.1500	.1500	.1000	.1000	.0250	.0250
43	0.0250	.0250	.0250	.1000	.1500	.1500	.1500	.1500	.1000	.1000	.0250	.0250
53	0.0250	.0250	.0250	.1000	.1500	.1500	.1500	.1500	.1000	.1000	.0250	.0250
63	0.0250	.0250	.0250	.1000	.1500	.1500	.1500	.1500	.1000	.1000	.0250	.0250
73	0.0250	.0250	.0250	.1000	.1500	.1500	.1500	.1500	.1000	.1000	.0250	.0250
83	0.0250	.0250	.0250	.1000	.1500	.1500	.1500	.1500	.1000	.1000	.0250	.0250
93	0.0250	.0250	.0250	.1000	.1500	.1500	.1500	.1500	.1000	.1000	.0250	.0250
103	0.0250	.0250	.0250	.1000	.1500	.1500	.1500	.1500	.1000	.1000	.0250	.0250
14	0.0250	.0250	.0250	.1000	.3000	.3500	.3500	.3500	.3000	.1000	.0250	.0250
24	0.0250	.0250	.0250	.1000	.3000	.3500	.3500	.3500	.3000	.1000	.0250	.0250
34	0.0250	.0250	.0250	.1000	.3000	.3500	.3500	.3500	.3000	.1000	.0250	.0250
44	0.0250	.0250	.0250	.1000	.3000	.3500	.3500	.3500	.3000	.1000	.0250	.0250
54	0.0250	.0250	.0250	.1000	.3000	.3500	.3500	.3500	.3000	.1000	.0250	.0250
64	0.0250	.0250	.0250	.1000	.3000	.3500	.3500	.3500	.3000	.1000	.0250	.0250
74	0.0250	.0250	.0250	.1000	.3000	.3500	.3500	.3500	.3000	.1000	.0250	.0250
84	0.0250	.0250	.0250	.1000	.3000	.3500	.3500	.3500	.3000	.1000	.0250	.0250
94	0.0250	.0250	.0250	.1000	.3000	.3500	.3500	.3500	.3000	.1000	.0250	.0250
104	0.0250	.0250	.0250	.1000	.3000	.3500	.3500	.3500	.3000	.1000	.0250	.0250

END MON-INTERCEP

MON-UZSN  
 \*\*\* <PLS > Upper zone storage at start of each month  
 \*\*\* x - x JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

12	0.1000	.1000	.2000	.4001	.0401	.2801	.2801	.2501	.0400	.4000	.2000	.100
22	0.1000	.1000	.2000	.4001	.0401	.2801	.2801	.2801	.0400	.4000	.2000	.100
32	0.1000	.1000	.2000	.4001	.0401	.2801	.2801	.2801	.0400	.4000	.2000	.100
42	0.1000	.1000	.2000	.4001	.0401	.2801	.2801	.2801	.0400	.4000	.2000	.100
52	0.1000	.1000	.2000	.4001	.0401	.2801	.2801	.2801	.0400	.4000	.2000	.100

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62 0.1000.1000.2000.4001.0401.2801.2801.2801.0400.4000.2000.100
72 0.1000.1000.2000.4001.0401.2801.2801.2801.0400.4000.2000.100
82 0.1000.1000.2000.4001.0401.2801.2801.2801.0400.4000.2000.100
92 0.1000.1000.2000.4001.0401.2801.2801.2801.0400.4000.2000.100
102 0.1000.1000.2000.4001.0401.2801.2801.2801.0400.4000.2000.100
14 0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
24 0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
34 0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
44 0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
54 0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
64 0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
74 0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
84 0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
94 0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
104 0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
END MON-UZSN

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MON-LZETPARM

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*** <PLS > Lower zone evapotransp parm at start of each month
*** x - x JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC
11 0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
21 0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
31 0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
41 0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
51 0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
61 0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
71 0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
81 0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
91 0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
101 0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
12 0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
22 0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
32 0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
42 0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
52 0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
62 0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
72 0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
82 0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
92 0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
102 0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
13 0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
23 0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
33 0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
43 0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
53 0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
63 0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
73 0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
83 0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
93 0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
103 0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
14 0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
24 0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
34 0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
44 0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
54 0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
64 0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
74 0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
84 0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
94 0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
104 0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
END MON-LZETPARM

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PWAT-STATE1

#	# ***	CEPS	SURS	UZS	IFWS	LZS	AGWS	GWVS
11		0.020	0.020	0.550	0.000	7.470	0.319	0.000
21		0.020	0.020	0.550	0.000	7.470	0.319	0.000
31		0.020	0.020	0.550	0.000	7.470	0.319	0.000
41		0.020	0.020	0.550	0.000	7.470	0.319	0.000
51		0.020	0.020	0.550	0.000	7.470	0.319	0.000
61		0.020	0.020	0.550	0.000	7.470	0.319	0.000
71		0.020	0.020	0.550	0.000	7.470	0.319	0.000



81	0.020	0.020	0.550	0.000	7.470	0.319	0.000
91	0.020	0.020	0.550	0.000	7.470	0.319	0.000
101	0.020	0.020	0.550	0.000	7.470	0.319	0.000
12	0.020	0.020	0.340	0.001	6.450	0.224	0.000
22	0.020	0.020	0.340	0.001	6.450	0.224	0.000
32	0.020	0.020	0.340	0.001	6.450	0.224	0.000
42	0.020	0.020	0.340	0.001	6.450	0.224	0.000
52	0.020	0.020	0.340	0.001	6.450	0.224	0.000
62	0.020	0.020	0.340	0.001	6.450	0.224	0.000
72	0.020	0.020	0.340	0.001	6.450	0.224	0.000
82	0.020	0.020	0.340	0.001	6.450	0.224	0.000
92	0.020	0.020	0.340	0.001	6.450	0.224	0.000
102	0.020	0.020	0.340	0.001	6.450	0.224	0.000
13	0.020	0.020	0.940	0.004	8.630	0.411	0.000
23	0.020	0.020	0.940	0.004	8.630	0.411	0.000
33	0.020	0.020	0.940	0.004	8.630	0.411	0.000
43	0.020	0.020	0.940	0.004	8.630	0.411	0.000
53	0.020	0.020	0.940	0.004	8.630	0.411	0.000
63	0.020	0.020	0.940	0.004	8.630	0.411	0.000
73	0.020	0.020	0.940	0.004	8.630	0.411	0.000
83	0.020	0.020	0.940	0.004	8.630	0.411	0.000
93	0.020	0.020	0.940	0.004	8.630	0.411	0.000
103	0.020	0.020	0.940	0.004	8.630	0.411	0.000
14	0.020	0.020	0.420	0.001	6.560	0.261	0.000
24	0.020	0.020	0.420	0.001	6.560	0.261	0.000
34	0.020	0.020	0.420	0.001	6.560	0.261	0.000
44	0.020	0.020	0.420	0.001	6.560	0.261	0.000
54	0.020	0.020	0.420	0.001	6.560	0.261	0.000
64	0.020	0.020	0.420	0.001	6.560	0.261	0.000
74	0.020	0.020	0.420	0.001	6.560	0.261	0.000
84	0.020	0.020	0.420	0.001	6.560	0.261	0.000
94	0.020	0.020	0.420	0.001	6.560	0.261	0.000
104	0.020	0.020	0.420	0.001	6.560	0.261	0.000

END PWAT-STATE1

END PERLND

IMPLND

ACTIVITY

#	#	ATMP	SNOW	IWAT	SLD	IWG	IQAL	***
11	1017	0	0	1	0	0	0	

END ACTIVITY

PRINT-INFO

#	#	ATMP	SNOW	IWAT	SLD	IWG	IQAL	PIVL	PYR	***
11	101	6	6	5	6	6	6	1	9	

END PRINT-INFO

GEN-INFO

#	#	NAME	UCI	IN	OUT	ENGL	METR	***
11	101	IMPERV LAND	1	1	1	91	0	

END GEN-INFO

IWAT-PARM1

#	#	CSNO	RTOP	VRS	VNN	RTLI	***
11	101	0	1	0	0	0	

END IWAT-PARM1

IWAT-PARM2

#	#	LSUR	SLSUR	NSUR	RETSC	***
11		200.0	0.2400	0.10	0.05	
21		200.0	0.2400	0.10	0.05	
31		200.0	0.2200	0.10	0.05	
41		300.0	0.1400	0.10	0.05	
51		250.0	0.1900	0.10	0.05	
61		200.0	0.2000	0.10	0.05	
71		250.0	0.1900	0.10	0.05	
81		250.0	0.1900	0.10	0.05	
91		200.0	0.2200	0.10	0.05	
101		250.0	0.1600	0.10	0.05	

END IWAT-PARM2

```

IWAT-PARM3
*** <ILS >   PETMAX   PETMIN
*** x - x   (deg F)   (deg F)
    11 101    40.0    35.0
END IWAT-PARM3

```

```

IWAT-STATE1
*** <ILS > IWATER state variables (inches)
*** x - x   RETS     SURS
    11 101    0.03    0.01
END IWAT-STATE1

```

END IMPLND

RCHRES

```

ACTIVITY
RCHRES Active Sections (1=Active; 0=Inactive) ***
# - # HYFG ADFG CNFG HTFG SDFG GQFG OXFG NUFG PKFG PHFG ***
    1 10 1 0 0 0 0 0 0 0 0
END ACTIVITY

```

```

PRINT-INFO
RCHRES Print-flags ***
# - # HYDR ADCA CONS HEAT SED GQL OXRX NUTR PLNK PHCB PIVL PYR ***
    1 10 5 5 5 5 5 5 5 5 12
END PRINT-INFO

```

GEN-INFO

```

RCHRES<-----Name----->Nexit Unit Systems Printer ***
# - # User t-series Engl Metr LKFG ***
      in out
    1 Little Back Creek 1 1 1 1 91 0 0
    2 Upper Back Creek 1 1 1 1 91 0 0
    3 Poages Mill 1 1 1 1 91 0 0
    4 Cave Spring 1 1 1 1 91 0 0
    5 Blue Ridge Parkway 1 1 1 1 91 0 0
    6 Cattail Hollow 1 1 1 1 91 0 0
    7 State Rd #676 1 1 1 1 91 0 0
    8 Red Hill Church 1 1 1 1 91 0 0
    9 State Rd #667 1 1 1 1 91 0 0
   10 Dundee 1 1 1 1 91 0 0
END GEN-INFO

```

HYDR-PARM1

```

RCHRES Flags for HYDR section ***
# - # VC A1 A2 A3 ODFVFG for each ODGTFG for each *** FUNCT for each
      FG FG FG FG possible exit possible exit *** possible exit
      1 2 3 4 5 1 2 3 4 5 *** 1 2 3 4 5
    1 10 0 1 1 1 4 0 0 0 0 0 0 0 0 0 0 0 0 0 1 1 1 1 1
END HYDR-PARM1

```

HYDR-PARM2

```

RCHRES ***
# - # FTABNO LEN DELTH STCOR KS DB50 ***
    1 1 2.62 387.0 0.0 0.5 0.01
    2 2 2.99 561.0 0.0 0.5 0.01
    3 3 2.08 69.0 0.0 0.5 0.01
    4 4 2.35 85.0 0.0 0.5 0.01
    5 5 2.78 85.0 0.0 0.5 0.01
    6 6 1.94 36.0 0.0 0.5 0.01
    7 7 2.29 56.0 0.0 0.5 0.01
    8 8 1.96 26.0 0.0 0.5 0.01
    9 9 2.97 52.0 0.0 0.5 0.01
   10 10 3.05 56.0 0.0 0.5 0.01
END HYDR-PARM2

```

HYDR-INIT

```

RCHRES Initial conditions for HYDR section ***
# - # VOL Initial value of COLIND *** Initial value of OUTDGT
      (ac-ft) for each possible exit *** for each possible exit

```

```

EX1 EX2 EX3 EX4 EX5 *** EX1 EX2 EX3 EX4 EX5
1 0.10
2 0.25
3 0.45
4 0.65
5 0.85
6 1.00
7 1.50
8 2.00
9 2.50
10 3.00
END HYDR-INIT
END RCHRES

COPY
TIMESERIES
Copy-opn***
*** x - x NPT NMN
100 0 7
101 110 0 2
END TIMESERIES
END COPY

PLTGEN
PLOTINFO
*** x - x FILE NPT NMN LABL PYR PIVL
100 92 0 10
200 93 0 10
300 94 0 10
END PLOTINFO
GEN-LABELS
*** x - x<-----title-----> <-----y-axis lab---->
100 Reach Outflows Flow (cfs)
200 Land Segment Outflows Runoff (in/hr)
300 Groundwater Recharge Recharge (in/hr)
END GEN-LABELS
SCALING
*** x - x<---ymin--><---ymax--><---ivlin-><-thresh->
100 0 100000 10
200 0 1.0000 10
300 0 1.0000 10
END SCALING
CURV-DATA
*** x - x <----label----> LIN INT COL TR
100 300 Outflow
END CURV-DATA
END PLTGEN

EXT SOURCES

<-Volume-> <Member> SsysSgap<--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name> x <Name> x tem strg<-factor->strg <Name> x x <Name> x x ***
WDM 210 EVAP ENGL PERLND 11 104 EXTNL PETINP 1 1
WDM 210 EVAP ENGL IMPLND 11 101 EXTNL PETINP 1 1

WDM 82 PRCP ENGL PERLND 11 104 EXTNL PREC 1 1
WDM 82 PRCP ENGL IMPLND 11 101 EXTNL PREC 1 1

WDM 541 FLOW ENGL PLTGEN 100 INPUT MEAN 1 1
WDM 542 FLOW ENGL PLTGEN 100 INPUT MEAN 2 1
WDM 543 FLOW ENGL PLTGEN 100 INPUT MEAN 3 1
WDM 544 FLOW ENGL PLTGEN 100 INPUT MEAN 4 1
WDM 545 FLOW ENGL PLTGEN 100 INPUT MEAN 5 1
WDM 546 FLOW ENGL PLTGEN 100 INPUT MEAN 6 1
WDM 547 FLOW ENGL PLTGEN 100 INPUT MEAN 7 1
WDM 548 FLOW ENGL PLTGEN 100 INPUT MEAN 8 1
WDM 549 FLOW ENGL PLTGEN 100 INPUT MEAN 9 1
WDM 550 FLOW ENGL PLTGEN 100 INPUT MEAN 10 1

WDM 531 SIMQ ENGL PLTGEN 200 INPUT MEAN 1 1
WDM 532 SIMQ ENGL PLTGEN 200 INPUT MEAN 2 1

```

WDM	533	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	3	1
WDM	534	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	4	1
WDM	535	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	5	1
WDM	536	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	6	1
WDM	537	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	7	1
WDM	538	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	8	1
WDM	539	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	9	1
WDM	540	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	10	1
WDM	551	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	1	1
WDM	552	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	2	1
WDM	553	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	3	1
WDM	554	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	4	1
WDM	555	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	5	1
WDM	556	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	6	1
WDM	557	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	7	1
WDM	558	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	8	1
WDM	559	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	9	1
WDM	560	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	10	1

END EXT SOURCES

EXT TARGETS

<-Volume->	<-Grp>	<-Member->	<--Mult-->	Tran	<-Volume->	<Member>	Tsys	Aggr	Amd	***		
<Name>	x	<Name>	x	x<-factor->	strg	<Name>	x	<Name>	qf	tem	strg	strg***
RCHRES	10	ROFLOW	ROVOL	1	13.35965E-4	WDM	320	SIMQ	1	ENGL		REPL
COPY	100	OUTPUT	MEAN	1	12.79971E-5	WDM	321	SURO	1	ENGL		REPL
COPY	100	OUTPUT	MEAN	2	12.79971E-5	WDM	322	IFWO	1	ENGL		REPL
COPY	100	OUTPUT	MEAN	3	12.79971E-5	WDM	323	AGWO	1	ENGL		REPL
COPY	100	OUTPUT	MEAN	4	12.79971E-5	WDM	325	PETX	1	ENGL	AGGR	REPL
COPY	100	OUTPUT	MEAN	5	12.79971E-5	WDM	326	SAET	1	ENGL	AGGR	REPL
COPY	100	OUTPUT	MEAN	6	12.79971E-5	WDM	327	UZSX	1	ENGL	AGGR	REPL
COPY	100	OUTPUT	MEAN	7	12.79971E-5	WDM	328	LZSX	1	ENGL	AGGR	REPL
RCHRES	1	ROFLOW	ROVOL	1	1	12.1	WDM	541	FLOW	1	ENGL	REPL
RCHRES	2	ROFLOW	ROVOL	1	1	12.1	WDM	542	FLOW	1	ENGL	REPL
RCHRES	3	ROFLOW	ROVOL	1	1	12.1	WDM	543	FLOW	1	ENGL	REPL
RCHRES	4	ROFLOW	ROVOL	1	1	12.1	WDM	544	FLOW	1	ENGL	REPL
RCHRES	5	ROFLOW	ROVOL	1	1	12.1	WDM	545	FLOW	1	ENGL	REPL
RCHRES	6	ROFLOW	ROVOL	1	1	12.1	WDM	546	FLOW	1	ENGL	REPL
RCHRES	7	ROFLOW	ROVOL	1	1	12.1	WDM	547	FLOW	1	ENGL	REPL
RCHRES	8	ROFLOW	ROVOL	1	1	12.1	WDM	548	FLOW	1	ENGL	REPL
RCHRES	9	ROFLOW	ROVOL	1	1	12.1	WDM	549	FLOW	1	ENGL	REPL
RCHRES	10	ROFLOW	ROVOL	1	1	12.1	WDM	550	FLOW	1	ENGL	REPL
COPY	101	OUTPUT	MEAN	1	13.96983E-4	WDM	531	SIMQ	1	ENGL		REPL
COPY	102	OUTPUT	MEAN	1	12.14041E-4	WDM	532	SIMQ	1	ENGL		REPL
COPY	103	OUTPUT	MEAN	1	11.74398E-4	WDM	533	SIMQ	1	ENGL		REPL
COPY	104	OUTPUT	MEAN	1	15.00000E-4	WDM	534	SIMQ	1	ENGL		REPL
COPY	105	OUTPUT	MEAN	1	12.26809E-4	WDM	535	SIMQ	1	ENGL		REPL
COPY	106	OUTPUT	MEAN	1	12.80820E-4	WDM	536	SIMQ	1	ENGL		REPL
COPY	107	OUTPUT	MEAN	1	13.25407E-4	WDM	537	SIMQ	1	ENGL		REPL
COPY	108	OUTPUT	MEAN	1	13.15560E-4	WDM	538	SIMQ	1	ENGL		REPL
COPY	109	OUTPUT	MEAN	1	13.39789E-4	WDM	539	SIMQ	1	ENGL		REPL
COPY	110	OUTPUT	MEAN	1	12.72554E-4	WDM	540	SIMQ	1	ENGL		REPL
COPY	101	OUTPUT	MEAN	2	13.96983E-4	WDM	551	SIMQ	1	ENGL		REPL
COPY	102	OUTPUT	MEAN	2	12.14041E-4	WDM	552	SIMQ	1	ENGL		REPL
COPY	103	OUTPUT	MEAN	2	11.74398E-4	WDM	553	SIMQ	1	ENGL		REPL
COPY	104	OUTPUT	MEAN	2	15.00000E-4	WDM	554	SIMQ	1	ENGL		REPL
COPY	105	OUTPUT	MEAN	2	12.26809E-4	WDM	555	SIMQ	1	ENGL		REPL
COPY	106	OUTPUT	MEAN	2	12.80820E-4	WDM	556	SIMQ	1	ENGL		REPL
COPY	107	OUTPUT	MEAN	2	13.25407E-4	WDM	557	SIMQ	1	ENGL		REPL
COPY	108	OUTPUT	MEAN	2	13.15560E-4	WDM	558	SIMQ	1	ENGL		REPL
COPY	109	OUTPUT	MEAN	2	13.39789E-4	WDM	559	SIMQ	1	ENGL		REPL
COPY	110	OUTPUT	MEAN	2	12.72554E-4	WDM	560	SIMQ	1	ENGL		REPL

END EXT TARGETS

SCHEMATIC

<-Volume->	<-Area-->	<-Volume->	<ML#>	***
<Name> x	<-factor->	<Name> x		***
PERLND 11	105.	RCHRES 1	1	
PERLND 12	1505.	RCHRES 1	1	
PERLND 13	19.	RCHRES 1	1	
PERLND 14	13.	RCHRES 1	1	
IMPLND 11	878.	RCHRES 1	3	
PERLND 21	177.	RCHRES 2	1	
PERLND 22	2798.	RCHRES 2	1	
PERLND 23	37.	RCHRES 2	1	
PERLND 24	33.	RCHRES 2	1	
IMPLND 21	1627.	RCHRES 2	3	
PERLND 31	222.	RCHRES 3	1	
PERLND 32	3413.	RCHRES 3	1	
PERLND 33	72.	RCHRES 3	1	
PERLND 34	36.	RCHRES 3	1	
IMPLND 31	1991.	RCHRES 3	3	
PERLND 41	64.	RCHRES 4	1	
PERLND 42	1150.	RCHRES 4	1	
PERLND 43	85.	RCHRES 4	1	
PERLND 44	19.	RCHRES 4	1	
IMPLND 41	682.	RCHRES 4	3	
PERLND 51	136.	RCHRES 5	1	
PERLND 52	2231.	RCHRES 5	1	
PERLND 53	591.	RCHRES 5	1	
PERLND 54	37.	RCHRES 5	1	
IMPLND 51	1415.	RCHRES 5	3	
PERLND 61	139.	RCHRES 6	1	
PERLND 62	2095.	RCHRES 6	1	
PERLND 63	71.	RCHRES 6	1	
PERLND 64	25.	RCHRES 6	1	
IMPLND 61	1231.	RCHRES 6	3	
PERLND 71	116.	RCHRES 7	1	
PERLND 72	1787.	RCHRES 7	1	
PERLND 73	65.	RCHRES 7	1	
PERLND 74	25.	RCHRES 7	1	
IMPLND 71	1052.	RCHRES 7	3	
PERLND 81	106.	RCHRES 8	1	
PERLND 82	1672.	RCHRES 8	1	
PERLND 83	328.	RCHRES 8	1	
PERLND 84	23.	RCHRES 8	1	
IMPLND 81	1037.	RCHRES 8	3	
PERLND 91	110.	RCHRES 9	1	
PERLND 92	1703.	RCHRES 9	1	
PERLND 93	103.	RCHRES 9	1	
PERLND 94	18.	RCHRES 9	1	
IMPLND 91	1008.	RCHRES 9	3	
PERLND 101	79.	RCHRES 10	1	
PERLND 102	2046.	RCHRES 10	1	
PERLND 103	272.	RCHRES 10	1	
PERLND 104	47.	RCHRES 10	1	
IMPLND 101	1225.	RCHRES 10	3	
RCHRES 1		RCHRES 3	5	
RCHRES 2		RCHRES 3	5	
RCHRES 3		RCHRES 4	5	
RCHRES 4		RCHRES 5	5	
RCHRES 5		RCHRES 6	5	
RCHRES 6		RCHRES 7	5	
RCHRES 7		RCHRES 8	5	
RCHRES 8		RCHRES 9	5	
RCHRES 9		RCHRES 10	5	

PERLND	11	105.	COPY	100	90
PERLND	12	1505.	COPY	100	90
PERLND	13	19.	COPY	100	90
PERLND	14	13.	COPY	100	90
IMPLND	11	878.	COPY	100	91
PERLND	11	105.	COPY	101	92
PERLND	12	1505.	COPY	101	92
PERLND	13	19.	COPY	101	92
PERLND	14	13.	COPY	101	92
IMPLND	11	878.	COPY	101	93
PERLND	21	177.	COPY	100	90
PERLND	22	2798.	COPY	100	90
PERLND	23	37.	COPY	100	90
PERLND	24	33.	COPY	100	90
IMPLND	21	1627.	COPY	100	91
PERLND	21	177.	COPY	102	92
PERLND	22	2798.	COPY	102	92
PERLND	23	37.	COPY	102	92
PERLND	24	33.	COPY	102	92
IMPLND	21	1627.	COPY	102	93
PERLND	31	222.	COPY	100	90
PERLND	32	3413.	COPY	100	90
PERLND	33	72.	COPY	100	90
PERLND	34	36.	COPY	100	90
IMPLND	31	1991.	COPY	100	91
PERLND	31	222.	COPY	103	92
PERLND	32	3413.	COPY	103	92
PERLND	33	72.	COPY	103	92
PERLND	34	36.	COPY	103	92
IMPLND	31	1991.	COPY	103	93
PERLND	41	64.	COPY	100	90
PERLND	42	1150.	COPY	100	90
PERLND	43	85.	COPY	100	90
PERLND	44	19.	COPY	100	90
IMPLND	41	682.	COPY	100	91
PERLND	41	64.	COPY	104	92
PERLND	42	1150.	COPY	104	92
PERLND	43	85.	COPY	104	92
PERLND	44	19.	COPY	104	92
IMPLND	41	682.	COPY	104	93
PERLND	51	136.	COPY	100	90
PERLND	52	2231.	COPY	100	90
PERLND	53	591.	COPY	100	90
PERLND	54	37.	COPY	100	90
IMPLND	51	1415.	COPY	100	91
PERLND	51	136.	COPY	105	92
PERLND	52	2231.	COPY	105	92
PERLND	53	591.	COPY	105	92
PERLND	54	37.	COPY	105	92
IMPLND	51	1415.	COPY	105	93
PERLND	61	139.	COPY	100	90
PERLND	62	2095.	COPY	100	90
PERLND	63	71.	COPY	100	90
PERLND	64	25.	COPY	100	90
IMPLND	61	1231.	COPY	100	91
PERLND	61	139.	COPY	106	92
PERLND	62	2095.	COPY	106	92
PERLND	63	71.	COPY	106	92
PERLND	64	25.	COPY	106	92
IMPLND	61	1231.	COPY	106	93
PERLND	71	116.	COPY	100	90
PERLND	72	1787.	COPY	100	90
PERLND	73	65.	COPY	100	90
PERLND	74	25.	COPY	100	90

IMPLND	71	1052.	COPY	100	91
PERLND	71	116.	COPY	107	92
PERLND	72	1787.	COPY	107	92
PERLND	73	65.	COPY	107	92
PERLND	74	25.	COPY	107	92
IMPLND	71	1052.	COPY	107	93
PERLND	81	106.	COPY	100	90
PERLND	82	1672.	COPY	100	90
PERLND	83	328.	COPY	100	90
PERLND	84	23.	COPY	100	90
IMPLND	81	1037.	COPY	100	91
PERLND	81	106.	COPY	108	92
PERLND	82	1672.	COPY	108	92
PERLND	83	328.	COPY	108	92
PERLND	84	23.	COPY	108	92
IMPLND	81	1037.	COPY	108	93
PERLND	91	110.	COPY	100	90
PERLND	92	1703.	COPY	100	90
PERLND	93	103.	COPY	100	90
PERLND	94	18.	COPY	100	90
IMPLND	91	1008.	COPY	100	91
PERLND	91	110.	COPY	109	92
PERLND	92	1703.	COPY	109	92
PERLND	93	103.	COPY	109	92
PERLND	94	18.	COPY	109	92
IMPLND	91	1008.	COPY	109	93
PERLND	101	79.	COPY	100	90
PERLND	102	2046.	COPY	100	90
PERLND	103	272.	COPY	100	90
PERLND	104	47.	COPY	100	90
IMPLND	101	1225.	COPY	100	91
PERLND	101	79.	COPY	110	92
PERLND	102	2046.	COPY	110	92
PERLND	103	272.	COPY	110	92
PERLND	104	47.	COPY	110	92
IMPLND	101	1225.	COPY	110	93

END SCHEMATIC

MASS-LINK

```

MASS-LINK      1
<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name>      <Name> x x<-factor->strg <Name>      <Name> x x ***
PERLND      PWATER PERO      0.0533333      RCHRES      INFLOW IVOL
END MASS-LINK      1

```

```

MASS-LINK      3
<Srce>      <-Grp> <-Member-><--Mult-->      <Targ>      <-Grp> <-Member-> ***
<Name>      <Name> <Name> # #<-factor->      <Name>      <Name> <Name> # # ***
IMPLND      IWATER SURO      0.0533333      RCHRES      INFLOW IVOL
END MASS-LINK      3

```

```

MASS-LINK      5
<Srce>      <-Grp> <-Member-><--Mult-->      <Targ>      <-Grp> <-Member-> ***
<Name>      <Name> <Name> # #<-factor->      <Name>      <Name> <Name> # # ***
RCHRES      ROFLOW      RCHRES      INFLOW
END MASS-LINK      5

```

```

MASS-LINK      90
<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name>      <Name> x x<-factor->strg <Name>      <Name> x x ***
PERLND      PWATER SURO      COPY      INPUT MEAN 1
PERLND      PWATER IFWO      COPY      INPUT MEAN 2
PERLND      PWATER AGWO      COPY      INPUT MEAN 3
PERLND      PWATER PET      COPY      INPUT MEAN 4
PERLND      PWATER TAET      COPY      INPUT MEAN 5
PERLND      PWATER UZS      COPY      INPUT MEAN 6
PERLND      PWATER LZS      COPY      INPUT MEAN 7

```

```

END MASS-LINK 90

MASS-LINK 91
<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name> <Name> x x<-factor->strg <Name> <Name> x x ***
IMPLND IWATER SURO COPY INPUT MEAN 1
IMPLND IWATER PET COPY INPUT MEAN 4
IMPLND IWATER IMPEV COPY INPUT MEAN 5
END MASS-LINK 91

MASS-LINK 92
<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name> <Name> x x<-factor->strg <Name> <Name> x x ***
PERLND PWATER PERO COPY INPUT MEAN 1
PERLND PWATER AGWI COPY INPUT MEAN 2
END MASS-LINK 92

MASS-LINK 93
<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name> <Name> x x<-factor->strg <Name> <Name> x x ***
IMPLND IWATER SURO COPY INPUT MEAN 1
END MASS-LINK 93
END MASS-LINK

```

FTABLES

```

FTABLE 1
ROWS COLS ***
15 4
DEPTH AREA VOLUME DISCH ***
(FT) (ACRES) (AC-FT) (CFS) ***
0.00 1.90 0.00 0.00
0.20 1.97 0.39 2.66
0.40 2.03 0.79 8.43
0.60 2.09 1.20 16.54
0.80 2.16 1.62 26.70
1.00 2.22 2.06 38.73
1.20 2.28 2.51 52.50
1.40 2.35 2.97 67.95
1.60 2.41 3.45 85.02
1.80 2.47 3.94 103.65
2.00 2.54 4.44 123.83
4.00 3.17 10.14 408.06
8.00 4.44 25.36 1443.51
12.00 5.71 45.65 3184.35
18.00 7.61 85.59 7362.11
END FTABLE 1

```

```

FTABLE 2
ROWS COLS ***
15 4
DEPTH AREA VOLUME DISCH ***
(FT) (ACRES) (AC-FT) (CFS) ***
0.00 2.53 0.00 0.00
0.20 2.61 0.51 3.43
0.40 2.68 1.04 10.87
0.60 2.75 1.59 21.33
0.80 2.82 2.14 34.41
1.00 2.90 2.72 49.89
1.20 2.97 3.30 67.61
1.40 3.04 3.90 87.46
1.60 3.11 4.52 109.35
1.80 3.19 5.15 133.23
2.00 3.26 5.79 159.04
4.00 3.98 13.03 519.10
8.00 5.43 31.86 1799.90
12.00 6.88 56.48 3905.86
21.00 10.35 134.42 12263.77
END FTABLE 2

```

```

FTABLE 3
ROWS COLS ***
16 4
DEPTH AREA VOLUME DISCH ***

```



(FT)	(ACRES)	(AC-FT)	(CFS)	***
0.00	4.29	0.00	0.00	
0.20	4.42	0.87	3.68	
0.40	4.55	1.77	11.69	
0.60	4.67	2.69	23.02	
0.80	4.80	3.64	37.28	
1.00	4.92	4.61	54.22	
1.30	5.11	6.11	84.35	
1.70	5.37	8.21	132.84	
2.00	5.56	9.85	175.20	
2.30	5.75	11.54	222.55	
2.70	6.00	13.89	293.34	
3.00	6.19	15.72	352.14	
6.00	8.08	37.12	1211.65	
9.00	9.98	64.21	2596.60	
12.00	11.87	96.98	4566.48	
36.00	27.02	563.67	48712.37	

END FTABLE 3  
FTABLE 4  
ROWS COLS \*\*\*  
16 4

DEPTH	AREA	VOLUME	DISCH	***
(FT)	(ACRES)	(AC-FT)	(CFS)	***
0.00	6.12	0.00	0.00	
0.20	6.29	1.24	4.15	
0.40	6.46	2.52	13.20	
0.60	6.63	3.83	25.99	
0.80	6.80	5.17	42.06	
1.00	6.98	6.55	61.14	
1.30	7.23	8.68	95.03	
1.70	7.57	11.64	149.46	
2.00	7.83	13.95	196.90	
2.30	8.09	16.34	249.83	
2.70	8.43	19.64	328.77	
3.00	8.68	22.21	394.17	
6.00	11.25	52.10	1338.90	
9.00	13.81	89.68	2535.59	
12.00	16.37	134.95	4936.63	
36.00	36.87	773.82	50457.43	

END FTABLE 4  
FTABLE 5  
ROWS COLS \*\*\*  
16 4

DEPTH	AREA	VOLUME	DISCH	***
(FT)	(ACRES)	(AC-FT)	(CFS)	***
0.00	8.94	0.00	0.00	
0.20	9.15	1.81	4.64	
0.40	9.35	3.66	14.75	
0.60	9.55	5.55	29.03	
0.80	9.75	7.48	46.94	
1.00	9.96	9.45	68.19	
1.30	10.26	12.48	105.86	
1.70	10.66	16.67	166.19	
2.00	10.97	19.91	218.59	
2.30	11.27	23.25	276.88	
2.70	11.68	27.84	363.51	
3.00	11.98	31.39	435.02	
6.00	15.02	71.89	1448.46	
9.00	18.06	121.50	3008.60	
12.00	21.09	180.22	5147.54	
58.00	67.67	2221.75	142706.41	

END FTABLE 5  
FTABLE 6  
ROWS COLS \*\*\*  
17 4

DEPTH	AREA	VOLUME	DISCH	***
(FT)	(ACRES)	(AC-FT)	(CFS)	***
0.00	7.64	0.00	0.00	
0.20	7.78	1.54	5.06	
0.40	7.92	3.11	16.08	
0.60	8.06	4.71	31.63	

0.80	8.20	6.34	51.14	
1.00	8.34	7.99	74.27	
1.30	8.56	10.53	115.24	
1.70	8.84	14.01	180.76	
2.00	9.05	16.69	237.60	
2.30	9.26	19.44	300.75	
2.70	9.54	23.20	394.44	
3.00	9.76	26.09	471.65	
6.00	11.87	58.53	1556.19	
9.00	13.99	97.32	3202.02	
12.00	16.10	142.45	5430.19	
15.00	18.22	193.93	8276.35	
58.00	48.54	1629.24	141041.23	

END FTABLE 6  
FTABLE 7  
ROWS COLS \*\*\*  
16 4

DEPTH	AREA	VOLUME	DISCH	***
(FT)	(ACRES)	(AC-FT)	(CFS)	***
0.00	10.53	0.00	0.00	
0.20	10.73	2.13	8.35	
0.40	10.92	4.29	26.56	
0.60	11.11	6.49	52.31	
0.80	11.31	8.74	84.68	
1.00	11.50	11.02	123.11	
1.30	11.79	14.51	191.34	
1.70	12.18	19.31	300.81	
2.00	12.47	23.00	396.05	
2.30	12.76	26.79	502.14	
2.70	13.15	31.97	660.01	
3.00	13.44	35.96	790.47	
6.00	16.35	80.66	2647.03	
9.00	19.26	134.08	5515.92	
12.00	22.17	196.24	9455.89	
24.00	33.81	532.16	37571.06	

END FTABLE 7  
FTABLE 8  
ROWS COLS \*\*\*  
17 4

DEPTH	AREA	VOLUME	DISCH	***
(FT)	(ACRES)	(AC-FT)	(CFS)	***
0.00	10.34	0.00	0.00	
0.20	10.53	2.09	8.49	
0.40	10.72	4.21	27.01	
0.60	10.91	6.37	53.19	
0.80	11.10	8.57	86.08	
1.00	11.29	10.81	125.11	
1.30	11.57	14.24	194.36	
1.70	11.95	18.95	305.34	
2.00	12.24	22.57	401.78	
2.30	12.52	26.29	509.10	
2.70	12.90	31.37	668.59	
3.00	13.19	35.29	800.22	
6.00	16.04	79.13	2660.86	
9.00	18.89	131.53	5505.65	
12.00	21.74	192.48	9376.55	
15.00	24.59	261.98	14339.04	
25.00	34.10	555.45	39708.38	

END FTABLE 8  
FTABLE 9  
ROWS COLS \*\*\*  
18 4

DEPTH	AREA	VOLUME	DISCH	***
(FT)	(ACRES)	(AC-FT)	(CFS)	***
0.00	17.26	0.00	0.00	
0.20	17.55	3.48	9.93	
0.40	17.83	7.02	31.59	
0.60	18.12	10.61	62.19	
0.80	18.41	14.27	100.62	
1.00	18.70	17.98	146.22	
1.30	19.13	23.65	227.07	

1.70	19.70	31.42	356.56
2.00	20.14	37.39	469.02
2.30	20.57	43.50	594.06
2.70	21.14	51.84	779.75
3.00	21.57	58.25	932.87
6.00	25.89	129.44	3087.80
9.00	30.20	213.58	6359.15
12.00	34.52	310.67	10782.20
15.00	38.83	420.69	16421.67
25.00	53.22	880.94	44979.76
50.00	89.17	2660.79	197754.51

END FTABLE 9  
 FTABLE 10  
 ROWS COLS \*\*\*  
 18 4

DEPTH (FT)	AREA (ACRES)	VOLUME (AC-FT)	DISCH (CFS)	***
0.00	19.58	0.00	0.00	***
0.20	19.88	3.95	11.22	
0.40	20.18	7.95	35.67	
0.60	20.47	12.02	70.22	
0.80	20.77	16.14	113.60	
1.00	21.06	20.32	165.03	
1.30	21.51	26.71	256.20	
1.70	22.10	35.43	402.07	
2.00	22.54	42.12	528.65	
2.30	22.98	48.95	669.29	
2.70	23.57	58.26	877.93	
3.00	24.02	65.40	1049.81	
6.00	28.45	144.11	3455.64	
9.00	32.89	236.12	7075.47	
12.00	37.32	341.43	11929.84	
15.00	41.75	460.04	18075.19	
25.00	56.53	951.48	48802.16	
50.00	93.49	2826.74	209904.75	

END FTABLE 10  
 END FTABLES  
 END RUN

# High Density Full Build Out with Restrictions

RUN

GLOBAL

Back Creek above Dundee, VA  
START 1956 10 1 0 0 END 1999 9 30 0 0  
RUN INTERP OUTPUT LEVEL 3 2  
RESUME 0 RUN 1 UNIT SYSTEM 1  
END GLOBAL

FILES

<FILE> <UN#>\*\*\*<---FILE NAME----->  
WDM 16 backcr.wdm  
MESSU 24 scenario.ech  
91 scenario.out  
92 backcr1.plt  
93 backcr2.plt  
94 backcr3.plt

END FILES

OPN SEQUENCE

INGRP INDELT 01:00

PERLND 11  
PERLND 12  
PERLND 13  
PERLND 14  
IMPLND 11  
RCHRES 1  
PERLND 21  
PERLND 22  
PERLND 23  
PERLND 24  
IMPLND 21  
RCHRES 2  
PERLND 31  
PERLND 32  
PERLND 33  
PERLND 34  
IMPLND 31  
RCHRES 3  
PERLND 41  
PERLND 42  
PERLND 43  
PERLND 44  
IMPLND 41  
RCHRES 4  
PERLND 51  
PERLND 52  
PERLND 53  
PERLND 54  
IMPLND 51  
RCHRES 5  
PERLND 61  
PERLND 62  
PERLND 63  
PERLND 64  
IMPLND 61  
RCHRES 6  
PERLND 71  
PERLND 72  
PERLND 73  
PERLND 74  
IMPLND 71  
RCHRES 7  
PERLND 81  
PERLND 82  
PERLND 83

```

PERLND      84
IMPLND      81
RCHRES       8
PERLND      91
PERLND      92
PERLND      93
PERLND      94
IMPLND      91
RCHRES       9
PERLND     101
PERLND     102
PERLND     103
PERLND     104
IMPLND     101
RCHRES     10
COPY       100
COPY       101
COPY       102
COPY       103
COPY       104
COPY       105
COPY       106
COPY       107
COPY       108
COPY       109
COPY       110
PLTGEN     100
PLTGEN     200
PLTGEN     300
END INGRP
END OPN SEQUENCE

```

```

PERLND
ACTIVITY
# # ATMP SNOW PWAT SED PST PWG PQAL MSTL PEST NITR PHOS TRAC ***
11 104 0 0 1 0 0 0 0 0 0 0 0 0 0
END ACTIVITY

```

```

PRINT-INFO
# # ATMP SNOW PWAT SED PST PWG PQAL MSTL PEST NITR PHOS TRAC PIVL***PY
11 104 6 6 5 6 6 6 6 6 6 6 6 6 1 9
END PRINT-INFO

```

```

GEN-INFO
# # NAME NBLKS UCI IN OUT ENGL METR ***
11 FOREST 1 1 1 1 91 0
21 FOREST 1 1 1 1 91 0
31 FOREST 1 1 1 1 91 0
41 FOREST 1 1 1 1 91 0
51 FOREST 1 1 1 1 91 0
61 FOREST 1 1 1 1 91 0
71 FOREST 1 1 1 1 91 0
81 FOREST 1 1 1 1 91 0
91 FOREST 1 1 1 1 91 0
101 FOREST 1 1 1 1 91 0
12 HERBACEOUS/AG 1 1 1 1 91 0
22 HERBACEOUS/AG 1 1 1 1 91 0
32 HERBACEOUS/AG 1 1 1 1 91 0
42 HERBACEOUS/AG 1 1 1 1 91 0
52 HERBACEOUS/AG 1 1 1 1 91 0
62 HERBACEOUS/AG 1 1 1 1 91 0
72 HERBACEOUS/AG 1 1 1 1 91 0
82 HERBACEOUS/AG 1 1 1 1 91 0
92 HERBACEOUS/AG 1 1 1 1 91 0
102 HERBACEOUS/AG 1 1 1 1 91 0
13 DISTURBED 1 1 1 1 91 0
23 DISTURBED 1 1 1 1 91 0
33 DISTURBED 1 1 1 1 91 0
43 DISTURBED 1 1 1 1 91 0
53 DISTURBED 1 1 1 1 91 0
63 DISTURBED 1 1 1 1 91 0

```

73	DISTURBED	1	1	1	1	91	0
83	DISTURBED	1	1	1	1	91	0
93	DISTURBED	1	1	1	1	91	0
103	DISTURBED	1	1	1	1	91	0
14	MIXED FOREST/AG	1	1	1	1	91	0
24	MIXED FOREST/AG	1	1	1	1	91	0
34	MIXED FOREST/AG	1	1	1	1	91	0
44	MIXED FOREST/AG	1	1	1	1	91	0
54	MIXED FOREST/AG	1	1	1	1	91	0
64	MIXED FOREST/AG	1	1	1	1	91	0
74	MIXED FOREST/AG	1	1	1	1	91	0
84	MIXED FOREST/AG	1	1	1	1	91	0
94	MIXED FOREST/AG	1	1	1	1	91	0
104	MIXED FOREST/AG	1	1	1	1	91	0

END GEN-INFO

PWAT-PARM1

#	#	CSNO	RTOP	UZFG	VCS	VUZ	NVV	VIFW	VIRC	VLE	***
11		0	1	1	1	0	0	0	0	1	0
12		0	1	1	1	1	0	0	0	1	0
13		0	1	1	1	0	0	0	0	1	0
14		0	1	1	1	1	0	0	0	1	0
21		0	1	1	1	0	0	0	0	1	0
22		0	1	1	1	1	0	0	0	1	0
23		0	1	1	1	0	0	0	0	1	0
24		0	1	1	1	1	0	0	0	1	0
31		0	1	1	1	0	0	0	0	1	0
32		0	1	1	1	1	0	0	0	1	0
33		0	1	1	1	0	0	0	0	1	0
34		0	1	1	1	1	0	0	0	1	0
41		0	1	1	1	0	0	0	0	1	0
42		0	1	1	1	1	0	0	0	1	0
43		0	1	1	1	0	0	0	0	1	0
44		0	1	1	1	1	0	0	0	1	0
51		0	1	1	1	0	0	0	0	1	0
52		0	1	1	1	1	0	0	0	1	0
53		0	1	1	1	0	0	0	0	1	0
54		0	1	1	1	1	0	0	0	1	0
61		0	1	1	1	0	0	0	0	1	0
62		0	1	1	1	1	0	0	0	1	0
63		0	1	1	1	0	0	0	0	1	0
64		0	1	1	1	1	0	0	0	1	0
71		0	1	1	1	0	0	0	0	1	0
72		0	1	1	1	1	0	0	0	1	0
73		0	1	1	1	0	0	0	0	1	0
74		0	1	1	1	1	0	0	0	1	0
81		0	1	1	1	0	0	0	0	1	0
82		0	1	1	1	1	0	0	0	1	0
83		0	1	1	1	0	0	0	0	1	0
84		0	1	1	1	1	0	0	0	1	0
91		0	1	1	1	0	0	0	0	1	0
92		0	1	1	1	1	0	0	0	1	0
93		0	1	1	1	0	0	0	0	1	0
94		0	1	1	1	1	0	0	0	1	0
101		0	1	1	1	0	0	0	0	1	0
102		0	1	1	1	1	0	0	0	1	0
103		0	1	1	1	0	0	0	0	1	0
104		0	1	1	1	1	0	0	0	1	0

END PWAT-PARM1

PWAT-PARM2

#	#	***FOREST	LZSN	INFILT	LSUR	SLSUR	KVARY	AGWR
11		0.000	9.5	0.105	200.	0.24000	0.000	.960
21		0.000	9.5	0.105	200.	0.24000	0.000	.960
31		0.000	9.5	0.105	200.	0.22000	0.000	.960
41		0.000	9.5	0.105	300.	0.14000	0.000	.960
51		0.000	9.5	0.105	250.	0.19000	0.000	.960
61		0.000	9.5	0.105	200.	0.20000	0.000	.960
71		0.000	9.5	0.105	250.	0.19000	0.000	.960
81		0.000	9.5	0.105	250.	0.19000	0.000	.960
91		0.000	9.5	0.105	200.	0.22000	0.000	.960

101	0.000	9.5	0.105	250.	0.16000	0.000	.960
12	0.000	9.5	0.086	200.	0.24000	0.000	.960
22	0.000	9.5	0.086	200.	0.24000	0.000	.960
32	0.000	9.5	0.086	200.	0.22000	0.000	.960
42	0.000	9.5	0.086	300.	0.14000	0.000	.960
52	0.000	9.5	0.086	250.	0.19000	0.000	.960
62	0.000	9.5	0.086	200.	0.20000	0.000	.960
72	0.000	9.5	0.086	250.	0.19000	0.000	.960
82	0.000	9.5	0.086	250.	0.19000	0.000	.960
92	0.000	9.5	0.086	200.	0.22000	0.000	.960
102	0.000	9.5	0.086	250.	0.16000	0.000	.960
13	0.000	9.5	0.067	200.	0.24000	0.000	.960
23	0.000	9.5	0.067	200.	0.24000	0.000	.960
33	0.000	9.5	0.067	200.	0.22000	0.000	.960
43	0.000	9.5	0.067	300.	0.14000	0.000	.960
53	0.000	9.5	0.067	250.	0.19000	0.000	.960
63	0.000	9.5	0.067	200.	0.20000	0.000	.960
73	0.000	9.5	0.067	250.	0.19000	0.000	.960
83	0.000	9.5	0.067	250.	0.19000	0.000	.960
93	0.000	9.5	0.067	200.	0.22000	0.000	.960
103	0.000	9.5	0.067	250.	0.16000	0.000	.960
14	0.000	9.5	0.096	200.	0.24000	0.000	.960
24	0.000	9.5	0.096	200.	0.24000	0.000	.960
34	0.000	9.5	0.096	200.	0.22000	0.000	.960
44	0.000	9.5	0.096	300.	0.14000	0.000	.960
54	0.000	9.5	0.096	250.	0.19000	0.000	.960
64	0.000	9.5	0.096	200.	0.20000	0.000	.960
74	0.000	9.5	0.096	250.	0.19000	0.000	.960
84	0.000	9.5	0.096	250.	0.19000	0.000	.960
94	0.000	9.5	0.096	200.	0.22000	0.000	.960
104	0.000	9.5	0.096	250.	0.16000	0.000	.960

END PWAT-PARM2

PWAT-PARM3

***<PLS>	PETMAX	PETMIN	INFEXP	INFILD	DEEPFR	BASETP	AGWETP
***x - x	(deg F)	(deg F)					
11 104	40.0	35.0	2.0	2.0	0.210	0.000	0.000

END PWAT-PARM3

PWAT-PARM4

#	#	CEPSC	UZSN	NSUR	INTFW	IRC	LZETP	***
11		0.200	1.30	0.40	3.7	0.65	0.90	
21		0.200	1.30	0.40	3.7	0.65	0.90	
31		0.200	1.30	0.40	3.7	0.65	0.90	
41		0.200	1.30	0.40	3.7	0.65	0.90	
51		0.200	1.30	0.40	3.7	0.65	0.90	
61		0.200	1.30	0.40	3.7	0.65	0.90	
71		0.200	1.30	0.40	3.7	0.65	0.90	
81		0.200	1.30	0.40	3.7	0.65	0.90	
91		0.200	1.30	0.40	3.7	0.65	0.90	
101		0.200	1.30	0.40	3.7	0.65	0.90	
12		0.200	1.00	0.20	2.8	0.60	0.90	
22		0.200	1.00	0.20	2.8	0.60	0.90	
32		0.200	1.00	0.20	2.8	0.60	0.90	
42		0.200	1.00	0.20	2.8	0.60	0.90	
52		0.200	1.00	0.20	2.8	0.60	0.90	
62		0.200	1.00	0.20	2.8	0.60	0.90	
72		0.200	1.00	0.20	2.8	0.60	0.90	
82		0.200	1.00	0.20	2.8	0.60	0.90	
92		0.200	1.00	0.20	2.8	0.60	0.90	
102		0.200	1.00	0.20	2.8	0.60	0.90	
13		0.200	0.92	0.15	2.8	0.60	0.90	
23		0.200	0.92	0.15	2.8	0.60	0.90	
33		0.200	0.92	0.15	2.8	0.60	0.90	
43		0.200	0.92	0.15	2.8	0.60	0.90	
53		0.200	0.92	0.15	2.8	0.60	0.90	
63		0.200	0.92	0.15	2.8	0.60	0.90	
73		0.200	0.92	0.15	2.8	0.60	0.90	
83		0.200	0.92	0.15	2.8	0.60	0.90	
93		0.200	0.92	0.15	2.8	0.60	0.90	
103		0.200	0.92	0.15	2.8	0.60	0.90	

14	0.200	1.00	0.30	3.3	0.63	0.90
24	0.200	1.00	0.30	3.3	0.63	0.90
34	0.200	1.00	0.30	3.3	0.63	0.90
44	0.200	1.00	0.30	3.3	0.63	0.90
54	0.200	1.00	0.30	3.3	0.63	0.90
64	0.200	1.00	0.30	3.3	0.63	0.90
74	0.200	1.00	0.30	3.3	0.63	0.90
84	0.200	1.00	0.30	3.3	0.63	0.90
94	0.200	1.00	0.30	3.3	0.63	0.90
104	0.200	1.00	0.30	3.3	0.63	0.90

END PWAT-PARM4

PWAT-PARM5  
 \*\*\* <PLS > FZG FZGL  
 \*\*\* x - x  
 11 104 1.0 0.1  
 END PWAT-PARM5

MON-INTERCEP  
 \*\*\* <PLS > Interception storage capacity at start of each month (in)  
 \*\*\* x - x JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

11	0.0250	.0250	.0250	.1000	.3500	.4000	.4000	.4000	.3500	.1000	.0250	.0250
21	0.0250	.0250	.0250	.1000	.3500	.4000	.4000	.4000	.3500	.1000	.0250	.0250
31	0.0250	.0250	.0250	.1000	.3500	.4000	.4000	.4000	.3500	.1000	.0250	.0250
41	0.0250	.0250	.0250	.1000	.3500	.4000	.4000	.4000	.3500	.1000	.0250	.0250
51	0.0250	.0250	.0250	.1000	.3500	.4000	.4000	.4000	.3500	.1000	.0250	.0250
61	0.0250	.0250	.0250	.1000	.3500	.4000	.4000	.4000	.3500	.1000	.0250	.0250
71	0.0250	.0250	.0250	.1000	.3500	.4000	.4000	.4000	.3500	.1000	.0250	.0250
81	0.0250	.0250	.0250	.1000	.3500	.4000	.4000	.4000	.3500	.1000	.0250	.0250
91	0.0250	.0250	.0250	.1000	.3500	.4000	.4000	.4000	.3500	.1000	.0250	.0250
101	0.0250	.0250	.0250	.1000	.3500	.4000	.4000	.4000	.3500	.1000	.0250	.0250
12	0.0250	.0250	.0250	.1000	.2500	.3000	.3000	.3000	.2500	.1000	.0250	.0250
22	0.0250	.0250	.0250	.1000	.2500	.3000	.3000	.3000	.2500	.1000	.0250	.0250
32	0.0250	.0250	.0250	.1000	.2500	.3000	.3000	.3000	.2500	.1000	.0250	.0250
42	0.0250	.0250	.0250	.1000	.2500	.3000	.3000	.3000	.2500	.1000	.0250	.0250
52	0.0250	.0250	.0250	.1000	.2500	.3000	.3000	.3000	.2500	.1000	.0250	.0250
62	0.0250	.0250	.0250	.1000	.2500	.3000	.3000	.3000	.2500	.1000	.0250	.0250
72	0.0250	.0250	.0250	.1000	.2500	.3000	.3000	.3000	.2500	.1000	.0250	.0250
82	0.0250	.0250	.0250	.1000	.2500	.3000	.3000	.3000	.2500	.1000	.0250	.0250
92	0.0250	.0250	.0250	.1000	.2500	.3000	.3000	.3000	.2500	.1000	.0250	.0250
102	0.0250	.0250	.0250	.1000	.2500	.3000	.3000	.3000	.2500	.1000	.0250	.0250
13	0.0250	.0250	.0250	.1000	.1500	.1500	.1500	.1500	.1000	.1000	.0250	.0250
23	0.0250	.0250	.0250	.1000	.1500	.1500	.1500	.1500	.1000	.1000	.0250	.0250
33	0.0250	.0250	.0250	.1000	.1500	.1500	.1500	.1500	.1000	.1000	.0250	.0250
43	0.0250	.0250	.0250	.1000	.1500	.1500	.1500	.1500	.1000	.1000	.0250	.0250
53	0.0250	.0250	.0250	.1000	.1500	.1500	.1500	.1500	.1000	.1000	.0250	.0250
63	0.0250	.0250	.0250	.1000	.1500	.1500	.1500	.1500	.1000	.1000	.0250	.0250
73	0.0250	.0250	.0250	.1000	.1500	.1500	.1500	.1500	.1000	.1000	.0250	.0250
83	0.0250	.0250	.0250	.1000	.1500	.1500	.1500	.1500	.1000	.1000	.0250	.0250
93	0.0250	.0250	.0250	.1000	.1500	.1500	.1500	.1500	.1000	.1000	.0250	.0250
103	0.0250	.0250	.0250	.1000	.1500	.1500	.1500	.1500	.1000	.1000	.0250	.0250
14	0.0250	.0250	.0250	.1000	.3000	.3500	.3500	.3500	.3000	.1000	.0250	.0250
24	0.0250	.0250	.0250	.1000	.3000	.3500	.3500	.3500	.3000	.1000	.0250	.0250
34	0.0250	.0250	.0250	.1000	.3000	.3500	.3500	.3500	.3000	.1000	.0250	.0250
44	0.0250	.0250	.0250	.1000	.3000	.3500	.3500	.3500	.3000	.1000	.0250	.0250
54	0.0250	.0250	.0250	.1000	.3000	.3500	.3500	.3500	.3000	.1000	.0250	.0250
64	0.0250	.0250	.0250	.1000	.3000	.3500	.3500	.3500	.3000	.1000	.0250	.0250
74	0.0250	.0250	.0250	.1000	.3000	.3500	.3500	.3500	.3000	.1000	.0250	.0250
84	0.0250	.0250	.0250	.1000	.3000	.3500	.3500	.3500	.3000	.1000	.0250	.0250
94	0.0250	.0250	.0250	.1000	.3000	.3500	.3500	.3500	.3000	.1000	.0250	.0250
104	0.0250	.0250	.0250	.1000	.3000	.3500	.3500	.3500	.3000	.1000	.0250	.0250

END MON-INTERCEP

MON-UZSN  
 \*\*\* <PLS > Upper zone storage at start of each month  
 \*\*\* x - x JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

12	0.1000	.1000	.2000	.4001	.0401	.2801	.2801	.2501	.0400	.4000	.2000	.100
22	0.1000	.1000	.2000	.4001	.0401	.2801	.2801	.2801	.0400	.4000	.2000	.100
32	0.1000	.1000	.2000	.4001	.0401	.2801	.2801	.2801	.0400	.4000	.2000	.100
42	0.1000	.1000	.2000	.4001	.0401	.2801	.2801	.2801	.0400	.4000	.2000	.100
52	0.1000	.1000	.2000	.4001	.0401	.2801	.2801	.2801	.0400	.4000	.2000	.100



```

62 0.1000.1000.2000.4001.0401.2801.2801.2801.0400.4000.2000.100
72 0.1000.1000.2000.4001.0401.2801.2801.2801.0400.4000.2000.100
82 0.1000.1000.2000.4001.0401.2801.2801.2801.0400.4000.2000.100
92 0.1000.1000.2000.4001.0401.2801.2801.2801.0400.4000.2000.100
102 0.1000.1000.2000.4001.0401.2801.2801.2801.0400.4000.2000.100
14 0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
24 0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
34 0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
44 0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
54 0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
64 0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
74 0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
84 0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
94 0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
104 0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
END MON-UZSN

```

MON-LZETPARM

```

*** <PLS > Lower zone evapotransp parm at start of each month
*** x - x JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC
11 0.1000.1000.3000.7000.9000.9000.9000.9000.9000.9000.7000.3000.100
21 0.1000.1000.3000.7000.9000.9000.9000.9000.9000.9000.7000.3000.100
31 0.1000.1000.3000.7000.9000.9000.9000.9000.9000.9000.7000.3000.100
41 0.1000.1000.3000.7000.9000.9000.9000.9000.9000.9000.7000.3000.100
51 0.1000.1000.3000.7000.9000.9000.9000.9000.9000.9000.7000.3000.100
61 0.1000.1000.3000.7000.9000.9000.9000.9000.9000.9000.7000.3000.100
71 0.1000.1000.3000.7000.9000.9000.9000.9000.9000.9000.7000.3000.100
81 0.1000.1000.3000.7000.9000.9000.9000.9000.9000.9000.7000.3000.100
91 0.1000.1000.3000.7000.9000.9000.9000.9000.9000.9000.7000.3000.100
101 0.1000.1000.3000.7000.9000.9000.9000.9000.9000.9000.7000.3000.100
12 0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
22 0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
32 0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
42 0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
52 0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
62 0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
72 0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
82 0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
92 0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
102 0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
13 0.1000.1000.2000.3000.4000.4000.4000.4000.4000.4000.3000.2000.100
23 0.1000.1000.2000.3000.4000.4000.4000.4000.4000.4000.3000.2000.100
33 0.1000.1000.2000.3000.4000.4000.4000.4000.4000.4000.3000.2000.100
43 0.1000.1000.2000.3000.4000.4000.4000.4000.4000.4000.3000.2000.100
53 0.1000.1000.2000.3000.4000.4000.4000.4000.4000.4000.3000.2000.100
63 0.1000.1000.2000.3000.4000.4000.4000.4000.4000.4000.3000.2000.100
73 0.1000.1000.2000.3000.4000.4000.4000.4000.4000.4000.3000.2000.100
83 0.1000.1000.2000.3000.4000.4000.4000.4000.4000.4000.3000.2000.100
93 0.1000.1000.2000.3000.4000.4000.4000.4000.4000.4000.3000.2000.100
103 0.1000.1000.2000.3000.4000.4000.4000.4000.4000.4000.3000.2000.100
14 0.1000.1000.3000.6500.8000.8000.8000.8000.8000.8000.6500.3000.100
24 0.1000.1000.3000.6500.8000.8000.8000.8000.8000.8000.6500.3000.100
34 0.1000.1000.3000.6500.8000.8000.8000.8000.8000.8000.6500.3000.100
44 0.1000.1000.3000.6500.8000.8000.8000.8000.8000.8000.6500.3000.100
54 0.1000.1000.3000.6500.8000.8000.8000.8000.8000.8000.6500.3000.100
64 0.1000.1000.3000.6500.8000.8000.8000.8000.8000.8000.6500.3000.100
74 0.1000.1000.3000.6500.8000.8000.8000.8000.8000.8000.6500.3000.100
84 0.1000.1000.3000.6500.8000.8000.8000.8000.8000.8000.6500.3000.100
94 0.1000.1000.3000.6500.8000.8000.8000.8000.8000.8000.6500.3000.100
104 0.1000.1000.3000.6500.8000.8000.8000.8000.8000.8000.6500.3000.100
END MON-LZETPARM

```

PWAT-STATE1

#	# ***	CEPS	SURS	UZS	IFWS	LZS	AGWS	GWVS
11		0.020	0.020	0.550	0.000	7.470	0.319	0.000
21		0.020	0.020	0.550	0.000	7.470	0.319	0.000
31		0.020	0.020	0.550	0.000	7.470	0.319	0.000
41		0.020	0.020	0.550	0.000	7.470	0.319	0.000
51		0.020	0.020	0.550	0.000	7.470	0.319	0.000
61		0.020	0.020	0.550	0.000	7.470	0.319	0.000
71		0.020	0.020	0.550	0.000	7.470	0.319	0.000

81	0.020	0.020	0.550	0.000	7.470	0.319	0.000
91	0.020	0.020	0.550	0.000	7.470	0.319	0.000
101	0.020	0.020	0.550	0.000	7.470	0.319	0.000
12	0.020	0.020	0.340	0.001	6.450	0.224	0.000
22	0.020	0.020	0.340	0.001	6.450	0.224	0.000
32	0.020	0.020	0.340	0.001	6.450	0.224	0.000
42	0.020	0.020	0.340	0.001	6.450	0.224	0.000
52	0.020	0.020	0.340	0.001	6.450	0.224	0.000
62	0.020	0.020	0.340	0.001	6.450	0.224	0.000
72	0.020	0.020	0.340	0.001	6.450	0.224	0.000
82	0.020	0.020	0.340	0.001	6.450	0.224	0.000
92	0.020	0.020	0.340	0.001	6.450	0.224	0.000
102	0.020	0.020	0.340	0.001	6.450	0.224	0.000
13	0.020	0.020	0.940	0.004	8.630	0.411	0.000
23	0.020	0.020	0.940	0.004	8.630	0.411	0.000
33	0.020	0.020	0.940	0.004	8.630	0.411	0.000
43	0.020	0.020	0.940	0.004	8.630	0.411	0.000
53	0.020	0.020	0.940	0.004	8.630	0.411	0.000
63	0.020	0.020	0.940	0.004	8.630	0.411	0.000
73	0.020	0.020	0.940	0.004	8.630	0.411	0.000
83	0.020	0.020	0.940	0.004	8.630	0.411	0.000
93	0.020	0.020	0.940	0.004	8.630	0.411	0.000
103	0.020	0.020	0.940	0.004	8.630	0.411	0.000
14	0.020	0.020	0.420	0.001	6.560	0.261	0.000
24	0.020	0.020	0.420	0.001	6.560	0.261	0.000
34	0.020	0.020	0.420	0.001	6.560	0.261	0.000
44	0.020	0.020	0.420	0.001	6.560	0.261	0.000
54	0.020	0.020	0.420	0.001	6.560	0.261	0.000
64	0.020	0.020	0.420	0.001	6.560	0.261	0.000
74	0.020	0.020	0.420	0.001	6.560	0.261	0.000
84	0.020	0.020	0.420	0.001	6.560	0.261	0.000
94	0.020	0.020	0.420	0.001	6.560	0.261	0.000
104	0.020	0.020	0.420	0.001	6.560	0.261	0.000

END PWAT-STATE1

END PERLND

IMPLND

ACTIVITY

#	#	ATMP	SNOW	IWAT	SLD	IWG	IQAL	***
11	1017	0	0	1	0	0	0	

END ACTIVITY

PRINT-INFO

#	#	ATMP	SNOW	IWAT	SLD	IWG	IQAL	PIVL	PYR	***
11	101	6	6	5	6	6	6	1	9	

END PRINT-INFO

GEN-INFO

#	#	NAME	UCI	IN	OUT	ENGL	METR	***
11	101	IMPERV LAND	1	1	1	91	0	

END GEN-INFO

IWAT-PARM1

#	#	CSNO	RTOP	VRS	VNN	RTLI	***
11	101	0	1	0	0	0	

END IWAT-PARM1

IWAT-PARM2

#	#	LSUR	SLSUR	NSUR	RETSC	***
11		200.0	0.2400	0.10	0.05	
21		200.0	0.2400	0.10	0.05	
31		200.0	0.2200	0.10	0.05	
41		300.0	0.1400	0.10	0.05	
51		250.0	0.1900	0.10	0.05	
61		200.0	0.2000	0.10	0.05	
71		250.0	0.1900	0.10	0.05	
81		250.0	0.1900	0.10	0.05	
91		200.0	0.2200	0.10	0.05	
101		250.0	0.1600	0.10	0.05	

END IWAT-PARM2

```

IWAT-PARM3
*** <ILS >   PETMAX   PETMIN
*** x - x   (deg F)   (deg F)
    11 101    40.0    35.0
END IWAT-PARM3

```

```

IWAT-STATE1
*** <ILS >   IWATER state variables (inches)
*** x - x     RETS     SURS
    11 101    0.03    0.01
END IWAT-STATE1

```

END IMPLND

RCHRES

```

ACTIVITY
RCHRES Active Sections (1=Active; 0=Inactive) ***
# - # HYFG ADFG CNFG HTFG SDFG GQFG OXFG NUFG PKFG PHFG ***
    1 10 1 0 0 0 0 0 0 0 0
END ACTIVITY

```

```

PRINT-INFO
RCHRES Print-flags ***
# - # HYDR ADCA CONS HEAT SED GQL OXRX NUTR PLNK PHCB PIVL PYR ***
    1 10 5 5 5 5 5 5 5 5 12
END PRINT-INFO

```

GEN-INFO

```

RCHRES<-----Name----->Next Unit Systems Printer ***
# - # User t-series Engl Metr LKFG ***
      in out
    1 Little Back Creek 1 1 1 1 91 0 0
    2 Upper Back Creek 1 1 1 1 91 0 0
    3 Poages Mill 1 1 1 1 91 0 0
    4 Cave Spring 1 1 1 1 91 0 0
    5 Blue Ridge Parkway 1 1 1 1 91 0 0
    6 Cattail Hollow 1 1 1 1 91 0 0
    7 State Rd #676 1 1 1 1 91 0 0
    8 Red Hill Church 1 1 1 1 91 0 0
    9 State Rd #667 1 1 1 1 91 0 0
   10 Dundee 1 1 1 1 91 0 0
END GEN-INFO

```

HYDR-PARM1

```

RCHRES Flags for HYDR section ***
# - # VC A1 A2 A3 ODFVFG for each ODGTFG for each *** FUNCT for each
      FG FG FG FG possible exit possible exit *** possible exit
      1 2 3 4 5 1 2 3 4 5 *** 1 2 3 4 5
    1 10 0 1 1 1 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 1 1 1 1
END HYDR-PARM1

```

HYDR-PARM2

```

RCHRES ***
# - # FTABNO LEN DELTH STCOR KS DB50 ***
    1 1 2.62 387.0 0.0 0.5 0.01
    2 2 2.99 561.0 0.0 0.5 0.01
    3 3 2.08 69.0 0.0 0.5 0.01
    4 4 2.35 85.0 0.0 0.5 0.01
    5 5 2.78 85.0 0.0 0.5 0.01
    6 6 1.94 36.0 0.0 0.5 0.01
    7 7 2.29 56.0 0.0 0.5 0.01
    8 8 1.96 26.0 0.0 0.5 0.01
    9 9 2.97 52.0 0.0 0.5 0.01
   10 10 3.05 56.0 0.0 0.5 0.01
END HYDR-PARM2

```

HYDR-INIT

```

RCHRES Initial conditions for HYDR section ***
# - # VOL Initial value of COLIND *** Initial value of OUTDGT
      (ac-ft) for each possible exit *** for each possible exit

```

```

EX1 EX2 EX3 EX4 EX5 *** EX1 EX2 EX3 EX4 EX5
1 0.10
2 0.25
3 0.45
4 0.65
5 0.85
6 1.00
7 1.50
8 2.00
9 2.50
10 3.00
END HYDR-INIT
END RCHRES

COPY
TIMESERIES
Copy-opn***
*** x - x NPT NMN
100 0 7
101 110 0 2
END TIMESERIES
END COPY

PLTGEN
PLOTINFO
*** x - x FILE NPT NMN LABL PYR PIVL
100 92 0 10
200 93 0 10
300 94 0 10
END PLOTINFO
GEN-LABELS
*** x - x<-----title-----> <-----y-axis lab---->
100 Reach Outflows Flow (cfs)
200 Land Segment Outflows Runoff (in/hr)
300 Groundwater Recharge Recharge (in/hr)
END GEN-LABELS
SCALING
*** x - x<---ymin--><---ymax--><---ivlin--><---thresh-->
100 0 100000 10
200 0 1.0000 10
300 0 1.0000 10
END SCALING
CURV-DATA
*** x - x <----label----> LIN INT COL TR
100 300 Outflow
END CURV-DATA
END PLTGEN

EXT SOURCES

<-Volume-> <Member> SsysSgap<--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name> x <Name> x tem strg<-factor->strg <Name> x x <Name> x x ***
WDM 210 EVAP ENGL PERLND 11 104 EXTNL PETINP 1 1
WDM 210 EVAP ENGL IMPLND 11 101 EXTNL PETINP 1 1

WDM 82 PRCP ENGL PERLND 11 104 EXTNL PREC 1 1
WDM 82 PRCP ENGL IMPLND 11 101 EXTNL PREC 1 1

WDM 541 FLOW ENGL PLTGEN 100 INPUT MEAN 1 1
WDM 542 FLOW ENGL PLTGEN 100 INPUT MEAN 2 1
WDM 543 FLOW ENGL PLTGEN 100 INPUT MEAN 3 1
WDM 544 FLOW ENGL PLTGEN 100 INPUT MEAN 4 1
WDM 545 FLOW ENGL PLTGEN 100 INPUT MEAN 5 1
WDM 546 FLOW ENGL PLTGEN 100 INPUT MEAN 6 1
WDM 547 FLOW ENGL PLTGEN 100 INPUT MEAN 7 1
WDM 548 FLOW ENGL PLTGEN 100 INPUT MEAN 8 1
WDM 549 FLOW ENGL PLTGEN 100 INPUT MEAN 9 1
WDM 550 FLOW ENGL PLTGEN 100 INPUT MEAN 10 1

WDM 531 SIMQ ENGL PLTGEN 200 INPUT MEAN 1 1
WDM 532 SIMQ ENGL PLTGEN 200 INPUT MEAN 2 1

```

WDM	533	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	3	1
WDM	534	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	4	1
WDM	535	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	5	1
WDM	536	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	6	1
WDM	537	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	7	1
WDM	538	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	8	1
WDM	539	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	9	1
WDM	540	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	10	1
WDM	551	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	1	1
WDM	552	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	2	1
WDM	553	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	3	1
WDM	554	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	4	1
WDM	555	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	5	1
WDM	556	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	6	1
WDM	557	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	7	1
WDM	558	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	8	1
WDM	559	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	9	1
WDM	560	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	10	1

END EXT SOURCES

EXT TARGETS

<-Volume->	<-Grp>	<-Member->	<--Mult-->	Tran	<-Volume->	<Member>	Tsys	Aggr	Amd	***		
<Name>	x	<Name>	x	x<-factor->	strg	<Name>	x	<Name>	qf	tem	strg	strg***
RCHRES	10	ROFLOW	ROVOL	1	13.35965E-4	WDM	320	SIMQ	1	ENGL		REPL
COPY	100	OUTPUT	MEAN	1	12.79971E-5	WDM	321	SURO	1	ENGL		REPL
COPY	100	OUTPUT	MEAN	2	12.79971E-5	WDM	322	IFWO	1	ENGL		REPL
COPY	100	OUTPUT	MEAN	3	12.79971E-5	WDM	323	AGWO	1	ENGL		REPL
COPY	100	OUTPUT	MEAN	4	12.79971E-5	WDM	325	PETX	1	ENGL	AGGR	REPL
COPY	100	OUTPUT	MEAN	5	12.79971E-5	WDM	326	SAET	1	ENGL	AGGR	REPL
COPY	100	OUTPUT	MEAN	6	12.79971E-5	WDM	327	UZSX	1	ENGL	AGGR	REPL
COPY	100	OUTPUT	MEAN	7	12.79971E-5	WDM	328	LZSX	1	ENGL	AGGR	REPL
RCHRES	1	ROFLOW	ROVOL	1	12.1	WDM	541	FLOW	1	ENGL		REPL
RCHRES	2	ROFLOW	ROVOL	1	12.1	WDM	542	FLOW	1	ENGL		REPL
RCHRES	3	ROFLOW	ROVOL	1	12.1	WDM	543	FLOW	1	ENGL		REPL
RCHRES	4	ROFLOW	ROVOL	1	12.1	WDM	544	FLOW	1	ENGL		REPL
RCHRES	5	ROFLOW	ROVOL	1	12.1	WDM	545	FLOW	1	ENGL		REPL
RCHRES	6	ROFLOW	ROVOL	1	12.1	WDM	546	FLOW	1	ENGL		REPL
RCHRES	7	ROFLOW	ROVOL	1	12.1	WDM	547	FLOW	1	ENGL		REPL
RCHRES	8	ROFLOW	ROVOL	1	12.1	WDM	548	FLOW	1	ENGL		REPL
RCHRES	9	ROFLOW	ROVOL	1	12.1	WDM	549	FLOW	1	ENGL		REPL
RCHRES	10	ROFLOW	ROVOL	1	12.1	WDM	550	FLOW	1	ENGL		REPL
COPY	101	OUTPUT	MEAN	1	13.96983E-4	WDM	531	SIMQ	1	ENGL		REPL
COPY	102	OUTPUT	MEAN	1	12.14041E-4	WDM	532	SIMQ	1	ENGL		REPL
COPY	103	OUTPUT	MEAN	1	11.74398E-4	WDM	533	SIMQ	1	ENGL		REPL
COPY	104	OUTPUT	MEAN	1	15.00000E-4	WDM	534	SIMQ	1	ENGL		REPL
COPY	105	OUTPUT	MEAN	1	12.26809E-4	WDM	535	SIMQ	1	ENGL		REPL
COPY	106	OUTPUT	MEAN	1	12.80820E-4	WDM	536	SIMQ	1	ENGL		REPL
COPY	107	OUTPUT	MEAN	1	13.25407E-4	WDM	537	SIMQ	1	ENGL		REPL
COPY	108	OUTPUT	MEAN	1	13.15560E-4	WDM	538	SIMQ	1	ENGL		REPL
COPY	109	OUTPUT	MEAN	1	13.39789E-4	WDM	539	SIMQ	1	ENGL		REPL
COPY	110	OUTPUT	MEAN	1	12.72554E-4	WDM	540	SIMQ	1	ENGL		REPL
COPY	101	OUTPUT	MEAN	2	13.96983E-4	WDM	551	SIMQ	1	ENGL		REPL
COPY	102	OUTPUT	MEAN	2	12.14041E-4	WDM	552	SIMQ	1	ENGL		REPL
COPY	103	OUTPUT	MEAN	2	11.74398E-4	WDM	553	SIMQ	1	ENGL		REPL
COPY	104	OUTPUT	MEAN	2	15.00000E-4	WDM	554	SIMQ	1	ENGL		REPL
COPY	105	OUTPUT	MEAN	2	12.26809E-4	WDM	555	SIMQ	1	ENGL		REPL
COPY	106	OUTPUT	MEAN	2	12.80820E-4	WDM	556	SIMQ	1	ENGL		REPL
COPY	107	OUTPUT	MEAN	2	13.25407E-4	WDM	557	SIMQ	1	ENGL		REPL
COPY	108	OUTPUT	MEAN	2	13.15560E-4	WDM	558	SIMQ	1	ENGL		REPL
COPY	109	OUTPUT	MEAN	2	13.39789E-4	WDM	559	SIMQ	1	ENGL		REPL
COPY	110	OUTPUT	MEAN	2	12.72554E-4	WDM	560	SIMQ	1	ENGL		REPL

END EXT TARGETS

SCHEMATIC

<-Volume->	<-Area-->	<-Volume->	<ML#>	***
<Name> x	<-factor->	<Name> x		***
PERLND 11	1294.	RCHRES 1	1	
PERLND 12	719.	RCHRES 1	1	
PERLND 13	19.	RCHRES 1	1	
PERLND 14	81.	RCHRES 1	1	
IMPLND 11	405.	RCHRES 1	3	
PERLND 21	2459.	RCHRES 2	1	
PERLND 22	1278.	RCHRES 2	1	
PERLND 23	37.	RCHRES 2	1	
PERLND 24	184.	RCHRES 2	1	
IMPLND 21	714.	RCHRES 2	3	
PERLND 31	2615.	RCHRES 3	1	
PERLND 32	1845.	RCHRES 3	1	
PERLND 33	72.	RCHRES 3	1	
PERLND 34	179.	RCHRES 3	1	
IMPLND 31	1022.	RCHRES 3	3	
PERLND 41	404.	RCHRES 4	1	
PERLND 42	901.	RCHRES 4	1	
PERLND 43	85.	RCHRES 4	1	
PERLND 44	85.	RCHRES 4	1	
IMPLND 41	525.	RCHRES 4	3	
PERLND 51	1516.	RCHRES 5	1	
PERLND 52	1291.	RCHRES 5	1	
PERLND 53	591.	RCHRES 5	1	
PERLND 54	192.	RCHRES 5	1	
IMPLND 51	818.	RCHRES 5	3	
PERLND 61	1491.	RCHRES 6	1	
PERLND 62	1179.	RCHRES 6	1	
PERLND 63	71.	RCHRES 6	1	
PERLND 64	143.	RCHRES 6	1	
IMPLND 61	677.	RCHRES 6	3	
PERLND 71	1157.	RCHRES 7	1	
PERLND 72	1080.	RCHRES 7	1	
PERLND 73	65.	RCHRES 7	1	
PERLND 74	124.	RCHRES 7	1	
IMPLND 71	620.	RCHRES 7	3	
PERLND 81	1146.	RCHRES 8	1	
PERLND 82	960.	RCHRES 8	1	
PERLND 83	328.	RCHRES 8	1	
PERLND 84	130.	RCHRES 8	1	
IMPLND 81	602.	RCHRES 8	3	
PERLND 91	1328.	RCHRES 9	1	
PERLND 92	876.	RCHRES 9	1	
PERLND 93	103.	RCHRES 9	1	
PERLND 94	141.	RCHRES 9	1	
IMPLND 91	494.	RCHRES 9	3	
PERLND 101	796.	RCHRES 10	1	
PERLND 102	1523.	RCHRES 10	1	
PERLND 103	272.	RCHRES 10	1	
PERLND 104	192.	RCHRES 10	1	
IMPLND 101	886.	RCHRES 10	3	
RCHRES 1		RCHRES 3	5	
RCHRES 2		RCHRES 3	5	
RCHRES 3		RCHRES 4	5	
RCHRES 4		RCHRES 5	5	
RCHRES 5		RCHRES 6	5	
RCHRES 6		RCHRES 7	5	
RCHRES 7		RCHRES 8	5	
RCHRES 8		RCHRES 9	5	
RCHRES 9		RCHRES 10	5	

PERLND	11	1294.	COPY	100	90
PERLND	12	719.	COPY	100	90
PERLND	13	19.	COPY	100	90
PERLND	14	81.	COPY	100	90
IMPLND	11	405.	COPY	100	91
PERLND	11	1294.	COPY	101	92
PERLND	12	719.	COPY	101	92
PERLND	13	19.	COPY	101	92
PERLND	14	81.	COPY	101	92
IMPLND	11	405.	COPY	101	93
PERLND	21	2459.	COPY	100	90
PERLND	22	1278.	COPY	100	90
PERLND	23	37.	COPY	100	90
PERLND	24	184.	COPY	100	90
IMPLND	21	714.	COPY	100	91
PERLND	21	2459.	COPY	102	92
PERLND	22	1278.	COPY	102	92
PERLND	23	37.	COPY	102	92
PERLND	24	184.	COPY	102	92
IMPLND	21	714.	COPY	102	93
PERLND	31	2615.	COPY	100	90
PERLND	32	1845.	COPY	100	90
PERLND	33	72.	COPY	100	90
PERLND	34	179.	COPY	100	90
IMPLND	31	1022.	COPY	100	91
PERLND	31	2615.	COPY	103	92
PERLND	32	1845.	COPY	103	92
PERLND	33	72.	COPY	103	92
PERLND	34	179.	COPY	103	92
IMPLND	31	1022.	COPY	103	93
PERLND	41	404.	COPY	100	90
PERLND	42	901.	COPY	100	90
PERLND	43	85.	COPY	100	90
PERLND	44	85.	COPY	100	90
IMPLND	41	525.	COPY	100	91
PERLND	41	404.	COPY	104	92
PERLND	42	901.	COPY	104	92
PERLND	43	85.	COPY	104	92
PERLND	44	85.	COPY	104	92
IMPLND	41	525.	COPY	104	93
PERLND	51	1516.	COPY	100	90
PERLND	52	1291.	COPY	100	90
PERLND	53	591.	COPY	100	90
PERLND	54	192.	COPY	100	90
IMPLND	51	818.	COPY	100	91
PERLND	51	1516.	COPY	105	92
PERLND	52	1291.	COPY	105	92
PERLND	53	591.	COPY	105	92
PERLND	54	192.	COPY	105	92
IMPLND	51	818.	COPY	105	93
PERLND	61	1491.	COPY	100	90
PERLND	62	1179.	COPY	100	90
PERLND	63	71.	COPY	100	90
PERLND	64	143.	COPY	100	90
IMPLND	61	677.	COPY	100	91
PERLND	61	1491.	COPY	106	92
PERLND	62	1179.	COPY	106	92
PERLND	63	71.	COPY	106	92
PERLND	64	143.	COPY	106	92
IMPLND	61	677.	COPY	106	93
PERLND	71	1157.	COPY	100	90
PERLND	72	1080.	COPY	100	90
PERLND	73	65.	COPY	100	90
PERLND	74	124.	COPY	100	90

IMPLND	71	620.	COPY	100	91
PERLND	71	1157.	COPY	107	92
PERLND	72	1080.	COPY	107	92
PERLND	73	65.	COPY	107	92
PERLND	74	124.	COPY	107	92
IMPLND	71	620.	COPY	107	93
PERLND	81	1146.	COPY	100	90
PERLND	82	960.	COPY	100	90
PERLND	83	328.	COPY	100	90
PERLND	84	130.	COPY	100	90
IMPLND	81	602.	COPY	100	91
PERLND	81	1146.	COPY	108	92
PERLND	82	960.	COPY	108	92
PERLND	83	328.	COPY	108	92
PERLND	84	130.	COPY	108	92
IMPLND	81	602.	COPY	108	93
PERLND	91	1328.	COPY	100	90
PERLND	92	876.	COPY	100	90
PERLND	93	103.	COPY	100	90
PERLND	94	141.	COPY	100	90
IMPLND	91	494.	COPY	100	91
PERLND	91	1328.	COPY	109	92
PERLND	92	876.	COPY	109	92
PERLND	93	103.	COPY	109	92
PERLND	94	141.	COPY	109	92
IMPLND	91	494.	COPY	109	93
PERLND	101	796.	COPY	100	90
PERLND	102	1523.	COPY	100	90
PERLND	103	272.	COPY	100	90
PERLND	104	192.	COPY	100	90
IMPLND	101	886.	COPY	100	91
PERLND	101	796.	COPY	110	92
PERLND	102	1523.	COPY	110	92
PERLND	103	272.	COPY	110	92
PERLND	104	192.	COPY	110	92
IMPLND	101	886.	COPY	110	93

END SCHEMATIC

MASS-LINK

```

MASS-LINK      1
<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name>      <Name> x x<-factor->strg <Name>      <Name> x x ***
PERLND      PWATER PERO      0.0533333      RCHRES      INFLOW IVOL
END MASS-LINK      1

```

```

MASS-LINK      3
<Srce>      <-Grp> <-Member-><--Mult-->      <Targ>      <-Grp> <-Member-> ***
<Name>      <Name> <Name> # #<-factor->      <Name>      <Name> <Name> # # ***
IMPLND      IWATER SURO      0.0533333      RCHRES      INFLOW IVOL
END MASS-LINK      3

```

```

MASS-LINK      5
<Srce>      <-Grp> <-Member-><--Mult-->      <Targ>      <-Grp> <-Member-> ***
<Name>      <Name> <Name> # #<-factor->      <Name>      <Name> <Name> # # ***
RCHRES      ROFLOW      RCHRES      INFLOW
END MASS-LINK      5

```

```

MASS-LINK      90
<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name>      <Name> x x<-factor->strg <Name>      <Name> x x ***
PERLND      PWATER SURO      COPY      INPUT MEAN 1
PERLND      PWATER IFWO      COPY      INPUT MEAN 2
PERLND      PWATER AGWO      COPY      INPUT MEAN 3
PERLND      PWATER PET      COPY      INPUT MEAN 4
PERLND      PWATER TAET      COPY      INPUT MEAN 5
PERLND      PWATER UZS      COPY      INPUT MEAN 6
PERLND      PWATER LZS      COPY      INPUT MEAN 7

```



```

END MASS-LINK 90

MASS-LINK 91
<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name> <Name> x x<-factor->strg <Name> <Name> x x ***
IMPLND IWATER SURO COPY INPUT MEAN 1
IMPLND IWATER PET COPY INPUT MEAN 4
IMPLND IWATER IMPEV COPY INPUT MEAN 5
END MASS-LINK 91

MASS-LINK 92
<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name> <Name> x x<-factor->strg <Name> <Name> x x ***
PERLND PWATER PERO COPY INPUT MEAN 1
PERLND PWATER AGWI COPY INPUT MEAN 2
END MASS-LINK 92

MASS-LINK 93
<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name> <Name> x x<-factor->strg <Name> <Name> x x ***
IMPLND IWATER SURO COPY INPUT MEAN 1
END MASS-LINK 93
END MASS-LINK

```

FTABLES

```

FTABLE 1
ROWS COLS ***
15 4
DEPTH AREA VOLUME DISCH ***
(FT) (ACRES) (AC-FT) (CFS) ***
0.00 1.90 0.00 0.00
0.20 1.97 0.39 2.66
0.40 2.03 0.79 8.43
0.60 2.09 1.20 16.54
0.80 2.16 1.62 26.70
1.00 2.22 2.06 38.73
1.20 2.28 2.51 52.50
1.40 2.35 2.97 67.95
1.60 2.41 3.45 85.02
1.80 2.47 3.94 103.65
2.00 2.54 4.44 123.83
4.00 3.17 10.14 408.06
8.00 4.44 25.36 1443.51
12.00 5.71 45.65 3184.35
18.00 7.61 85.59 7362.11
END FTABLE 1

```

```

FTABLE 2
ROWS COLS ***
15 4
DEPTH AREA VOLUME DISCH ***
(FT) (ACRES) (AC-FT) (CFS) ***
0.00 2.53 0.00 0.00
0.20 2.61 0.51 3.43
0.40 2.68 1.04 10.87
0.60 2.75 1.59 21.33
0.80 2.82 2.14 34.41
1.00 2.90 2.72 49.89
1.20 2.97 3.30 67.61
1.40 3.04 3.90 87.46
1.60 3.11 4.52 109.35
1.80 3.19 5.15 133.23
2.00 3.26 5.79 159.04
4.00 3.98 13.03 519.10
8.00 5.43 31.86 1799.90
12.00 6.88 56.48 3905.86
21.00 10.35 134.42 12263.77
END FTABLE 2

```

```

FTABLE 3
ROWS COLS ***
16 4
DEPTH AREA VOLUME DISCH ***

```

(FT)	(ACRES)	(AC-FT)	(CFS)	***
0.00	4.29	0.00	0.00	
0.20	4.42	0.87	3.68	
0.40	4.55	1.77	11.69	
0.60	4.67	2.69	23.02	
0.80	4.80	3.64	37.28	
1.00	4.92	4.61	54.22	
1.30	5.11	6.11	84.35	
1.70	5.37	8.21	132.84	
2.00	5.56	9.85	175.20	
2.30	5.75	11.54	222.55	
2.70	6.00	13.89	293.34	
3.00	6.19	15.72	352.14	
6.00	8.08	37.12	1211.65	
9.00	9.98	64.21	2596.60	
12.00	11.87	96.98	4566.48	
36.00	27.02	563.67	48712.37	

END FTABLE 3  
FTABLE 4  
ROWS COLS \*\*\*  
16 4

DEPTH	AREA	VOLUME	DISCH	***
(FT)	(ACRES)	(AC-FT)	(CFS)	***
0.00	6.12	0.00	0.00	
0.20	6.29	1.24	4.15	
0.40	6.46	2.52	13.20	
0.60	6.63	3.83	25.99	
0.80	6.80	5.17	42.06	
1.00	6.98	6.55	61.14	
1.30	7.23	8.68	95.03	
1.70	7.57	11.64	149.46	
2.00	7.83	13.95	196.90	
2.30	8.09	16.34	249.83	
2.70	8.43	19.64	328.77	
3.00	8.68	22.21	394.17	
6.00	11.25	52.10	1338.90	
9.00	13.81	89.68	2535.59	
12.00	16.37	134.95	4936.63	
36.00	36.87	773.82	50457.43	

END FTABLE 4  
FTABLE 5  
ROWS COLS \*\*\*  
16 4

DEPTH	AREA	VOLUME	DISCH	***
(FT)	(ACRES)	(AC-FT)	(CFS)	***
0.00	8.94	0.00	0.00	
0.20	9.15	1.81	4.64	
0.40	9.35	3.66	14.75	
0.60	9.55	5.55	29.03	
0.80	9.75	7.48	46.94	
1.00	9.96	9.45	68.19	
1.30	10.26	12.48	105.86	
1.70	10.66	16.67	166.19	
2.00	10.97	19.91	218.59	
2.30	11.27	23.25	276.88	
2.70	11.68	27.84	363.51	
3.00	11.98	31.39	435.02	
6.00	15.02	71.89	1448.46	
9.00	18.06	121.50	3008.60	
12.00	21.09	180.22	5147.54	
58.00	67.67	2221.75	142706.41	

END FTABLE 5  
FTABLE 6  
ROWS COLS \*\*\*  
17 4

DEPTH	AREA	VOLUME	DISCH	***
(FT)	(ACRES)	(AC-FT)	(CFS)	***
0.00	7.64	0.00	0.00	
0.20	7.78	1.54	5.06	
0.40	7.92	3.11	16.08	
0.60	8.06	4.71	31.63	

0.80	8.20	6.34	51.14	
1.00	8.34	7.99	74.27	
1.30	8.56	10.53	115.24	
1.70	8.84	14.01	180.76	
2.00	9.05	16.69	237.60	
2.30	9.26	19.44	300.75	
2.70	9.54	23.20	394.44	
3.00	9.76	26.09	471.65	
6.00	11.87	58.53	1556.19	
9.00	13.99	97.32	3202.02	
12.00	16.10	142.45	5430.19	
15.00	18.22	193.93	8276.35	
58.00	48.54	1629.24	141041.23	

END FTABLE 6  
FTABLE 7  
ROWS COLS \*\*\*  
16 4

DEPTH	AREA	VOLUME	DISCH	***
(FT)	(ACRES)	(AC-FT)	(CFS)	***
0.00	10.53	0.00	0.00	
0.20	10.73	2.13	8.35	
0.40	10.92	4.29	26.56	
0.60	11.11	6.49	52.31	
0.80	11.31	8.74	84.68	
1.00	11.50	11.02	123.11	
1.30	11.79	14.51	191.34	
1.70	12.18	19.31	300.81	
2.00	12.47	23.00	396.05	
2.30	12.76	26.79	502.14	
2.70	13.15	31.97	660.01	
3.00	13.44	35.96	790.47	
6.00	16.35	80.66	2647.03	
9.00	19.26	134.08	5515.92	
12.00	22.17	196.24	9455.89	
24.00	33.81	532.16	37571.06	

END FTABLE 7  
FTABLE 8  
ROWS COLS \*\*\*  
17 4

DEPTH	AREA	VOLUME	DISCH	***
(FT)	(ACRES)	(AC-FT)	(CFS)	***
0.00	10.34	0.00	0.00	
0.20	10.53	2.09	8.49	
0.40	10.72	4.21	27.01	
0.60	10.91	6.37	53.19	
0.80	11.10	8.57	86.08	
1.00	11.29	10.81	125.11	
1.30	11.57	14.24	194.36	
1.70	11.95	18.95	305.34	
2.00	12.24	22.57	401.78	
2.30	12.52	26.29	509.10	
2.70	12.90	31.37	668.59	
3.00	13.19	35.29	800.22	
6.00	16.04	79.13	2660.86	
9.00	18.89	131.53	5505.65	
12.00	21.74	192.48	9376.55	
15.00	24.59	261.98	14339.04	
25.00	34.10	555.45	39708.38	

END FTABLE 8  
FTABLE 9  
ROWS COLS \*\*\*  
18 4

DEPTH	AREA	VOLUME	DISCH	***
(FT)	(ACRES)	(AC-FT)	(CFS)	***
0.00	17.26	0.00	0.00	
0.20	17.55	3.48	9.93	
0.40	17.83	7.02	31.59	
0.60	18.12	10.61	62.19	
0.80	18.41	14.27	100.62	
1.00	18.70	17.98	146.22	
1.30	19.13	23.65	227.07	

1.70	19.70	31.42	356.56
2.00	20.14	37.39	469.02
2.30	20.57	43.50	594.06
2.70	21.14	51.84	779.75
3.00	21.57	58.25	932.87
6.00	25.89	129.44	3087.80
9.00	30.20	213.58	6359.15
12.00	34.52	310.67	10782.20
15.00	38.83	420.69	16421.67
25.00	53.22	880.94	44979.76
50.00	89.17	2660.79	197754.51

END FTABLE 9  
 FTABLE 10  
 ROWS COLS \*\*\*  
 18 4

DEPTH (FT)	AREA (ACRES)	VOLUME (AC-FT)	DISCH (CFS)	***
0.00	19.58	0.00	0.00	***
0.20	19.88	3.95	11.22	
0.40	20.18	7.95	35.67	
0.60	20.47	12.02	70.22	
0.80	20.77	16.14	113.60	
1.00	21.06	20.32	165.03	
1.30	21.51	26.71	256.20	
1.70	22.10	35.43	402.07	
2.00	22.54	42.12	528.65	
2.30	22.98	48.95	669.29	
2.70	23.57	58.26	877.93	
3.00	24.02	65.40	1049.81	
6.00	28.45	144.11	3455.64	
9.00	32.89	236.12	7075.47	
12.00	37.32	341.43	11929.84	
15.00	41.75	460.04	18075.19	
25.00	56.53	951.48	48802.16	
50.00	93.49	2826.74	209904.75	

END FTABLE 10  
 END FTABLES  
 END RUN

# Low Density Full Build Out without Restrictions

RUN

GLOBAL

Back Creek above Dundee, VA  
START 1956 10 1 0 0 END 1999 9 30 0 0  
RUN INTERP OUTPUT LEVEL 3 2  
RESUME 0 RUN 1 UNIT SYSTEM 1  
END GLOBAL

FILES

<FILE> <UN#>\*\*\*<----FILE NAME----->  
WDM 16 backcr.wdm  
MESSU 24 scenario.ech  
91 scenario.out  
92 backcr1.plt  
93 backcr2.plt  
94 backcr3.plt

END FILES

OPN SEQUENCE

INGRP INDELT 01:00  
PERLND 11  
PERLND 12  
PERLND 13  
PERLND 14  
IMPLND 11  
RCHRES 1  
PERLND 21  
PERLND 22  
PERLND 23  
PERLND 24  
IMPLND 21  
RCHRES 2  
PERLND 31  
PERLND 32  
PERLND 33  
PERLND 34  
IMPLND 31  
RCHRES 3  
PERLND 41  
PERLND 42  
PERLND 43  
PERLND 44  
IMPLND 41  
RCHRES 4  
PERLND 51  
PERLND 52  
PERLND 53  
PERLND 54  
IMPLND 51  
RCHRES 5  
PERLND 61  
PERLND 62  
PERLND 63  
PERLND 64  
IMPLND 61  
RCHRES 6  
PERLND 71  
PERLND 72  
PERLND 73  
PERLND 74  
IMPLND 71  
RCHRES 7  
PERLND 81  
PERLND 82  
PERLND 83

```

PERLND      84
IMPLND      81
RCHRES       8
PERLND      91
PERLND      92
PERLND      93
PERLND      94
IMPLND      91
RCHRES       9
PERLND     101
PERLND     102
PERLND     103
PERLND     104
IMPLND     101
RCHRES     10
COPY        100
COPY        101
COPY        102
COPY        103
COPY        104
COPY        105
COPY        106
COPY        107
COPY        108
COPY        109
COPY        110
PLTGEN     100
PLTGEN     200
PLTGEN     300
END INGRP
END OPN SEQUENCE

```

```

PERLND
ACTIVITY
# # ATMP SNOW PWAT SED PST PWG PQAL MSTL PEST NITR PHOS TRAC ***
11 104 0 0 1 0 0 0 0 0 0 0 0 0 0
END ACTIVITY

```

```

PRINT-INFO
# # ATMP SNOW PWAT SED PST PWG PQAL MSTL PEST NITR PHOS TRAC PIVL***PY
11 104 6 6 5 6 6 6 6 6 6 6 6 6 1 9
END PRINT-INFO

```

```

GEN-INFO
# # NAME NBLKS UCI IN OUT ENGL METR ***
11 FOREST 1 1 1 1 91 0
21 FOREST 1 1 1 1 91 0
31 FOREST 1 1 1 1 91 0
41 FOREST 1 1 1 1 91 0
51 FOREST 1 1 1 1 91 0
61 FOREST 1 1 1 1 91 0
71 FOREST 1 1 1 1 91 0
81 FOREST 1 1 1 1 91 0
91 FOREST 1 1 1 1 91 0
101 FOREST 1 1 1 1 91 0
12 HERBACEOUS/AG 1 1 1 1 91 0
22 HERBACEOUS/AG 1 1 1 1 91 0
32 HERBACEOUS/AG 1 1 1 1 91 0
42 HERBACEOUS/AG 1 1 1 1 91 0
52 HERBACEOUS/AG 1 1 1 1 91 0
62 HERBACEOUS/AG 1 1 1 1 91 0
72 HERBACEOUS/AG 1 1 1 1 91 0
82 HERBACEOUS/AG 1 1 1 1 91 0
92 HERBACEOUS/AG 1 1 1 1 91 0
102 HERBACEOUS/AG 1 1 1 1 91 0
13 DISTURBED 1 1 1 1 91 0
23 DISTURBED 1 1 1 1 91 0
33 DISTURBED 1 1 1 1 91 0
43 DISTURBED 1 1 1 1 91 0
53 DISTURBED 1 1 1 1 91 0
63 DISTURBED 1 1 1 1 91 0

```

73	DISTURBED	1	1	1	1	91	0
83	DISTURBED	1	1	1	1	91	0
93	DISTURBED	1	1	1	1	91	0
103	DISTURBED	1	1	1	1	91	0
14	MIXED FOREST/AG	1	1	1	1	91	0
24	MIXED FOREST/AG	1	1	1	1	91	0
34	MIXED FOREST/AG	1	1	1	1	91	0
44	MIXED FOREST/AG	1	1	1	1	91	0
54	MIXED FOREST/AG	1	1	1	1	91	0
64	MIXED FOREST/AG	1	1	1	1	91	0
74	MIXED FOREST/AG	1	1	1	1	91	0
84	MIXED FOREST/AG	1	1	1	1	91	0
94	MIXED FOREST/AG	1	1	1	1	91	0
104	MIXED FOREST/AG	1	1	1	1	91	0

END GEN-INFO

PWAT-PARM1

#	#	CSNO	RTOP	UZFG	VCS	VUZ	NVV	VIFW	VIRC	VLE	***
11		0	1	1	1	0	0	0	0	1	0
12		0	1	1	1	1	0	0	0	1	0
13		0	1	1	1	0	0	0	0	1	0
14		0	1	1	1	1	0	0	0	1	0
21		0	1	1	1	0	0	0	0	1	0
22		0	1	1	1	1	0	0	0	1	0
23		0	1	1	1	0	0	0	0	1	0
24		0	1	1	1	1	0	0	0	1	0
31		0	1	1	1	0	0	0	0	1	0
32		0	1	1	1	1	0	0	0	1	0
33		0	1	1	1	0	0	0	0	1	0
34		0	1	1	1	1	0	0	0	1	0
41		0	1	1	1	0	0	0	0	1	0
42		0	1	1	1	1	0	0	0	1	0
43		0	1	1	1	0	0	0	0	1	0
44		0	1	1	1	1	0	0	0	1	0
51		0	1	1	1	0	0	0	0	1	0
52		0	1	1	1	1	0	0	0	1	0
53		0	1	1	1	0	0	0	0	1	0
54		0	1	1	1	1	0	0	0	1	0
61		0	1	1	1	0	0	0	0	1	0
62		0	1	1	1	1	0	0	0	1	0
63		0	1	1	1	0	0	0	0	1	0
64		0	1	1	1	1	0	0	0	1	0
71		0	1	1	1	0	0	0	0	1	0
72		0	1	1	1	1	0	0	0	1	0
73		0	1	1	1	0	0	0	0	1	0
74		0	1	1	1	1	0	0	0	1	0
81		0	1	1	1	0	0	0	0	1	0
82		0	1	1	1	1	0	0	0	1	0
83		0	1	1	1	0	0	0	0	1	0
84		0	1	1	1	1	0	0	0	1	0
91		0	1	1	1	0	0	0	0	1	0
92		0	1	1	1	1	0	0	0	1	0
93		0	1	1	1	0	0	0	0	1	0
94		0	1	1	1	1	0	0	0	1	0
101		0	1	1	1	0	0	0	0	1	0
102		0	1	1	1	1	0	0	0	1	0
103		0	1	1	1	0	0	0	0	1	0
104		0	1	1	1	1	0	0	0	1	0

END PWAT-PARM1

PWAT-PARM2

#	#	***FOREST	LZSN	INFILT	LSUR	SLSUR	KVARY	AGWR
11		0.000	9.5	0.105	200.	0.24000	0.000	.960
21		0.000	9.5	0.105	200.	0.24000	0.000	.960
31		0.000	9.5	0.105	200.	0.22000	0.000	.960
41		0.000	9.5	0.105	300.	0.14000	0.000	.960
51		0.000	9.5	0.105	250.	0.19000	0.000	.960
61		0.000	9.5	0.105	200.	0.20000	0.000	.960
71		0.000	9.5	0.105	250.	0.19000	0.000	.960
81		0.000	9.5	0.105	250.	0.19000	0.000	.960
91		0.000	9.5	0.105	200.	0.22000	0.000	.960

101	0.000	9.5	0.105	250.	0.16000	0.000	.960
12	0.000	9.5	0.086	200.	0.24000	0.000	.960
22	0.000	9.5	0.086	200.	0.24000	0.000	.960
32	0.000	9.5	0.086	200.	0.22000	0.000	.960
42	0.000	9.5	0.086	300.	0.14000	0.000	.960
52	0.000	9.5	0.086	250.	0.19000	0.000	.960
62	0.000	9.5	0.086	200.	0.20000	0.000	.960
72	0.000	9.5	0.086	250.	0.19000	0.000	.960
82	0.000	9.5	0.086	250.	0.19000	0.000	.960
92	0.000	9.5	0.086	200.	0.22000	0.000	.960
102	0.000	9.5	0.086	250.	0.16000	0.000	.960
13	0.000	9.5	0.067	200.	0.24000	0.000	.960
23	0.000	9.5	0.067	200.	0.24000	0.000	.960
33	0.000	9.5	0.067	200.	0.22000	0.000	.960
43	0.000	9.5	0.067	300.	0.14000	0.000	.960
53	0.000	9.5	0.067	250.	0.19000	0.000	.960
63	0.000	9.5	0.067	200.	0.20000	0.000	.960
73	0.000	9.5	0.067	250.	0.19000	0.000	.960
83	0.000	9.5	0.067	250.	0.19000	0.000	.960
93	0.000	9.5	0.067	200.	0.22000	0.000	.960
103	0.000	9.5	0.067	250.	0.16000	0.000	.960
14	0.000	9.5	0.096	200.	0.24000	0.000	.960
24	0.000	9.5	0.096	200.	0.24000	0.000	.960
34	0.000	9.5	0.096	200.	0.22000	0.000	.960
44	0.000	9.5	0.096	300.	0.14000	0.000	.960
54	0.000	9.5	0.096	250.	0.19000	0.000	.960
64	0.000	9.5	0.096	200.	0.20000	0.000	.960
74	0.000	9.5	0.096	250.	0.19000	0.000	.960
84	0.000	9.5	0.096	250.	0.19000	0.000	.960
94	0.000	9.5	0.096	200.	0.22000	0.000	.960
104	0.000	9.5	0.096	250.	0.16000	0.000	.960

END PWAT-PARM2

PWAT-PARM3

***<PLS>	PETMAX	PETMIN	INFEXP	INFILD	DEEPFR	BASETP	AGWETP
***x - x	(deg F)	(deg F)					
11 104	40.0	35.0	2.0	2.0	0.210	0.000	0.000

END PWAT-PARM3

PWAT-PARM4

#	#	CEPSC	UZSN	NSUR	INTFW	IRC	LZETP	***
11		0.200	1.30	0.40	3.7	0.65	0.90	
21		0.200	1.30	0.40	3.7	0.65	0.90	
31		0.200	1.30	0.40	3.7	0.65	0.90	
41		0.200	1.30	0.40	3.7	0.65	0.90	
51		0.200	1.30	0.40	3.7	0.65	0.90	
61		0.200	1.30	0.40	3.7	0.65	0.90	
71		0.200	1.30	0.40	3.7	0.65	0.90	
81		0.200	1.30	0.40	3.7	0.65	0.90	
91		0.200	1.30	0.40	3.7	0.65	0.90	
101		0.200	1.30	0.40	3.7	0.65	0.90	
12		0.200	1.00	0.20	2.8	0.60	0.90	
22		0.200	1.00	0.20	2.8	0.60	0.90	
32		0.200	1.00	0.20	2.8	0.60	0.90	
42		0.200	1.00	0.20	2.8	0.60	0.90	
52		0.200	1.00	0.20	2.8	0.60	0.90	
62		0.200	1.00	0.20	2.8	0.60	0.90	
72		0.200	1.00	0.20	2.8	0.60	0.90	
82		0.200	1.00	0.20	2.8	0.60	0.90	
92		0.200	1.00	0.20	2.8	0.60	0.90	
102		0.200	1.00	0.20	2.8	0.60	0.90	
13		0.200	0.92	0.15	2.8	0.60	0.90	
23		0.200	0.92	0.15	2.8	0.60	0.90	
33		0.200	0.92	0.15	2.8	0.60	0.90	
43		0.200	0.92	0.15	2.8	0.60	0.90	
53		0.200	0.92	0.15	2.8	0.60	0.90	
63		0.200	0.92	0.15	2.8	0.60	0.90	
73		0.200	0.92	0.15	2.8	0.60	0.90	
83		0.200	0.92	0.15	2.8	0.60	0.90	
93		0.200	0.92	0.15	2.8	0.60	0.90	
103		0.200	0.92	0.15	2.8	0.60	0.90	



14	0.200	1.00	0.30	3.3	0.63	0.90
24	0.200	1.00	0.30	3.3	0.63	0.90
34	0.200	1.00	0.30	3.3	0.63	0.90
44	0.200	1.00	0.30	3.3	0.63	0.90
54	0.200	1.00	0.30	3.3	0.63	0.90
64	0.200	1.00	0.30	3.3	0.63	0.90
74	0.200	1.00	0.30	3.3	0.63	0.90
84	0.200	1.00	0.30	3.3	0.63	0.90
94	0.200	1.00	0.30	3.3	0.63	0.90
104	0.200	1.00	0.30	3.3	0.63	0.90

END PWAT-PARM4

PWAT-PARM5  
 \*\*\* <PLS > FZG FZGL  
 \*\*\* x - x  
 11 104 1.0 0.1  
 END PWAT-PARM5

MON-INTERCEP  
 \*\*\* <PLS > Interception storage capacity at start of each month (in)  
 \*\*\* x - x JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC  
 11 0.0250.0250.0250.1000.3500.4000.4000.4000.3500.1000.0250.025  
 21 0.0250.0250.0250.1000.3500.4000.4000.4000.3500.1000.0250.025  
 31 0.0250.0250.0250.1000.3500.4000.4000.4000.3500.1000.0250.025  
 41 0.0250.0250.0250.1000.3500.4000.4000.4000.3500.1000.0250.025  
 51 0.0250.0250.0250.1000.3500.4000.4000.4000.3500.1000.0250.025  
 61 0.0250.0250.0250.1000.3500.4000.4000.4000.3500.1000.0250.025  
 71 0.0250.0250.0250.1000.3500.4000.4000.4000.3500.1000.0250.025  
 81 0.0250.0250.0250.1000.3500.4000.4000.4000.3500.1000.0250.025  
 91 0.0250.0250.0250.1000.3500.4000.4000.4000.3500.1000.0250.025  
 101 0.0250.0250.0250.1000.3500.4000.4000.4000.3500.1000.0250.025  
 12 0.0250.0250.0250.1000.2500.3000.3000.3000.2500.1000.0250.025  
 22 0.0250.0250.0250.1000.2500.3000.3000.3000.2500.1000.0250.025  
 32 0.0250.0250.0250.1000.2500.3000.3000.3000.2500.1000.0250.025  
 42 0.0250.0250.0250.1000.2500.3000.3000.3000.2500.1000.0250.025  
 52 0.0250.0250.0250.1000.2500.3000.3000.3000.2500.1000.0250.025  
 62 0.0250.0250.0250.1000.2500.3000.3000.3000.2500.1000.0250.025  
 72 0.0250.0250.0250.1000.2500.3000.3000.3000.2500.1000.0250.025  
 82 0.0250.0250.0250.1000.2500.3000.3000.3000.2500.1000.0250.025  
 92 0.0250.0250.0250.1000.2500.3000.3000.3000.2500.1000.0250.025  
 102 0.0250.0250.0250.1000.2500.3000.3000.3000.2500.1000.0250.025  
 13 0.0250.0250.0250.1000.1500.1500.1500.1500.1000.1000.0250.025  
 23 0.0250.0250.0250.1000.1500.1500.1500.1500.1000.1000.0250.025  
 33 0.0250.0250.0250.1000.1500.1500.1500.1500.1000.1000.0250.025  
 43 0.0250.0250.0250.1000.1500.1500.1500.1500.1000.1000.0250.025  
 53 0.0250.0250.0250.1000.1500.1500.1500.1500.1000.1000.0250.025  
 63 0.0250.0250.0250.1000.1500.1500.1500.1500.1000.1000.0250.025  
 73 0.0250.0250.0250.1000.1500.1500.1500.1500.1000.1000.0250.025  
 83 0.0250.0250.0250.1000.1500.1500.1500.1500.1000.1000.0250.025  
 93 0.0250.0250.0250.1000.1500.1500.1500.1500.1000.1000.0250.025  
 103 0.0250.0250.0250.1000.1500.1500.1500.1500.1000.1000.0250.025  
 14 0.0250.0250.0250.1000.3000.3500.3500.3500.3000.1000.0250.025  
 24 0.0250.0250.0250.1000.3000.3500.3500.3500.3000.1000.0250.025  
 34 0.0250.0250.0250.1000.3000.3500.3500.3500.3000.1000.0250.025  
 44 0.0250.0250.0250.1000.3000.3500.3500.3500.3000.1000.0250.025  
 54 0.0250.0250.0250.1000.3000.3500.3500.3500.3000.1000.0250.025  
 64 0.0250.0250.0250.1000.3000.3500.3500.3500.3000.1000.0250.025  
 74 0.0250.0250.0250.1000.3000.3500.3500.3500.3000.1000.0250.025  
 84 0.0250.0250.0250.1000.3000.3500.3500.3500.3000.1000.0250.025  
 94 0.0250.0250.0250.1000.3000.3500.3500.3500.3000.1000.0250.025  
 104 0.0250.0250.0250.1000.3000.3500.3500.3500.3000.1000.0250.025  
 END MON-INTERCEP

MON-UZSN  
 \*\*\* <PLS > Upper zone storage at start of each month  
 \*\*\* x - x JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC  
 12 0.1000.1000.2000.4001.0401.2801.2801.2501.0400.4000.2000.100  
 22 0.1000.1000.2000.4001.0401.2801.2801.2801.0400.4000.2000.100  
 32 0.1000.1000.2000.4001.0401.2801.2801.2801.0400.4000.2000.100  
 42 0.1000.1000.2000.4001.0401.2801.2801.2801.0400.4000.2000.100  
 52 0.1000.1000.2000.4001.0401.2801.2801.2801.0400.4000.2000.100

```

62 0.1000.1000.2000.4001.0401.2801.2801.2801.0400.4000.2000.100
72 0.1000.1000.2000.4001.0401.2801.2801.2801.0400.4000.2000.100
82 0.1000.1000.2000.4001.0401.2801.2801.2801.0400.4000.2000.100
92 0.1000.1000.2000.4001.0401.2801.2801.2801.0400.4000.2000.100
102 0.1000.1000.2000.4001.0401.2801.2801.2801.0400.4000.2000.100
14 0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
24 0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
34 0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
44 0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
54 0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
64 0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
74 0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
84 0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
94 0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
104 0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
END MON-UZSN

```

MON-LZETPARM

```

*** <PLS > Lower zone evapotransp parm at start of each month
*** x - x JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC
11 0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
21 0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
31 0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
41 0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
51 0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
61 0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
71 0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
81 0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
91 0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
101 0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
12 0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
22 0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
32 0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
42 0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
52 0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
62 0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
72 0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
82 0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
92 0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
102 0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
13 0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
23 0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
33 0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
43 0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
53 0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
63 0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
73 0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
83 0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
93 0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
103 0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
14 0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
24 0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
34 0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
44 0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
54 0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
64 0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
74 0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
84 0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
94 0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
104 0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
END MON-LZETPARM

```

PWAT-STATE1

#	# ***	CEPS	SURS	UZS	IFWS	LZS	AGWS	GWVS
11		0.020	0.020	0.550	0.000	7.470	0.319	0.000
21		0.020	0.020	0.550	0.000	7.470	0.319	0.000
31		0.020	0.020	0.550	0.000	7.470	0.319	0.000
41		0.020	0.020	0.550	0.000	7.470	0.319	0.000
51		0.020	0.020	0.550	0.000	7.470	0.319	0.000
61		0.020	0.020	0.550	0.000	7.470	0.319	0.000
71		0.020	0.020	0.550	0.000	7.470	0.319	0.000

81	0.020	0.020	0.550	0.000	7.470	0.319	0.000
91	0.020	0.020	0.550	0.000	7.470	0.319	0.000
101	0.020	0.020	0.550	0.000	7.470	0.319	0.000
12	0.020	0.020	0.340	0.001	6.450	0.224	0.000
22	0.020	0.020	0.340	0.001	6.450	0.224	0.000
32	0.020	0.020	0.340	0.001	6.450	0.224	0.000
42	0.020	0.020	0.340	0.001	6.450	0.224	0.000
52	0.020	0.020	0.340	0.001	6.450	0.224	0.000
62	0.020	0.020	0.340	0.001	6.450	0.224	0.000
72	0.020	0.020	0.340	0.001	6.450	0.224	0.000
82	0.020	0.020	0.340	0.001	6.450	0.224	0.000
92	0.020	0.020	0.340	0.001	6.450	0.224	0.000
102	0.020	0.020	0.340	0.001	6.450	0.224	0.000
13	0.020	0.020	0.940	0.004	8.630	0.411	0.000
23	0.020	0.020	0.940	0.004	8.630	0.411	0.000
33	0.020	0.020	0.940	0.004	8.630	0.411	0.000
43	0.020	0.020	0.940	0.004	8.630	0.411	0.000
53	0.020	0.020	0.940	0.004	8.630	0.411	0.000
63	0.020	0.020	0.940	0.004	8.630	0.411	0.000
73	0.020	0.020	0.940	0.004	8.630	0.411	0.000
83	0.020	0.020	0.940	0.004	8.630	0.411	0.000
93	0.020	0.020	0.940	0.004	8.630	0.411	0.000
103	0.020	0.020	0.940	0.004	8.630	0.411	0.000
14	0.020	0.020	0.420	0.001	6.560	0.261	0.000
24	0.020	0.020	0.420	0.001	6.560	0.261	0.000
34	0.020	0.020	0.420	0.001	6.560	0.261	0.000
44	0.020	0.020	0.420	0.001	6.560	0.261	0.000
54	0.020	0.020	0.420	0.001	6.560	0.261	0.000
64	0.020	0.020	0.420	0.001	6.560	0.261	0.000
74	0.020	0.020	0.420	0.001	6.560	0.261	0.000
84	0.020	0.020	0.420	0.001	6.560	0.261	0.000
94	0.020	0.020	0.420	0.001	6.560	0.261	0.000
104	0.020	0.020	0.420	0.001	6.560	0.261	0.000

END PWAT-STATE1

END PERLND

IMPLND

ACTIVITY

#	#	ATMP	SNOW	IWAT	SLD	IWG	IQAL	***
11	1017	0	0	1	0	0	0	

END ACTIVITY

PRINT-INFO

#	#	ATMP	SNOW	IWAT	SLD	IWG	IQAL	PIVL	PYR	***
11	101	6	6	5	6	6	6	1	9	

END PRINT-INFO

GEN-INFO

#	#	NAME	UCI	IN	OUT	ENGL	METR	***
11	101	IMPERV LAND	1	1	1	91	0	

END GEN-INFO

IWAT-PARM1

#	#	CSNO	RTOP	VRS	VNN	RTLI	***
11	101	0	1	0	0	0	

END IWAT-PARM1

IWAT-PARM2

#	#	LSUR	SLSUR	NSUR	RETSC	***
11		200.0	0.2400	0.10	0.05	
21		200.0	0.2400	0.10	0.05	
31		200.0	0.2200	0.10	0.05	
41		300.0	0.1400	0.10	0.05	
51		250.0	0.1900	0.10	0.05	
61		200.0	0.2000	0.10	0.05	
71		250.0	0.1900	0.10	0.05	
81		250.0	0.1900	0.10	0.05	
91		200.0	0.2200	0.10	0.05	
101		250.0	0.1600	0.10	0.05	

END IWAT-PARM2

```

IWAT-PARM3
*** <ILS >   PETMAX   PETMIN
*** x - x   (deg F)   (deg F)
    11 101    40.0    35.0
END IWAT-PARM3

```

```

IWAT-STATE1
*** <ILS >   IWATER state variables (inches)
*** x - x     RETS     SURS
    11 101    0.03    0.01
END IWAT-STATE1

```

END IMPLND

RCHRES

```

ACTIVITY
RCHRES Active Sections (1=Active; 0=Inactive) ***
# - # HYFG ADFG CNFG HTFG SDFG GQFG OXFG NUFG PKFG PHFG ***
    1 10 1 0 0 0 0 0 0 0 0
END ACTIVITY

```

```

PRINT-INFO
RCHRES Print-flags ***
# - # HYDR ADCA CONS HEAT SED GQL OXRX NUTR PLNK PHCB PIVL PYR ***
    1 10 5 5 5 5 5 5 5 5 12
END PRINT-INFO

```

GEN-INFO

```

RCHRES<-----Name----->Nexit Unit Systems Printer ***
# - # User t-series Engl Metr LKFG ***
      in out
    1 Little Back Creek 1 1 1 1 91 0 0
    2 Upper Back Creek 1 1 1 1 91 0 0
    3 Poages Mill 1 1 1 1 91 0 0
    4 Cave Spring 1 1 1 1 91 0 0
    5 Blue Ridge Parkway 1 1 1 1 91 0 0
    6 Cattail Hollow 1 1 1 1 91 0 0
    7 State Rd #676 1 1 1 1 91 0 0
    8 Red Hill Church 1 1 1 1 91 0 0
    9 State Rd #667 1 1 1 1 91 0 0
   10 Dundee 1 1 1 1 91 0 0
END GEN-INFO

```

HYDR-PARM1

```

RCHRES Flags for HYDR section ***
# - # VC A1 A2 A3 ODFVFG for each ODGTFG for each *** FUNCT for each
      FG FG FG FG possible exit possible exit *** possible exit
      1 2 3 4 5 1 2 3 4 5 *** 1 2 3 4 5
    1 10 0 1 1 1 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 1 1 1 1
END HYDR-PARM1

```

HYDR-PARM2

```

RCHRES ***
# - # FTABNO LEN DELTH STCOR KS DB50 ***
    1 1 2.62 387.0 0.0 0.5 0.01
    2 2 2.99 561.0 0.0 0.5 0.01
    3 3 2.08 69.0 0.0 0.5 0.01
    4 4 2.35 85.0 0.0 0.5 0.01
    5 5 2.78 85.0 0.0 0.5 0.01
    6 6 1.94 36.0 0.0 0.5 0.01
    7 7 2.29 56.0 0.0 0.5 0.01
    8 8 1.96 26.0 0.0 0.5 0.01
    9 9 2.97 52.0 0.0 0.5 0.01
   10 10 3.05 56.0 0.0 0.5 0.01
END HYDR-PARM2

```

HYDR-INIT

```

RCHRES Initial conditions for HYDR section ***
# - # VOL Initial value of COLIND *** Initial value of OUTDGT
      (ac-ft) for each possible exit *** for each possible exit

```

```

EX1 EX2 EX3 EX4 EX5 *** EX1 EX2 EX3 EX4 EX5
1 0.10
2 0.25
3 0.45
4 0.65
5 0.85
6 1.00
7 1.50
8 2.00
9 2.50
10 3.00
END HYDR-INIT
END RCHRES

COPY
TIMESERIES
Copy-opn***
*** x - x NPT NMN
100 0 7
101 110 0 2
END TIMESERIES
END COPY

PLTGEN
PLOTINFO
*** x - x FILE NPT NMN LABL PYR PIVL
100 92 0 10
200 93 0 10
300 94 0 10
END PLOTINFO
GEN-LABELS
*** x - x<-----title-----> <-----y-axis lab---->
100 Reach Outflows Flow (cfs)
200 Land Segment Outflows Runoff (in/hr)
300 Groundwater Recharge Recharge (in/hr)
END GEN-LABELS
SCALING
*** x - x<---ymin--><---ymax--><---ivlin--><---thresh-->
100 0 100000 10
200 0 1.0000 10
300 0 1.0000 10
END SCALING
CURV-DATA
*** x - x <----label----> LIN INT COL TR
100 300 Outflow
END CURV-DATA
END PLTGEN

EXT SOURCES

<-Volume-> <Member> SsysSgap<--Mult-->Tran <-Target vols> <-Grp> <Member-> ***
<Name> x <Name> x tem strg<-factor->strg <Name> x x <Name> x x ***
WDM 210 EVAP ENGL PERLND 11 104 EXTNL PETINP 1 1
WDM 210 EVAP ENGL IMPLND 11 101 EXTNL PETINP 1 1

WDM 82 PRCP ENGL PERLND 11 104 EXTNL PREC 1 1
WDM 82 PRCP ENGL IMPLND 11 101 EXTNL PREC 1 1

WDM 541 FLOW ENGL PLTGEN 100 INPUT MEAN 1 1
WDM 542 FLOW ENGL PLTGEN 100 INPUT MEAN 2 1
WDM 543 FLOW ENGL PLTGEN 100 INPUT MEAN 3 1
WDM 544 FLOW ENGL PLTGEN 100 INPUT MEAN 4 1
WDM 545 FLOW ENGL PLTGEN 100 INPUT MEAN 5 1
WDM 546 FLOW ENGL PLTGEN 100 INPUT MEAN 6 1
WDM 547 FLOW ENGL PLTGEN 100 INPUT MEAN 7 1
WDM 548 FLOW ENGL PLTGEN 100 INPUT MEAN 8 1
WDM 549 FLOW ENGL PLTGEN 100 INPUT MEAN 9 1
WDM 550 FLOW ENGL PLTGEN 100 INPUT MEAN 10 1

WDM 531 SIMQ ENGL PLTGEN 200 INPUT MEAN 1 1
WDM 532 SIMQ ENGL PLTGEN 200 INPUT MEAN 2 1

```

WDM	533	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	3	1
WDM	534	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	4	1
WDM	535	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	5	1
WDM	536	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	6	1
WDM	537	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	7	1
WDM	538	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	8	1
WDM	539	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	9	1
WDM	540	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	10	1
WDM	551	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	1	1
WDM	552	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	2	1
WDM	553	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	3	1
WDM	554	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	4	1
WDM	555	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	5	1
WDM	556	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	6	1
WDM	557	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	7	1
WDM	558	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	8	1
WDM	559	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	9	1
WDM	560	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	10	1

END EXT SOURCES

EXT TARGETS

<-Volume->	<-Grp>	<-Member->	<--Mult-->	Tran	<-Volume->	<Member>	Tsys	Aggr	Amd	***		
<Name>	x	<Name>	x	x<-factor->	strg	<Name>	x	<Name>	qf	tem	strg	strg***
RCHRES	10	ROFLOW	ROVOL	1	13.35965E-4	WDM	320	SIMQ	1	ENGL		REPL
COPY	100	OUTPUT	MEAN	1	12.79971E-5	WDM	321	SURO	1	ENGL		REPL
COPY	100	OUTPUT	MEAN	2	12.79971E-5	WDM	322	IFWO	1	ENGL		REPL
COPY	100	OUTPUT	MEAN	3	12.79971E-5	WDM	323	AGWO	1	ENGL		REPL
COPY	100	OUTPUT	MEAN	4	12.79971E-5	WDM	325	PETX	1	ENGL	AGGR	REPL
COPY	100	OUTPUT	MEAN	5	12.79971E-5	WDM	326	SAET	1	ENGL	AGGR	REPL
COPY	100	OUTPUT	MEAN	6	12.79971E-5	WDM	327	UZSX	1	ENGL	AGGR	REPL
COPY	100	OUTPUT	MEAN	7	12.79971E-5	WDM	328	LZSX	1	ENGL	AGGR	REPL
RCHRES	1	ROFLOW	ROVOL	1	1	12.1	WDM	541	FLOW	1	ENGL	REPL
RCHRES	2	ROFLOW	ROVOL	1	1	12.1	WDM	542	FLOW	1	ENGL	REPL
RCHRES	3	ROFLOW	ROVOL	1	1	12.1	WDM	543	FLOW	1	ENGL	REPL
RCHRES	4	ROFLOW	ROVOL	1	1	12.1	WDM	544	FLOW	1	ENGL	REPL
RCHRES	5	ROFLOW	ROVOL	1	1	12.1	WDM	545	FLOW	1	ENGL	REPL
RCHRES	6	ROFLOW	ROVOL	1	1	12.1	WDM	546	FLOW	1	ENGL	REPL
RCHRES	7	ROFLOW	ROVOL	1	1	12.1	WDM	547	FLOW	1	ENGL	REPL
RCHRES	8	ROFLOW	ROVOL	1	1	12.1	WDM	548	FLOW	1	ENGL	REPL
RCHRES	9	ROFLOW	ROVOL	1	1	12.1	WDM	549	FLOW	1	ENGL	REPL
RCHRES	10	ROFLOW	ROVOL	1	1	12.1	WDM	550	FLOW	1	ENGL	REPL
COPY	101	OUTPUT	MEAN	1	13.96983E-4	WDM	531	SIMQ	1	ENGL		REPL
COPY	102	OUTPUT	MEAN	1	12.14041E-4	WDM	532	SIMQ	1	ENGL		REPL
COPY	103	OUTPUT	MEAN	1	11.74398E-4	WDM	533	SIMQ	1	ENGL		REPL
COPY	104	OUTPUT	MEAN	1	15.00000E-4	WDM	534	SIMQ	1	ENGL		REPL
COPY	105	OUTPUT	MEAN	1	12.26809E-4	WDM	535	SIMQ	1	ENGL		REPL
COPY	106	OUTPUT	MEAN	1	12.80820E-4	WDM	536	SIMQ	1	ENGL		REPL
COPY	107	OUTPUT	MEAN	1	13.25407E-4	WDM	537	SIMQ	1	ENGL		REPL
COPY	108	OUTPUT	MEAN	1	13.15560E-4	WDM	538	SIMQ	1	ENGL		REPL
COPY	109	OUTPUT	MEAN	1	13.39789E-4	WDM	539	SIMQ	1	ENGL		REPL
COPY	110	OUTPUT	MEAN	1	12.72554E-4	WDM	540	SIMQ	1	ENGL		REPL
COPY	101	OUTPUT	MEAN	2	13.96983E-4	WDM	551	SIMQ	1	ENGL		REPL
COPY	102	OUTPUT	MEAN	2	12.14041E-4	WDM	552	SIMQ	1	ENGL		REPL
COPY	103	OUTPUT	MEAN	2	11.74398E-4	WDM	553	SIMQ	1	ENGL		REPL
COPY	104	OUTPUT	MEAN	2	15.00000E-4	WDM	554	SIMQ	1	ENGL		REPL
COPY	105	OUTPUT	MEAN	2	12.26809E-4	WDM	555	SIMQ	1	ENGL		REPL
COPY	106	OUTPUT	MEAN	2	12.80820E-4	WDM	556	SIMQ	1	ENGL		REPL
COPY	107	OUTPUT	MEAN	2	13.25407E-4	WDM	557	SIMQ	1	ENGL		REPL
COPY	108	OUTPUT	MEAN	2	13.15560E-4	WDM	558	SIMQ	1	ENGL		REPL
COPY	109	OUTPUT	MEAN	2	13.39789E-4	WDM	559	SIMQ	1	ENGL		REPL
COPY	110	OUTPUT	MEAN	2	12.72554E-4	WDM	560	SIMQ	1	ENGL		REPL

END EXT TARGETS

SCHEMATIC

<-Volume->	<-Area-->	<-Volume->	<ML#>	***
<Name> x	<-factor->	<Name> x		***
PERLND 11	1581.	RCHRES 1	1	1
PERLND 12	477.	RCHRES 1	1	1
PERLND 13	19.	RCHRES 1	1	1
PERLND 14	188.	RCHRES 1	1	1
IMPLND 11	254.	RCHRES 1	1	3
PERLND 21	2652.	RCHRES 2	2	1
PERLND 22	1018.	RCHRES 2	2	1
PERLND 23	37.	RCHRES 2	2	1
PERLND 24	495.	RCHRES 2	2	1
IMPLND 21	470.	RCHRES 2	2	3
PERLND 31	3324.	RCHRES 3	3	1
PERLND 32	1222.	RCHRES 3	3	1
PERLND 33	72.	RCHRES 3	3	1
PERLND 34	536.	RCHRES 3	3	1
IMPLND 31	580.	RCHRES 3	3	3
PERLND 41	964.	RCHRES 4	4	1
PERLND 42	454.	RCHRES 4	4	1
PERLND 43	85.	RCHRES 4	4	1
PERLND 44	289.	RCHRES 4	4	1
IMPLND 41	207.	RCHRES 4	4	3
PERLND 51	2038.	RCHRES 5	5	1
PERLND 52	740.	RCHRES 5	5	1
PERLND 53	591.	RCHRES 5	5	1
PERLND 54	550.	RCHRES 5	5	1
IMPLND 51	491.	RCHRES 5	5	3
PERLND 61	2086.	RCHRES 6	6	1
PERLND 62	666.	RCHRES 6	6	1
PERLND 63	71.	RCHRES 6	6	1
PERLND 64	376.	RCHRES 6	6	1
IMPLND 61	362.	RCHRES 6	6	3
PERLND 71	1740.	RCHRES 7	7	1
PERLND 72	556.	RCHRES 7	7	1
PERLND 73	65.	RCHRES 7	7	1
PERLND 74	374.	RCHRES 7	7	1
IMPLND 71	310.	RCHRES 7	7	3
PERLND 81	1590.	RCHRES 8	8	1
PERLND 82	559.	RCHRES 8	8	1
PERLND 83	328.	RCHRES 8	8	1
PERLND 84	344.	RCHRES 8	8	1
IMPLND 81	344.	RCHRES 8	8	3
PERLND 91	1651.	RCHRES 9	9	1
PERLND 92	611.	RCHRES 9	9	1
PERLND 93	103.	RCHRES 9	9	1
PERLND 94	275.	RCHRES 9	9	1
IMPLND 91	303.	RCHRES 9	9	3
PERLND 101	1182.	RCHRES 10	10	1
PERLND 102	1125.	RCHRES 10	10	1
PERLND 103	272.	RCHRES 10	10	1
PERLND 104	700.	RCHRES 10	10	1
IMPLND 101	390.	RCHRES 10	10	3
RCHRES 1		RCHRES 3	3	5
RCHRES 2		RCHRES 3	3	5
RCHRES 3		RCHRES 4	4	5
RCHRES 4		RCHRES 5	5	5
RCHRES 5		RCHRES 6	6	5
RCHRES 6		RCHRES 7	7	5
RCHRES 7		RCHRES 8	8	5
RCHRES 8		RCHRES 9	9	5
RCHRES 9		RCHRES 10	10	5

PERLND	11	1581.	COPY	100	90
PERLND	12	477.	COPY	100	90
PERLND	13	19.	COPY	100	90
PERLND	14	188.	COPY	100	90
IMPLND	11	254.	COPY	100	91
PERLND	11	1581.	COPY	101	92
PERLND	12	477.	COPY	101	92
PERLND	13	19.	COPY	101	92
PERLND	14	188.	COPY	101	92
IMPLND	11	254.	COPY	101	93
PERLND	21	2652.	COPY	100	90
PERLND	22	1018.	COPY	100	90
PERLND	23	37.	COPY	100	90
PERLND	24	495.	COPY	100	90
IMPLND	21	470.	COPY	100	91
PERLND	21	2652.	COPY	102	92
PERLND	22	1018.	COPY	102	92
PERLND	23	37.	COPY	102	92
PERLND	24	495.	COPY	102	92
IMPLND	21	470.	COPY	102	93
PERLND	31	3324.	COPY	100	90
PERLND	32	1222.	COPY	100	90
PERLND	33	72.	COPY	100	90
PERLND	34	536.	COPY	100	90
IMPLND	31	580.	COPY	100	91
PERLND	31	3324.	COPY	103	92
PERLND	32	1222.	COPY	103	92
PERLND	33	72.	COPY	103	92
PERLND	34	536.	COPY	103	92
IMPLND	31	580.	COPY	103	93
PERLND	41	964.	COPY	100	90
PERLND	42	454.	COPY	100	90
PERLND	43	85.	COPY	100	90
PERLND	44	289.	COPY	100	90
IMPLND	41	207.	COPY	100	91
PERLND	41	964.	COPY	104	92
PERLND	42	454.	COPY	104	92
PERLND	43	85.	COPY	104	92
PERLND	44	289.	COPY	104	92
IMPLND	41	207.	COPY	104	93
PERLND	51	2038.	COPY	100	90
PERLND	52	740.	COPY	100	90
PERLND	53	591.	COPY	100	90
PERLND	54	550.	COPY	100	90
IMPLND	51	491.	COPY	100	91
PERLND	51	2038.	COPY	105	92
PERLND	52	740.	COPY	105	92
PERLND	53	591.	COPY	105	92
PERLND	54	550.	COPY	105	92
IMPLND	51	491.	COPY	105	93
PERLND	61	2086.	COPY	100	90
PERLND	62	666.	COPY	100	90
PERLND	63	71.	COPY	100	90
PERLND	64	376.	COPY	100	90
IMPLND	61	362.	COPY	100	91
PERLND	61	2086.	COPY	106	92
PERLND	62	666.	COPY	106	92
PERLND	63	71.	COPY	106	92
PERLND	64	376.	COPY	106	92
IMPLND	61	362.	COPY	106	93
PERLND	71	1740.	COPY	100	90
PERLND	72	556.	COPY	100	90
PERLND	73	65.	COPY	100	90
PERLND	74	374.	COPY	100	90



IMPLND	71	310.	COPY	100	91
PERLND	71	1740.	COPY	107	92
PERLND	72	556.	COPY	107	92
PERLND	73	65.	COPY	107	92
PERLND	74	374.	COPY	107	92
IMPLND	71	310.	COPY	107	93
PERLND	81	1590.	COPY	100	90
PERLND	82	559.	COPY	100	90
PERLND	83	328.	COPY	100	90
PERLND	84	344.	COPY	100	90
IMPLND	81	344.	COPY	100	91
PERLND	81	1590.	COPY	108	92
PERLND	82	559.	COPY	108	92
PERLND	83	328.	COPY	108	92
PERLND	84	344.	COPY	108	92
IMPLND	81	344.	COPY	108	93
PERLND	91	1651.	COPY	100	90
PERLND	92	611.	COPY	100	90
PERLND	93	103.	COPY	100	90
PERLND	94	275.	COPY	100	90
IMPLND	91	303.	COPY	100	91
PERLND	91	1651.	COPY	109	92
PERLND	92	611.	COPY	109	92
PERLND	93	103.	COPY	109	92
PERLND	94	275.	COPY	109	92
IMPLND	91	303.	COPY	109	93
PERLND	101	1182.	COPY	100	90
PERLND	102	1125.	COPY	100	90
PERLND	103	272.	COPY	100	90
PERLND	104	700.	COPY	100	90
IMPLND	101	390.	COPY	100	91
PERLND	101	1182.	COPY	110	92
PERLND	102	1125.	COPY	110	92
PERLND	103	272.	COPY	110	92
PERLND	104	700.	COPY	110	92
IMPLND	101	390.	COPY	110	93

END SCHEMATIC

MASS-LINK

```

MASS-LINK      1
<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name>      <Name> x x<-factor->strg <Name>      <Name> x x ***
PERLND      PWATER PERO      0.0533333      RCHRES      INFLOW IVOL
END MASS-LINK      1

```

```

MASS-LINK      3
<Srce>      <-Grp> <-Member-><--Mult-->      <Targ>      <-Grp> <-Member-> ***
<Name>      <Name> <Name> # #<-factor->      <Name>      <Name> <Name> # # ***
IMPLND      IWATER SURO      0.0533333      RCHRES      INFLOW IVOL
END MASS-LINK      3

```

```

MASS-LINK      5
<Srce>      <-Grp> <-Member-><--Mult-->      <Targ>      <-Grp> <-Member-> ***
<Name>      <Name> <Name> # #<-factor->      <Name>      <Name> <Name> # # ***
RCHRES      ROFLOW      RCHRES      INFLOW
END MASS-LINK      5

```

```

MASS-LINK      90
<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name>      <Name> x x<-factor->strg <Name>      <Name> x x ***
PERLND      PWATER SURO      COPY      INPUT MEAN 1
PERLND      PWATER IFWO      COPY      INPUT MEAN 2
PERLND      PWATER AGWO      COPY      INPUT MEAN 3
PERLND      PWATER PET      COPY      INPUT MEAN 4
PERLND      PWATER TAET      COPY      INPUT MEAN 5
PERLND      PWATER UZS      COPY      INPUT MEAN 6
PERLND      PWATER LZS      COPY      INPUT MEAN 7

```

```

END MASS-LINK 90

MASS-LINK 91
<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name> <Name> x x<-factor->strg <Name> <Name> x x ***
IMPLND IWATER SURO COPY INPUT MEAN 1
IMPLND IWATER PET COPY INPUT MEAN 4
IMPLND IWATER IMPEV COPY INPUT MEAN 5
END MASS-LINK 91

MASS-LINK 92
<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name> <Name> x x<-factor->strg <Name> <Name> x x ***
PERLND PWATER PERO COPY INPUT MEAN 1
PERLND PWATER AGWI COPY INPUT MEAN 2
END MASS-LINK 92

MASS-LINK 93
<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name> <Name> x x<-factor->strg <Name> <Name> x x ***
IMPLND IWATER SURO COPY INPUT MEAN 1
END MASS-LINK 93
END MASS-LINK

```

FTABLES

```

FTABLE 1
ROWS COLS ***
15 4
DEPTH AREA VOLUME DISCH ***
(FT) (ACRES) (AC-FT) (CFS) ***
0.00 1.90 0.00 0.00
0.20 1.97 0.39 2.66
0.40 2.03 0.79 8.43
0.60 2.09 1.20 16.54
0.80 2.16 1.62 26.70
1.00 2.22 2.06 38.73
1.20 2.28 2.51 52.50
1.40 2.35 2.97 67.95
1.60 2.41 3.45 85.02
1.80 2.47 3.94 103.65
2.00 2.54 4.44 123.83
4.00 3.17 10.14 408.06
8.00 4.44 25.36 1443.51
12.00 5.71 45.65 3184.35
18.00 7.61 85.59 7362.11
END FTABLE 1
FTABLE 2
ROWS COLS ***
15 4
DEPTH AREA VOLUME DISCH ***
(FT) (ACRES) (AC-FT) (CFS) ***
0.00 2.53 0.00 0.00
0.20 2.61 0.51 3.43
0.40 2.68 1.04 10.87
0.60 2.75 1.59 21.33
0.80 2.82 2.14 34.41
1.00 2.90 2.72 49.89
1.20 2.97 3.30 67.61
1.40 3.04 3.90 87.46
1.60 3.11 4.52 109.35
1.80 3.19 5.15 133.23
2.00 3.26 5.79 159.04
4.00 3.98 13.03 519.10
8.00 5.43 31.86 1799.90
12.00 6.88 56.48 3905.86
21.00 10.35 134.42 12263.77
END FTABLE 2
FTABLE 3
ROWS COLS ***
16 4
DEPTH AREA VOLUME DISCH ***

```

(FT)	(ACRES)	(AC-FT)	(CFS)	***
0.00	4.29	0.00	0.00	
0.20	4.42	0.87	3.68	
0.40	4.55	1.77	11.69	
0.60	4.67	2.69	23.02	
0.80	4.80	3.64	37.28	
1.00	4.92	4.61	54.22	
1.30	5.11	6.11	84.35	
1.70	5.37	8.21	132.84	
2.00	5.56	9.85	175.20	
2.30	5.75	11.54	222.55	
2.70	6.00	13.89	293.34	
3.00	6.19	15.72	352.14	
6.00	8.08	37.12	1211.65	
9.00	9.98	64.21	2596.60	
12.00	11.87	96.98	4566.48	
36.00	27.02	563.67	48712.37	

END FTABLE 3  
FTABLE 4  
ROWS COLS \*\*\*  
16 4

DEPTH	AREA	VOLUME	DISCH	***
(FT)	(ACRES)	(AC-FT)	(CFS)	***
0.00	6.12	0.00	0.00	
0.20	6.29	1.24	4.15	
0.40	6.46	2.52	13.20	
0.60	6.63	3.83	25.99	
0.80	6.80	5.17	42.06	
1.00	6.98	6.55	61.14	
1.30	7.23	8.68	95.03	
1.70	7.57	11.64	149.46	
2.00	7.83	13.95	196.90	
2.30	8.09	16.34	249.83	
2.70	8.43	19.64	328.77	
3.00	8.68	22.21	394.17	
6.00	11.25	52.10	1338.90	
9.00	13.81	89.68	2535.59	
12.00	16.37	134.95	4936.63	
36.00	36.87	773.82	50457.43	

END FTABLE 4  
FTABLE 5  
ROWS COLS \*\*\*  
16 4

DEPTH	AREA	VOLUME	DISCH	***
(FT)	(ACRES)	(AC-FT)	(CFS)	***
0.00	8.94	0.00	0.00	
0.20	9.15	1.81	4.64	
0.40	9.35	3.66	14.75	
0.60	9.55	5.55	29.03	
0.80	9.75	7.48	46.94	
1.00	9.96	9.45	68.19	
1.30	10.26	12.48	105.86	
1.70	10.66	16.67	166.19	
2.00	10.97	19.91	218.59	
2.30	11.27	23.25	276.88	
2.70	11.68	27.84	363.51	
3.00	11.98	31.39	435.02	
6.00	15.02	71.89	1448.46	
9.00	18.06	121.50	3008.60	
12.00	21.09	180.22	5147.54	
58.00	67.67	2221.75	142706.41	

END FTABLE 5  
FTABLE 6  
ROWS COLS \*\*\*  
17 4

DEPTH	AREA	VOLUME	DISCH	***
(FT)	(ACRES)	(AC-FT)	(CFS)	***
0.00	7.64	0.00	0.00	
0.20	7.78	1.54	5.06	
0.40	7.92	3.11	16.08	
0.60	8.06	4.71	31.63	

0.80	8.20	6.34	51.14	
1.00	8.34	7.99	74.27	
1.30	8.56	10.53	115.24	
1.70	8.84	14.01	180.76	
2.00	9.05	16.69	237.60	
2.30	9.26	19.44	300.75	
2.70	9.54	23.20	394.44	
3.00	9.76	26.09	471.65	
6.00	11.87	58.53	1556.19	
9.00	13.99	97.32	3202.02	
12.00	16.10	142.45	5430.19	
15.00	18.22	193.93	8276.35	
58.00	48.54	1629.24	141041.23	

END FTABLE 6  
FTABLE 7  
ROWS COLS \*\*\*  
16 4

DEPTH	AREA	VOLUME	DISCH	***
(FT)	(ACRES)	(AC-FT)	(CFS)	***
0.00	10.53	0.00	0.00	
0.20	10.73	2.13	8.35	
0.40	10.92	4.29	26.56	
0.60	11.11	6.49	52.31	
0.80	11.31	8.74	84.68	
1.00	11.50	11.02	123.11	
1.30	11.79	14.51	191.34	
1.70	12.18	19.31	300.81	
2.00	12.47	23.00	396.05	
2.30	12.76	26.79	502.14	
2.70	13.15	31.97	660.01	
3.00	13.44	35.96	790.47	
6.00	16.35	80.66	2647.03	
9.00	19.26	134.08	5515.92	
12.00	22.17	196.24	9455.89	
24.00	33.81	532.16	37571.06	

END FTABLE 7  
FTABLE 8  
ROWS COLS \*\*\*  
17 4

DEPTH	AREA	VOLUME	DISCH	***
(FT)	(ACRES)	(AC-FT)	(CFS)	***
0.00	10.34	0.00	0.00	
0.20	10.53	2.09	8.49	
0.40	10.72	4.21	27.01	
0.60	10.91	6.37	53.19	
0.80	11.10	8.57	86.08	
1.00	11.29	10.81	125.11	
1.30	11.57	14.24	194.36	
1.70	11.95	18.95	305.34	
2.00	12.24	22.57	401.78	
2.30	12.52	26.29	509.10	
2.70	12.90	31.37	668.59	
3.00	13.19	35.29	800.22	
6.00	16.04	79.13	2660.86	
9.00	18.89	131.53	5505.65	
12.00	21.74	192.48	9376.55	
15.00	24.59	261.98	14339.04	
25.00	34.10	555.45	39708.38	

END FTABLE 8  
FTABLE 9  
ROWS COLS \*\*\*  
18 4

DEPTH	AREA	VOLUME	DISCH	***
(FT)	(ACRES)	(AC-FT)	(CFS)	***
0.00	17.26	0.00	0.00	
0.20	17.55	3.48	9.93	
0.40	17.83	7.02	31.59	
0.60	18.12	10.61	62.19	
0.80	18.41	14.27	100.62	
1.00	18.70	17.98	146.22	
1.30	19.13	23.65	227.07	

1.70	19.70	31.42	356.56
2.00	20.14	37.39	469.02
2.30	20.57	43.50	594.06
2.70	21.14	51.84	779.75
3.00	21.57	58.25	932.87
6.00	25.89	129.44	3087.80
9.00	30.20	213.58	6359.15
12.00	34.52	310.67	10782.20
15.00	38.83	420.69	16421.67
25.00	53.22	880.94	44979.76
50.00	89.17	2660.79	197754.51

END FTABLE 9  
 FTABLE 10  
 ROWS COLS \*\*\*  
 18 4

DEPTH (FT)	AREA (ACRES)	VOLUME (AC-FT)	DISCH (CFS)	*** ***
0.00	19.58	0.00	0.00	
0.20	19.88	3.95	11.22	
0.40	20.18	7.95	35.67	
0.60	20.47	12.02	70.22	
0.80	20.77	16.14	113.60	
1.00	21.06	20.32	165.03	
1.30	21.51	26.71	256.20	
1.70	22.10	35.43	402.07	
2.00	22.54	42.12	528.65	
2.30	22.98	48.95	669.29	
2.70	23.57	58.26	877.93	
3.00	24.02	65.40	1049.81	
6.00	28.45	144.11	3455.64	
9.00	32.89	236.12	7075.47	
12.00	37.32	341.43	11929.84	
15.00	41.75	460.04	18075.19	
25.00	56.53	951.48	48802.16	
50.00	93.49	2826.74	209904.75	

END FTABLE 10  
 END FTABLES  
 END RUN

# Low Density Full Build Out with Restrictions

RUN

GLOBAL

```
Back Creek above Dundee, VA
START      1956 10 1 0 0  END      1999 9 30 0 0
RUN INTERP OUTPUT LEVEL 3 2
RESUME     0 RUN 1
UNIT SYSTEM 1
END GLOBAL
```

FILES

```
<FILE> <UN#>***<----FILE NAME----->
WDM      16 backcr.wdm
MESSU    24 scenario.ech
          91 scenario.out
          92 backcr1.plt
          93 backcr2.plt
          94 backcr3.plt
```

END FILES

OPN SEQUENCE

```
INGRP      INDELT 01:00
PERLND     11
PERLND     12
PERLND     13
PERLND     14
IMPLND     11
RCHRES     1
PERLND     21
PERLND     22
PERLND     23
PERLND     24
IMPLND     21
RCHRES     2
PERLND     31
PERLND     32
PERLND     33
PERLND     34
IMPLND     31
RCHRES     3
PERLND     41
PERLND     42
PERLND     43
PERLND     44
IMPLND     41
RCHRES     4
PERLND     51
PERLND     52
PERLND     53
PERLND     54
IMPLND     51
RCHRES     5
PERLND     61
PERLND     62
PERLND     63
PERLND     64
IMPLND     61
RCHRES     6
PERLND     71
PERLND     72
PERLND     73
PERLND     74
IMPLND     71
RCHRES     7
PERLND     81
PERLND     82
PERLND     83
PERLND     84
IMPLND     81
```

```

RCHRES      8
PERLND     91
PERLND     92
PERLND     93
PERLND     94
IMPLND     91
RCHRES      9
PERLND    101
PERLND    102
PERLND    103
PERLND    104
IMPLND    101
RCHRES     10
COPY       100
COPY       101
COPY       102
COPY       103
COPY       104
COPY       105
COPY       106
COPY       107
COPY       108
COPY       109
COPY       110
PLTGEN     100
PLTGEN     200
PLTGEN     300
END INGRP
END OPN SEQUENCE

```

```

PERLND
ACTIVITY
# # ATMP SNOW PWAT SED PST PWG PQAL MSTL PEST NITR PHOS TRAC ***
11 104 0 0 1 0 0 0 0 0 0 0 0 0 0
END ACTIVITY

```

```

PRINT-INFO
# # ATMP SNOW PWAT SED PST PWG PQAL MSTL PEST NITR PHOS TRAC PIVL***PY
11 104 6 6 5 6 6 6 6 6 6 6 6 6 1 9
END PRINT-INFO

```

```

GEN-INFO
# # NAME NBLKS UCI IN OUT ENGL METR ***
11 FOREST 1 1 1 1 91 0
21 FOREST 1 1 1 1 91 0
31 FOREST 1 1 1 1 91 0
41 FOREST 1 1 1 1 91 0
51 FOREST 1 1 1 1 91 0
61 FOREST 1 1 1 1 91 0
71 FOREST 1 1 1 1 91 0
81 FOREST 1 1 1 1 91 0
91 FOREST 1 1 1 1 91 0
101 FOREST 1 1 1 1 91 0
12 HERBACEOUS/AG 1 1 1 1 91 0
22 HERBACEOUS/AG 1 1 1 1 91 0
32 HERBACEOUS/AG 1 1 1 1 91 0
42 HERBACEOUS/AG 1 1 1 1 91 0
52 HERBACEOUS/AG 1 1 1 1 91 0
62 HERBACEOUS/AG 1 1 1 1 91 0
72 HERBACEOUS/AG 1 1 1 1 91 0
82 HERBACEOUS/AG 1 1 1 1 91 0
92 HERBACEOUS/AG 1 1 1 1 91 0
102 HERBACEOUS/AG 1 1 1 1 91 0
13 DISTURBED 1 1 1 1 91 0
23 DISTURBED 1 1 1 1 91 0
33 DISTURBED 1 1 1 1 91 0
43 DISTURBED 1 1 1 1 91 0
53 DISTURBED 1 1 1 1 91 0
63 DISTURBED 1 1 1 1 91 0
73 DISTURBED 1 1 1 1 91 0
83 DISTURBED 1 1 1 1 91 0

```

93	DISTURBED	1	1	1	1	91	0
103	DISTURBED	1	1	1	1	91	0
14	MIXED FOREST/AG	1	1	1	1	91	0
24	MIXED FOREST/AG	1	1	1	1	91	0
34	MIXED FOREST/AG	1	1	1	1	91	0
44	MIXED FOREST/AG	1	1	1	1	91	0
54	MIXED FOREST/AG	1	1	1	1	91	0
64	MIXED FOREST/AG	1	1	1	1	91	0
74	MIXED FOREST/AG	1	1	1	1	91	0
84	MIXED FOREST/AG	1	1	1	1	91	0
94	MIXED FOREST/AG	1	1	1	1	91	0
104	MIXED FOREST/AG	1	1	1	1	91	0

END GEN-INFO

PWAT-PARM1

#	#	CSNO	RTOP	UZFG	VCS	VUZ	NVV	VIFW	VIRC	VLE	***
11		0	1	1	1	0	0	0	0	1	0
12		0	1	1	1	1	0	0	0	1	0
13		0	1	1	1	0	0	0	0	1	0
14		0	1	1	1	1	0	0	0	1	0
21		0	1	1	1	0	0	0	0	1	0
22		0	1	1	1	1	0	0	0	1	0
23		0	1	1	1	0	0	0	0	1	0
24		0	1	1	1	1	0	0	0	1	0
31		0	1	1	1	0	0	0	0	1	0
32		0	1	1	1	1	0	0	0	1	0
33		0	1	1	1	0	0	0	0	1	0
34		0	1	1	1	1	0	0	0	1	0
41		0	1	1	1	0	0	0	0	1	0
42		0	1	1	1	1	0	0	0	1	0
43		0	1	1	1	0	0	0	0	1	0
44		0	1	1	1	1	0	0	0	1	0
51		0	1	1	1	0	0	0	0	1	0
52		0	1	1	1	1	0	0	0	1	0
53		0	1	1	1	0	0	0	0	1	0
54		0	1	1	1	1	0	0	0	1	0
61		0	1	1	1	0	0	0	0	1	0
62		0	1	1	1	1	0	0	0	1	0
63		0	1	1	1	0	0	0	0	1	0
64		0	1	1	1	1	0	0	0	1	0
71		0	1	1	1	0	0	0	0	1	0
72		0	1	1	1	1	0	0	0	1	0
73		0	1	1	1	0	0	0	0	1	0
74		0	1	1	1	1	0	0	0	1	0
81		0	1	1	1	0	0	0	0	1	0
82		0	1	1	1	1	0	0	0	1	0
83		0	1	1	1	0	0	0	0	1	0
84		0	1	1	1	1	0	0	0	1	0
91		0	1	1	1	0	0	0	0	1	0
92		0	1	1	1	1	0	0	0	1	0
93		0	1	1	1	0	0	0	0	1	0
94		0	1	1	1	1	0	0	0	1	0
101		0	1	1	1	0	0	0	0	1	0
102		0	1	1	1	1	0	0	0	1	0
103		0	1	1	1	0	0	0	0	1	0
104		0	1	1	1	1	0	0	0	1	0

END PWAT-PARM1

PWAT-PARM2

#	#	***FOREST	LZSN	INFILT	LSUR	SLSUR	KVARY	AGWR
11		0.000	9.5	0.105	200.	0.24000	0.000	.960
21		0.000	9.5	0.105	200.	0.24000	0.000	.960
31		0.000	9.5	0.105	200.	0.22000	0.000	.960
41		0.000	9.5	0.105	300.	0.14000	0.000	.960
51		0.000	9.5	0.105	250.	0.19000	0.000	.960
61		0.000	9.5	0.105	200.	0.20000	0.000	.960
71		0.000	9.5	0.105	250.	0.19000	0.000	.960
81		0.000	9.5	0.105	250.	0.19000	0.000	.960
91		0.000	9.5	0.105	200.	0.22000	0.000	.960
101		0.000	9.5	0.105	250.	0.16000	0.000	.960
12		0.000	9.5	0.086	200.	0.24000	0.000	.960



22	0.000	9.5	0.086	200.	0.24000	0.000	.960
32	0.000	9.5	0.086	200.	0.22000	0.000	.960
42	0.000	9.5	0.086	300.	0.14000	0.000	.960
52	0.000	9.5	0.086	250.	0.19000	0.000	.960
62	0.000	9.5	0.086	200.	0.20000	0.000	.960
72	0.000	9.5	0.086	250.	0.19000	0.000	.960
82	0.000	9.5	0.086	250.	0.19000	0.000	.960
92	0.000	9.5	0.086	200.	0.22000	0.000	.960
102	0.000	9.5	0.086	250.	0.16000	0.000	.960
13	0.000	9.5	0.067	200.	0.24000	0.000	.960
23	0.000	9.5	0.067	200.	0.24000	0.000	.960
33	0.000	9.5	0.067	200.	0.22000	0.000	.960
43	0.000	9.5	0.067	300.	0.14000	0.000	.960
53	0.000	9.5	0.067	250.	0.19000	0.000	.960
63	0.000	9.5	0.067	200.	0.20000	0.000	.960
73	0.000	9.5	0.067	250.	0.19000	0.000	.960
83	0.000	9.5	0.067	250.	0.19000	0.000	.960
93	0.000	9.5	0.067	200.	0.22000	0.000	.960
103	0.000	9.5	0.067	250.	0.16000	0.000	.960
14	0.000	9.5	0.096	200.	0.24000	0.000	.960
24	0.000	9.5	0.096	200.	0.24000	0.000	.960
34	0.000	9.5	0.096	200.	0.22000	0.000	.960
44	0.000	9.5	0.096	300.	0.14000	0.000	.960
54	0.000	9.5	0.096	250.	0.19000	0.000	.960
64	0.000	9.5	0.096	200.	0.20000	0.000	.960
74	0.000	9.5	0.096	250.	0.19000	0.000	.960
84	0.000	9.5	0.096	250.	0.19000	0.000	.960
94	0.000	9.5	0.096	200.	0.22000	0.000	.960
104	0.000	9.5	0.096	250.	0.16000	0.000	.960

END PWAT-PARM2

PWAT-PARM3

***<PLS>	PETMAX	PETMIN	INFEXP	INFILD	DEEPFR	BASETP	AGWETP
***x - x	(deg F)	(deg F)					
11 104	40.0	35.0	2.0	2.0	0.210	0.000	0.000

END PWAT-PARM3

PWAT-PARM4

#	#	CEPSC	UZSN	NSUR	INTFW	IRC	LZETP	***
11		0.200	1.30	0.40	3.7	0.65	0.90	
21		0.200	1.30	0.40	3.7	0.65	0.90	
31		0.200	1.30	0.40	3.7	0.65	0.90	
41		0.200	1.30	0.40	3.7	0.65	0.90	
51		0.200	1.30	0.40	3.7	0.65	0.90	
61		0.200	1.30	0.40	3.7	0.65	0.90	
71		0.200	1.30	0.40	3.7	0.65	0.90	
81		0.200	1.30	0.40	3.7	0.65	0.90	
91		0.200	1.30	0.40	3.7	0.65	0.90	
101		0.200	1.30	0.40	3.7	0.65	0.90	
12		0.200	1.00	0.20	2.8	0.60	0.90	
22		0.200	1.00	0.20	2.8	0.60	0.90	
32		0.200	1.00	0.20	2.8	0.60	0.90	
42		0.200	1.00	0.20	2.8	0.60	0.90	
52		0.200	1.00	0.20	2.8	0.60	0.90	
62		0.200	1.00	0.20	2.8	0.60	0.90	
72		0.200	1.00	0.20	2.8	0.60	0.90	
82		0.200	1.00	0.20	2.8	0.60	0.90	
92		0.200	1.00	0.20	2.8	0.60	0.90	
102		0.200	1.00	0.20	2.8	0.60	0.90	
13		0.200	0.92	0.15	2.8	0.60	0.90	
23		0.200	0.92	0.15	2.8	0.60	0.90	
33		0.200	0.92	0.15	2.8	0.60	0.90	
43		0.200	0.92	0.15	2.8	0.60	0.90	
53		0.200	0.92	0.15	2.8	0.60	0.90	
63		0.200	0.92	0.15	2.8	0.60	0.90	
73		0.200	0.92	0.15	2.8	0.60	0.90	
83		0.200	0.92	0.15	2.8	0.60	0.90	
93		0.200	0.92	0.15	2.8	0.60	0.90	
103		0.200	0.92	0.15	2.8	0.60	0.90	
14		0.200	1.00	0.30	3.3	0.63	0.90	
24		0.200	1.00	0.30	3.3	0.63	0.90	

34	0.200	1.00	0.30	3.3	0.63	0.90
44	0.200	1.00	0.30	3.3	0.63	0.90
54	0.200	1.00	0.30	3.3	0.63	0.90
64	0.200	1.00	0.30	3.3	0.63	0.90
74	0.200	1.00	0.30	3.3	0.63	0.90
84	0.200	1.00	0.30	3.3	0.63	0.90
94	0.200	1.00	0.30	3.3	0.63	0.90
104	0.200	1.00	0.30	3.3	0.63	0.90

END PWAT-PARM4

PWAT-PARM5  
 \*\*\* <PLS > FZG FZGL  
 \*\*\* x - x  
 11 104 1.0 0.1  
 END PWAT-PARM5

MON-INTERCEP  
 \*\*\* <PLS > Interception storage capacity at start of each month (in)  
 \*\*\* x - x JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC  
 11 0.0250.0250.0250.1000.3500.4000.4000.4000.3500.1000.0250.025  
 21 0.0250.0250.0250.1000.3500.4000.4000.4000.3500.1000.0250.025  
 31 0.0250.0250.0250.1000.3500.4000.4000.4000.3500.1000.0250.025  
 41 0.0250.0250.0250.1000.3500.4000.4000.4000.3500.1000.0250.025  
 51 0.0250.0250.0250.1000.3500.4000.4000.4000.3500.1000.0250.025  
 61 0.0250.0250.0250.1000.3500.4000.4000.4000.3500.1000.0250.025  
 71 0.0250.0250.0250.1000.3500.4000.4000.4000.3500.1000.0250.025  
 81 0.0250.0250.0250.1000.3500.4000.4000.4000.3500.1000.0250.025  
 91 0.0250.0250.0250.1000.3500.4000.4000.4000.3500.1000.0250.025  
 101 0.0250.0250.0250.1000.3500.4000.4000.4000.3500.1000.0250.025  
 12 0.0250.0250.0250.1000.2500.3000.3000.3000.2500.1000.0250.025  
 22 0.0250.0250.0250.1000.2500.3000.3000.3000.2500.1000.0250.025  
 32 0.0250.0250.0250.1000.2500.3000.3000.3000.2500.1000.0250.025  
 42 0.0250.0250.0250.1000.2500.3000.3000.3000.2500.1000.0250.025  
 52 0.0250.0250.0250.1000.2500.3000.3000.3000.2500.1000.0250.025  
 62 0.0250.0250.0250.1000.2500.3000.3000.3000.2500.1000.0250.025  
 72 0.0250.0250.0250.1000.2500.3000.3000.3000.2500.1000.0250.025  
 82 0.0250.0250.0250.1000.2500.3000.3000.3000.2500.1000.0250.025  
 92 0.0250.0250.0250.1000.2500.3000.3000.3000.2500.1000.0250.025  
 102 0.0250.0250.0250.1000.2500.3000.3000.3000.2500.1000.0250.025  
 13 0.0250.0250.0250.1000.1500.1500.1500.1500.1000.1000.0250.025  
 23 0.0250.0250.0250.1000.1500.1500.1500.1500.1000.1000.0250.025  
 33 0.0250.0250.0250.1000.1500.1500.1500.1500.1000.1000.0250.025  
 43 0.0250.0250.0250.1000.1500.1500.1500.1500.1000.1000.0250.025  
 53 0.0250.0250.0250.1000.1500.1500.1500.1500.1000.1000.0250.025  
 63 0.0250.0250.0250.1000.1500.1500.1500.1500.1000.1000.0250.025  
 73 0.0250.0250.0250.1000.1500.1500.1500.1500.1000.1000.0250.025  
 83 0.0250.0250.0250.1000.1500.1500.1500.1500.1000.1000.0250.025  
 93 0.0250.0250.0250.1000.1500.1500.1500.1500.1000.1000.0250.025  
 103 0.0250.0250.0250.1000.1500.1500.1500.1500.1000.1000.0250.025  
 14 0.0250.0250.0250.1000.3000.3500.3500.3500.3000.1000.0250.025  
 24 0.0250.0250.0250.1000.3000.3500.3500.3500.3000.1000.0250.025  
 34 0.0250.0250.0250.1000.3000.3500.3500.3500.3000.1000.0250.025  
 44 0.0250.0250.0250.1000.3000.3500.3500.3500.3000.1000.0250.025  
 54 0.0250.0250.0250.1000.3000.3500.3500.3500.3000.1000.0250.025  
 64 0.0250.0250.0250.1000.3000.3500.3500.3500.3000.1000.0250.025  
 74 0.0250.0250.0250.1000.3000.3500.3500.3500.3000.1000.0250.025  
 84 0.0250.0250.0250.1000.3000.3500.3500.3500.3000.1000.0250.025  
 94 0.0250.0250.0250.1000.3000.3500.3500.3500.3000.1000.0250.025  
 104 0.0250.0250.0250.1000.3000.3500.3500.3500.3000.1000.0250.025  
 END MON-INTERCEP

MON-UZSN  
 \*\*\* <PLS > Upper zone storage at start of each month  
 \*\*\* x - x JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC  
 12 0.1000.1000.2000.4001.0401.2801.2801.2501.0400.4000.2000.100  
 22 0.1000.1000.2000.4001.0401.2801.2801.2801.0400.4000.2000.100  
 32 0.1000.1000.2000.4001.0401.2801.2801.2801.0400.4000.2000.100  
 42 0.1000.1000.2000.4001.0401.2801.2801.2801.0400.4000.2000.100  
 52 0.1000.1000.2000.4001.0401.2801.2801.2801.0400.4000.2000.100  
 62 0.1000.1000.2000.4001.0401.2801.2801.2801.0400.4000.2000.100  
 72 0.1000.1000.2000.4001.0401.2801.2801.2801.0400.4000.2000.100

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82      0.1000.1000.2000.4001.0401.2801.2801.2801.0400.4000.2000.100
92      0.1000.1000.2000.4001.0401.2801.2801.2801.0400.4000.2000.100
102     0.1000.1000.2000.4001.0401.2801.2801.2801.0400.4000.2000.100
14      0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
24      0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
34      0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
44      0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
54      0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
64      0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
74      0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
84      0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
94      0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
104     0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
END MON-UZSN

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MON-LZETPARM

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*** <PLS > Lower zone evapotransp  parm at start of each month
*** x - x  JAN  FEB  MAR  APR  MAY  JUN  JUL  AUG  SEP  OCT  NOV  DEC
11      0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
21      0.1000.1000.3000.7000.9000.9000.9000.9000.9000.9000.7000.3000.100
31      0.1000.1000.3000.7000.9000.9000.9000.9000.9000.9000.7000.3000.100
41      0.1000.1000.3000.7000.9000.9000.9000.9000.9000.9000.7000.3000.100
51      0.1000.1000.3000.7000.9000.9000.9000.9000.9000.9000.7000.3000.100
61      0.1000.1000.3000.7000.9000.9000.9000.9000.9000.9000.7000.3000.100
71      0.1000.1000.3000.7000.9000.9000.9000.9000.9000.9000.7000.3000.100
81      0.1000.1000.3000.7000.9000.9000.9000.9000.9000.9000.7000.3000.100
91      0.1000.1000.3000.7000.9000.9000.9000.9000.9000.9000.7000.3000.100
101     0.1000.1000.3000.7000.9000.9000.9000.9000.9000.9000.7000.3000.100
12      0.1000.1000.3000.6000.7000.7000.7000.7000.7000.7000.6000.3000.100
22      0.1000.1000.3000.6000.7000.7000.7000.7000.7000.7000.6000.3000.100
32      0.1000.1000.3000.6000.7000.7000.7000.7000.7000.7000.6000.3000.100
42      0.1000.1000.3000.6000.7000.7000.7000.7000.7000.7000.6000.3000.100
52      0.1000.1000.3000.6000.7000.7000.7000.7000.7000.7000.6000.3000.100
62      0.1000.1000.3000.6000.7000.7000.7000.7000.7000.7000.6000.3000.100
72      0.1000.1000.3000.6000.7000.7000.7000.7000.7000.7000.6000.3000.100
82      0.1000.1000.3000.6000.7000.7000.7000.7000.7000.7000.6000.3000.100
92      0.1000.1000.3000.6000.7000.7000.7000.7000.7000.7000.6000.3000.100
102     0.1000.1000.3000.6000.7000.7000.7000.7000.7000.7000.6000.3000.100
13      0.1000.1000.2000.3000.4000.4000.4000.4000.4000.4000.3000.2000.100
23      0.1000.1000.2000.3000.4000.4000.4000.4000.4000.4000.3000.2000.100
33      0.1000.1000.2000.3000.4000.4000.4000.4000.4000.4000.3000.2000.100
43      0.1000.1000.2000.3000.4000.4000.4000.4000.4000.4000.3000.2000.100
53      0.1000.1000.2000.3000.4000.4000.4000.4000.4000.4000.3000.2000.100
63      0.1000.1000.2000.3000.4000.4000.4000.4000.4000.4000.3000.2000.100
73      0.1000.1000.2000.3000.4000.4000.4000.4000.4000.4000.3000.2000.100
83      0.1000.1000.2000.3000.4000.4000.4000.4000.4000.4000.3000.2000.100
93      0.1000.1000.2000.3000.4000.4000.4000.4000.4000.4000.3000.2000.100
103     0.1000.1000.2000.3000.4000.4000.4000.4000.4000.4000.3000.2000.100
14      0.1000.1000.3000.6500.8000.8000.8000.8000.8000.8000.6500.3000.100
24      0.1000.1000.3000.6500.8000.8000.8000.8000.8000.8000.6500.3000.100
34      0.1000.1000.3000.6500.8000.8000.8000.8000.8000.8000.6500.3000.100
44      0.1000.1000.3000.6500.8000.8000.8000.8000.8000.8000.6500.3000.100
54      0.1000.1000.3000.6500.8000.8000.8000.8000.8000.8000.6500.3000.100
64      0.1000.1000.3000.6500.8000.8000.8000.8000.8000.8000.6500.3000.100
74      0.1000.1000.3000.6500.8000.8000.8000.8000.8000.8000.6500.3000.100
84      0.1000.1000.3000.6500.8000.8000.8000.8000.8000.8000.6500.3000.100
94      0.1000.1000.3000.6500.8000.8000.8000.8000.8000.8000.6500.3000.100
104     0.1000.1000.3000.6500.8000.8000.8000.8000.8000.8000.6500.3000.100
END MON-LZETPARM

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PWAT-STATE1

#	# ***	CEPS	SURS	UZS	IFWS	LZS	AGWS	GWVS
11		0.020	0.020	0.550	0.000	7.470	0.319	0.000
21		0.020	0.020	0.550	0.000	7.470	0.319	0.000
31		0.020	0.020	0.550	0.000	7.470	0.319	0.000
41		0.020	0.020	0.550	0.000	7.470	0.319	0.000
51		0.020	0.020	0.550	0.000	7.470	0.319	0.000
61		0.020	0.020	0.550	0.000	7.470	0.319	0.000
71		0.020	0.020	0.550	0.000	7.470	0.319	0.000
81		0.020	0.020	0.550	0.000	7.470	0.319	0.000
91		0.020	0.020	0.550	0.000	7.470	0.319	0.000

101	0.020	0.020	0.550	0.000	7.470	0.319	0.000
12	0.020	0.020	0.340	0.001	6.450	0.224	0.000
22	0.020	0.020	0.340	0.001	6.450	0.224	0.000
32	0.020	0.020	0.340	0.001	6.450	0.224	0.000
42	0.020	0.020	0.340	0.001	6.450	0.224	0.000
52	0.020	0.020	0.340	0.001	6.450	0.224	0.000
62	0.020	0.020	0.340	0.001	6.450	0.224	0.000
72	0.020	0.020	0.340	0.001	6.450	0.224	0.000
82	0.020	0.020	0.340	0.001	6.450	0.224	0.000
92	0.020	0.020	0.340	0.001	6.450	0.224	0.000
102	0.020	0.020	0.340	0.001	6.450	0.224	0.000
13	0.020	0.020	0.940	0.004	8.630	0.411	0.000
23	0.020	0.020	0.940	0.004	8.630	0.411	0.000
33	0.020	0.020	0.940	0.004	8.630	0.411	0.000
43	0.020	0.020	0.940	0.004	8.630	0.411	0.000
53	0.020	0.020	0.940	0.004	8.630	0.411	0.000
63	0.020	0.020	0.940	0.004	8.630	0.411	0.000
73	0.020	0.020	0.940	0.004	8.630	0.411	0.000
83	0.020	0.020	0.940	0.004	8.630	0.411	0.000
93	0.020	0.020	0.940	0.004	8.630	0.411	0.000
103	0.020	0.020	0.940	0.004	8.630	0.411	0.000
14	0.020	0.020	0.420	0.001	6.560	0.261	0.000
24	0.020	0.020	0.420	0.001	6.560	0.261	0.000
34	0.020	0.020	0.420	0.001	6.560	0.261	0.000
44	0.020	0.020	0.420	0.001	6.560	0.261	0.000
54	0.020	0.020	0.420	0.001	6.560	0.261	0.000
64	0.020	0.020	0.420	0.001	6.560	0.261	0.000
74	0.020	0.020	0.420	0.001	6.560	0.261	0.000
84	0.020	0.020	0.420	0.001	6.560	0.261	0.000
94	0.020	0.020	0.420	0.001	6.560	0.261	0.000
104	0.020	0.020	0.420	0.001	6.560	0.261	0.000

END PWAT-STATE1

END PERLND

IMPLND

ACTIVITY

#	#	ATMP	SNOW	IWAT	SLD	IWG	IQAL	***
11	1017	0	0	1	0	0	0	

END ACTIVITY

PRINT-INFO

#	#	ATMP	SNOW	IWAT	SLD	IWG	IQAL	PIVL	PYR	***
11	101	6	6	5	6	6	6	1	9	

END PRINT-INFO

GEN-INFO

#	#	NAME	UCI	IN	OUT	ENGL	METR	***
11	101	IMPERV LAND	1	1	1	91	0	

END GEN-INFO

IWAT-PARM1

#	#	CSNO	RTOP	VRS	VNN	RTLI	***
11	101	0	1	0	0	0	

END IWAT-PARM1

IWAT-PARM2

#	#	LSUR	SLSUR	NSUR	RETSC	***
11		200.0	0.2400	0.10	0.05	
21		200.0	0.2400	0.10	0.05	
31		200.0	0.2200	0.10	0.05	
41		300.0	0.1400	0.10	0.05	
51		250.0	0.1900	0.10	0.05	
61		200.0	0.2000	0.10	0.05	
71		250.0	0.1900	0.10	0.05	
81		250.0	0.1900	0.10	0.05	
91		200.0	0.2200	0.10	0.05	
101		250.0	0.1600	0.10	0.05	

END IWAT-PARM2

IWAT-PARM3

```

*** <ILS >    PETMAX    PETMIN
*** x - x    (deg F)    (deg F)
    11 101    40.0      35.0
END IWAT-PARM3

```

```

IWAT-STATE1
*** <ILS >    IWATER state variables (inches)
*** x - x    RETS      SURS
    11 101    0.03     0.01
END IWAT-STATE1

```

END IMPLND

```

RCHRES
ACTIVITY
RCHRES Active Sections (1=Active; 0=Inactive) ***
# - # HYFG ADFG CNFG HTFG SDFG GQFG OXFG NUFG PKFG PHFG ***
    1 10 1 0 0 0 0 0 0 0
END ACTIVITY

```

```

PRINT-INFO
RCHRES Print-flags ***
# - # HYDR ADCA CONS HEAT SED GQL OXRX NUTR PLNK PHCB PIVL PYR ***
    1 10 5 5 5 5 5 5 5 5 12
END PRINT-INFO

```

```

GEN-INFO
RCHRES<-----Name----->Nexit Unit Systems Printer ***
# - # User t-series Engr Metr LKFG ***
              in out ***
    1 Little Back Creek 1 1 1 1 91 0 0
    2 Upper Back Creek 1 1 1 1 91 0 0
    3 Poages Mill 1 1 1 1 91 0 0
    4 Cave Spring 1 1 1 1 91 0 0
    5 Blue Ridge Parkway 1 1 1 1 91 0 0
    6 Cattail Hollow 1 1 1 1 91 0 0
    7 State Rd #676 1 1 1 1 91 0 0
    8 Red Hill Church 1 1 1 1 91 0 0
    9 State Rd #667 1 1 1 1 91 0 0
   10 Dundee 1 1 1 1 91 0 0
END GEN-INFO

```

```

HYDR-PARM1
RCHRES Flags for HYDR section ***
# - # VC A1 A2 A3 ODFVFG for each ODGTFG for each *** FUNCT for each
      FG FG FG FG possible exit possible exit *** possible exit
              1 2 3 4 5 1 2 3 4 5 *** 1 2 3 4 5
    1 10 0 1 1 1 4 0 0 0 0 0 0 0 0 0 1 1 1 1 1
END HYDR-PARM1

```

```

HYDR-PARM2
RCHRES ***
# - # FTABNO LEN DELTH STCOR KS DB50 ***
    1 1 2.62 387.0 0.0 0.5 0.01
    2 2 2.99 561.0 0.0 0.5 0.01
    3 3 2.08 69.0 0.0 0.5 0.01
    4 4 2.35 85.0 0.0 0.5 0.01
    5 5 2.78 85.0 0.0 0.5 0.01
    6 6 1.94 36.0 0.0 0.5 0.01
    7 7 2.29 56.0 0.0 0.5 0.01
    8 8 1.96 26.0 0.0 0.5 0.01
    9 9 2.97 52.0 0.0 0.5 0.01
   10 10 3.05 56.0 0.0 0.5 0.01
END HYDR-PARM2

```

```

HYDR-INIT
RCHRES Initial conditions for HYDR section ***
# - # VOL Initial value of COLIND *** Initial value of OUTDGT
      (ac-ft) for each possible exit *** for each possible exit
              EX1 EX2 EX3 EX4 EX5 *** EX1 EX2 EX3 EX4 EX5
    1 0.10

```

```

2          0.25
3          0.45
4          0.65
5          0.85
6          1.00
7          1.50
8          2.00
9          2.50
10         3.00
END HYDR-INIT
END RCHRES

COPY
TIMESERIES
Copy-opn***
*** x - x NPT NMN
100      0 7
101 110 0 2
END TIMESERIES
END COPY

PLTGEN
PLOTINFO
*** x - x FILE NPT NMN LABEL PYR PIVL
100      92 0 10
200      93 0 10
300      94 0 10
END PLOTINFO
GEN-LABELS
*** x - x<-----title-----> <-----y-axis lab---->
100      Reach Outflows          Flow (cfs)
200      Land Segment Outflows   Runoff (in/hr)
300      Groundwater Recharge    Recharge (in/hr)
END GEN-LABELS
SCALING
*** x - x<---ymin---><---ymax---><---ivlin---><---thresh--->
100      0 100000 10
200      0 1.0000 10
300      0 1.0000 10
END SCALING
CURV-DATA
*** x - x <----label----> LIN INT COL TR
100 300 Outflow
END CURV-DATA
END PLTGEN

EXT SOURCES

<-Volume-> <Member> SsysSgap<--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name> x <Name> x tem strg<-factor->strg <Name> x x <Name> x x ***
WDM 210 EVAP ENGL PERLND 11 104 EXTNL PETINP 1 1
WDM 210 EVAP ENGL IMPLND 11 101 EXTNL PETINP 1 1

WDM 82 PRCP ENGL PERLND 11 104 EXTNL PREC 1 1
WDM 82 PRCP ENGL IMPLND 11 101 EXTNL PREC 1 1

WDM 541 FLOW ENGL PLTGEN 100 INPUT MEAN 1 1
WDM 542 FLOW ENGL PLTGEN 100 INPUT MEAN 2 1
WDM 543 FLOW ENGL PLTGEN 100 INPUT MEAN 3 1
WDM 544 FLOW ENGL PLTGEN 100 INPUT MEAN 4 1
WDM 545 FLOW ENGL PLTGEN 100 INPUT MEAN 5 1
WDM 546 FLOW ENGL PLTGEN 100 INPUT MEAN 6 1
WDM 547 FLOW ENGL PLTGEN 100 INPUT MEAN 7 1
WDM 548 FLOW ENGL PLTGEN 100 INPUT MEAN 8 1
WDM 549 FLOW ENGL PLTGEN 100 INPUT MEAN 9 1
WDM 550 FLOW ENGL PLTGEN 100 INPUT MEAN 10 1

WDM 531 SIMQ ENGL PLTGEN 200 INPUT MEAN 1 1
WDM 532 SIMQ ENGL PLTGEN 200 INPUT MEAN 2 1
WDM 533 SIMQ ENGL PLTGEN 200 INPUT MEAN 3 1
WDM 534 SIMQ ENGL PLTGEN 200 INPUT MEAN 4 1

```

WDM	535	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	5	1
WDM	536	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	6	1
WDM	537	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	7	1
WDM	538	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	8	1
WDM	539	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	9	1
WDM	540	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	10	1
WDM	551	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	1	1
WDM	552	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	2	1
WDM	553	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	3	1
WDM	554	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	4	1
WDM	555	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	5	1
WDM	556	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	6	1
WDM	557	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	7	1
WDM	558	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	8	1
WDM	559	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	9	1
WDM	560	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	10	1

END EXT SOURCES

EXT TARGETS

<-Volume-> <Name>	<-Grp> x	<-Member-> <Name>	<-Mult--> x	<-factor--> x	Tran strg	<-Volume-> <Name>	<Member> <Name>	Tsys qf	Aggr tem	Amd strg	*** strg***
RCHRES	10	ROFLOW	ROVOL	1	13.35965E-4	WDM	320	SIMQ	1	ENGL	REPL
COPY	100	OUTPUT	MEAN	1	12.79971E-5	WDM	321	SURO	1	ENGL	REPL
COPY	100	OUTPUT	MEAN	2	12.79971E-5	WDM	322	IFWO	1	ENGL	REPL
COPY	100	OUTPUT	MEAN	3	12.79971E-5	WDM	323	AGWO	1	ENGL	REPL
COPY	100	OUTPUT	MEAN	4	12.79971E-5	WDM	325	PETX	1	ENGL	AGGR
COPY	100	OUTPUT	MEAN	5	12.79971E-5	WDM	326	SAET	1	ENGL	AGGR
COPY	100	OUTPUT	MEAN	6	12.79971E-5	WDM	327	UZSX	1	ENGL	AGGR
COPY	100	OUTPUT	MEAN	7	12.79971E-5	WDM	328	LZSX	1	ENGL	AGGR
RCHRES	1	ROFLOW	ROVOL	1	12.1	WDM	541	FLOW	1	ENGL	REPL
RCHRES	2	ROFLOW	ROVOL	1	12.1	WDM	542	FLOW	1	ENGL	REPL
RCHRES	3	ROFLOW	ROVOL	1	12.1	WDM	543	FLOW	1	ENGL	REPL
RCHRES	4	ROFLOW	ROVOL	1	12.1	WDM	544	FLOW	1	ENGL	REPL
RCHRES	5	ROFLOW	ROVOL	1	12.1	WDM	545	FLOW	1	ENGL	REPL
RCHRES	6	ROFLOW	ROVOL	1	12.1	WDM	546	FLOW	1	ENGL	REPL
RCHRES	7	ROFLOW	ROVOL	1	12.1	WDM	547	FLOW	1	ENGL	REPL
RCHRES	8	ROFLOW	ROVOL	1	12.1	WDM	548	FLOW	1	ENGL	REPL
RCHRES	9	ROFLOW	ROVOL	1	12.1	WDM	549	FLOW	1	ENGL	REPL
RCHRES	10	ROFLOW	ROVOL	1	12.1	WDM	550	FLOW	1	ENGL	REPL
COPY	101	OUTPUT	MEAN	1	13.96983E-4	WDM	531	SIMQ	1	ENGL	REPL
COPY	102	OUTPUT	MEAN	1	12.14041E-4	WDM	532	SIMQ	1	ENGL	REPL
COPY	103	OUTPUT	MEAN	1	11.74398E-4	WDM	533	SIMQ	1	ENGL	REPL
COPY	104	OUTPUT	MEAN	1	15.00000E-4	WDM	534	SIMQ	1	ENGL	REPL
COPY	105	OUTPUT	MEAN	1	12.26809E-4	WDM	535	SIMQ	1	ENGL	REPL
COPY	106	OUTPUT	MEAN	1	12.80820E-4	WDM	536	SIMQ	1	ENGL	REPL
COPY	107	OUTPUT	MEAN	1	13.25407E-4	WDM	537	SIMQ	1	ENGL	REPL
COPY	108	OUTPUT	MEAN	1	13.15560E-4	WDM	538	SIMQ	1	ENGL	REPL
COPY	109	OUTPUT	MEAN	1	13.39789E-4	WDM	539	SIMQ	1	ENGL	REPL
COPY	110	OUTPUT	MEAN	1	12.72554E-4	WDM	540	SIMQ	1	ENGL	REPL
COPY	101	OUTPUT	MEAN	2	13.96983E-4	WDM	551	SIMQ	1	ENGL	REPL
COPY	102	OUTPUT	MEAN	2	12.14041E-4	WDM	552	SIMQ	1	ENGL	REPL
COPY	103	OUTPUT	MEAN	2	11.74398E-4	WDM	553	SIMQ	1	ENGL	REPL
COPY	104	OUTPUT	MEAN	2	15.00000E-4	WDM	554	SIMQ	1	ENGL	REPL
COPY	105	OUTPUT	MEAN	2	12.26809E-4	WDM	555	SIMQ	1	ENGL	REPL
COPY	106	OUTPUT	MEAN	2	12.80820E-4	WDM	556	SIMQ	1	ENGL	REPL
COPY	107	OUTPUT	MEAN	2	13.25407E-4	WDM	557	SIMQ	1	ENGL	REPL
COPY	108	OUTPUT	MEAN	2	13.15560E-4	WDM	558	SIMQ	1	ENGL	REPL
COPY	109	OUTPUT	MEAN	2	13.39789E-4	WDM	559	SIMQ	1	ENGL	REPL
COPY	110	OUTPUT	MEAN	2	12.72554E-4	WDM	560	SIMQ	1	ENGL	REPL

END EXT TARGETS

SCHEMATIC

<-Volume->	<Area-->	<-Volume->	<ML#>	***
<Name>	x	<-factor-->	<Name>	x
				***

PERLND	11	1894.	RCHRES	1	1
PERLND	12	281.	RCHRES	1	1
PERLND	13	19.	RCHRES	1	1
PERLND	14	206.	RCHRES	1	1
IMPLND	11	119.	RCHRES	1	3
PERLND	21	3252.	RCHRES	2	1
PERLND	22	639.	RCHRES	2	1
PERLND	23	37.	RCHRES	2	1
PERLND	24	535.	RCHRES	2	1
IMPLND	21	209.	RCHRES	2	3
PERLND	31	3954.	RCHRES	3	1
PERLND	32	831.	RCHRES	3	1
PERLND	33	72.	RCHRES	3	1
PERLND	34	574.	RCHRES	3	1
IMPLND	31	303.	RCHRES	3	3
PERLND	41	1054.	RCHRES	4	1
PERLND	42	392.	RCHRES	4	1
PERLND	43	85.	RCHRES	4	1
PERLND	44	306.	RCHRES	4	1
IMPLND	41	162.	RCHRES	4	3
PERLND	51	2401.	RCHRES	5	1
PERLND	52	506.	RCHRES	5	1
PERLND	53	591.	RCHRES	5	1
PERLND	54	591.	RCHRES	5	1
IMPLND	51	320.	RCHRES	5	3
PERLND	61	2442.	RCHRES	6	1
PERLND	62	438.	RCHRES	6	1
PERLND	63	71.	RCHRES	6	1
PERLND	64	407.	RCHRES	6	1
IMPLND	61	204.	RCHRES	6	3
PERLND	71	2014.	RCHRES	7	1
PERLND	72	379.	RCHRES	7	1
PERLND	73	65.	RCHRES	7	1
PERLND	74	400.	RCHRES	7	1
IMPLND	71	187.	RCHRES	7	3
PERLND	81	1864.	RCHRES	8	1
PERLND	82	381.	RCHRES	8	1
PERLND	83	328.	RCHRES	8	1
PERLND	84	373.	RCHRES	8	1
IMPLND	81	220.	RCHRES	8	3
PERLND	91	1971.	RCHRES	9	1
PERLND	92	405.	RCHRES	9	1
PERLND	93	103.	RCHRES	9	1
PERLND	94	307.	RCHRES	9	1
IMPLND	91	156.	RCHRES	9	3
PERLND	101	1370.	RCHRES	10	1
PERLND	102	995.	RCHRES	10	1
PERLND	103	272.	RCHRES	10	1
PERLND	104	738.	RCHRES	10	1
IMPLND	101	293.	RCHRES	10	3
RCHRES	1		RCHRES	3	5
RCHRES	2		RCHRES	3	5
RCHRES	3		RCHRES	4	5
RCHRES	4		RCHRES	5	5
RCHRES	5		RCHRES	6	5
RCHRES	6		RCHRES	7	5
RCHRES	7		RCHRES	8	5
RCHRES	8		RCHRES	9	5
RCHRES	9		RCHRES	10	5
PERLND	11	1894.	COPY	100	90



PERLND	12	281.	COPY	100	90
PERLND	13	19.	COPY	100	90
PERLND	14	206.	COPY	100	90
IMPLND	11	119.	COPY	100	91
PERLND	11	1894.	COPY	101	92
PERLND	12	281.	COPY	101	92
PERLND	13	19.	COPY	101	92
PERLND	14	206.	COPY	101	92
IMPLND	11	119.	COPY	101	93
PERLND	21	3252.	COPY	100	90
PERLND	22	639.	COPY	100	90
PERLND	23	37.	COPY	100	90
PERLND	24	535.	COPY	100	90
IMPLND	21	209.	COPY	100	91
PERLND	21	3252.	COPY	102	92
PERLND	22	639.	COPY	102	92
PERLND	23	37.	COPY	102	92
PERLND	24	535.	COPY	102	92
IMPLND	21	209.	COPY	102	93
PERLND	31	3954.	COPY	100	90
PERLND	32	831.	COPY	100	90
PERLND	33	72.	COPY	100	90
PERLND	34	574.	COPY	100	90
IMPLND	31	303.	COPY	100	91
PERLND	31	3954.	COPY	103	92
PERLND	32	831.	COPY	103	92
PERLND	33	72.	COPY	103	92
PERLND	34	574.	COPY	103	92
IMPLND	31	303.	COPY	103	93
PERLND	41	1054.	COPY	100	90
PERLND	42	392.	COPY	100	90
PERLND	43	85.	COPY	100	90
PERLND	44	306.	COPY	100	90
IMPLND	41	162.	COPY	100	91
PERLND	41	1054.	COPY	104	92
PERLND	42	392.	COPY	104	92
PERLND	43	85.	COPY	104	92
PERLND	44	306.	COPY	104	92
IMPLND	41	162.	COPY	104	93
PERLND	51	2401.	COPY	100	90
PERLND	52	506.	COPY	100	90
PERLND	53	591.	COPY	100	90
PERLND	54	591.	COPY	100	90
IMPLND	51	320.	COPY	100	91
PERLND	51	2401.	COPY	105	92
PERLND	52	506.	COPY	105	92
PERLND	53	591.	COPY	105	92
PERLND	54	591.	COPY	105	92
IMPLND	51	320.	COPY	105	93
PERLND	61	2442.	COPY	100	90
PERLND	62	438.	COPY	100	90
PERLND	63	71.	COPY	100	90
PERLND	64	407.	COPY	100	90
IMPLND	61	204.	COPY	100	91
PERLND	61	2442.	COPY	106	92
PERLND	62	438.	COPY	106	92
PERLND	63	71.	COPY	106	92
PERLND	64	407.	COPY	106	92
IMPLND	61	204.	COPY	106	93
PERLND	71	2014.	COPY	100	90
PERLND	72	379.	COPY	100	90
PERLND	73	65.	COPY	100	90
PERLND	74	400.	COPY	100	90
IMPLND	71	187.	COPY	100	91
PERLND	71	2014.	COPY	107	92

PERLND	72	379.	COPY	107	92
PERLND	73	65.	COPY	107	92
PERLND	74	400.	COPY	107	92
IMPLND	71	187.	COPY	107	93
PERLND	81	1864.	COPY	100	90
PERLND	82	381.	COPY	100	90
PERLND	83	328.	COPY	100	90
PERLND	84	373.	COPY	100	90
IMPLND	81	220.	COPY	100	91
PERLND	81	1864.	COPY	108	92
PERLND	82	381.	COPY	108	92
PERLND	83	328.	COPY	108	92
PERLND	84	373.	COPY	108	92
IMPLND	81	220.	COPY	108	93
PERLND	91	1971.	COPY	100	90
PERLND	92	405.	COPY	100	90
PERLND	93	103.	COPY	100	90
PERLND	94	307.	COPY	100	90
IMPLND	91	156.	COPY	100	91
PERLND	91	1971.	COPY	109	92
PERLND	92	405.	COPY	109	92
PERLND	93	103.	COPY	109	92
PERLND	94	307.	COPY	109	92
IMPLND	91	156.	COPY	109	93
PERLND	101	1370.	COPY	100	90
PERLND	102	995.	COPY	100	90
PERLND	103	272.	COPY	100	90
PERLND	104	738.	COPY	100	90
IMPLND	101	293.	COPY	100	91
PERLND	101	1370.	COPY	110	92
PERLND	102	995.	COPY	110	92
PERLND	103	272.	COPY	110	92
PERLND	104	738.	COPY	110	92
IMPLND	101	293.	COPY	110	93

END SCHEMATIC

MASS-LINK

```

MASS-LINK      1
<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name>      <Name> <Name> x x<-factor->strg <Name>      <Name> x x ***
PERLND      PWATER PERO      0.0533333 RCHRES      INFLOW IVOL
END MASS-LINK      1

```

```

MASS-LINK      3
<Srce>      <-Grp> <-Member-><--Mult-->      <Targ>      <-Grp> <-Member-> ***
<Name>      <Name> <Name> # #<-factor->      <Name>      <Name> <Name> # # ***
IMPLND      IWATER SURO      0.0533333 RCHRES      INFLOW IVOL
END MASS-LINK      3

```

```

MASS-LINK      5
<Srce>      <-Grp> <-Member-><--Mult-->      <Targ>      <-Grp> <-Member-> ***
<Name>      <Name> <Name> # #<-factor->      <Name>      <Name> <Name> # # ***
RCHRES      ROFLOW      RCHRES      INFLOW
END MASS-LINK      5

```

```

MASS-LINK      90
<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name>      <Name> x x<-factor->strg <Name>      <Name> x x ***
PERLND      PWATER SURO      COPY      INPUT MEAN 1
PERLND      PWATER IFWO      COPY      INPUT MEAN 2
PERLND      PWATER AGWO      COPY      INPUT MEAN 3
PERLND      PWATER PET      COPY      INPUT MEAN 4
PERLND      PWATER TAET      COPY      INPUT MEAN 5
PERLND      PWATER UZS      COPY      INPUT MEAN 6
PERLND      PWATER LZS      COPY      INPUT MEAN 7
END MASS-LINK      90

```

```

MASS-LINK          91
<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name>           <Name> x x<-factor->strg <Name>           <Name> x x ***
IMPLND          IWATER SURO                COPY                INPUT MEAN 1
IMPLND          IWATER PET                  COPY                INPUT MEAN 4
IMPLND          IWATER IMPEV                COPY                INPUT MEAN 5
END MASS-LINK     91

```

```

MASS-LINK          92
<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name>           <Name> x x<-factor->strg <Name>           <Name> x x ***
PERLND          PWATER PERO                COPY                INPUT MEAN 1
PERLND          PWATER AGWI                COPY                INPUT MEAN 2
END MASS-LINK     92

```

```

MASS-LINK          93
<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name>           <Name> x x<-factor->strg <Name>           <Name> x x ***
IMPLND          IWATER SURO                COPY                INPUT MEAN 1
END MASS-LINK     93
END MASS-LINK

```

FTABLES

```

FTABLE            1
ROWS COLS ***
15              4
DEPTH           AREA           VOLUME           DISCH           ***
(F)            (ACRES)          (AC-FT)          (CFS)          ***
0.00           1.90           0.00            0.00
0.20           1.97           0.39            2.66
0.40           2.03           0.79            8.43
0.60           2.09           1.20            16.54
0.80           2.16           1.62            26.70
1.00           2.22           2.06            38.73
1.20           2.28           2.51            52.50
1.40           2.35           2.97            67.95
1.60           2.41           3.45            85.02
1.80           2.47           3.94            103.65
2.00           2.54           4.44            123.83
4.00           3.17           10.14           408.06
8.00           4.44           25.36           1443.51
12.00          5.71           45.65           3184.35
18.00          7.61           85.59           7362.11

```

END FTABLE 1

```

FTABLE            2
ROWS COLS ***
15              4
DEPTH           AREA           VOLUME           DISCH           ***
(F)            (ACRES)          (AC-FT)          (CFS)          ***
0.00           2.53           0.00            0.00
0.20           2.61           0.51            3.43
0.40           2.68           1.04            10.87
0.60           2.75           1.59            21.33
0.80           2.82           2.14            34.41
1.00           2.90           2.72            49.89
1.20           2.97           3.30            67.61
1.40           3.04           3.90            87.46
1.60           3.11           4.52            109.35
1.80           3.19           5.15            133.23
2.00           3.26           5.79            159.04
4.00           3.98           13.03           519.10
8.00           5.43           31.86           1799.90
12.00          6.88           56.48           3905.86
21.00          10.35          134.42          12263.77

```

END FTABLE 2

```

FTABLE            3
ROWS COLS ***
16              4
DEPTH           AREA           VOLUME           DISCH           ***
(F)            (ACRES)          (AC-FT)          (CFS)          ***
0.00           4.29           0.00            0.00

```

0.20	4.42	0.87	3.68	
0.40	4.55	1.77	11.69	
0.60	4.67	2.69	23.02	
0.80	4.80	3.64	37.28	
1.00	4.92	4.61	54.22	
1.30	5.11	6.11	84.35	
1.70	5.37	8.21	132.84	
2.00	5.56	9.85	175.20	
2.30	5.75	11.54	222.55	
2.70	6.00	13.89	293.34	
3.00	6.19	15.72	352.14	
6.00	8.08	37.12	1211.65	
9.00	9.98	64.21	2596.60	
12.00	11.87	96.98	4566.48	
36.00	27.02	563.67	48712.37	

END FTABLE 3  
 FTABLE 4  
 ROWS COLS \*\*\*  
 16 4

DEPTH	AREA	VOLUME	DISCH	***
(FT)	(ACRES)	(AC-FT)	(CFS)	***
0.00	6.12	0.00	0.00	
0.20	6.29	1.24	4.15	
0.40	6.46	2.52	13.20	
0.60	6.63	3.83	25.99	
0.80	6.80	5.17	42.06	
1.00	6.98	6.55	61.14	
1.30	7.23	8.68	95.03	
1.70	7.57	11.64	149.46	
2.00	7.83	13.95	196.90	
2.30	8.09	16.34	249.83	
2.70	8.43	19.64	328.77	
3.00	8.68	22.21	394.17	
6.00	11.25	52.10	1338.90	
9.00	13.81	89.68	2535.59	
12.00	16.37	134.95	4936.63	
36.00	36.87	773.82	50457.43	

END FTABLE 4  
 FTABLE 5  
 ROWS COLS \*\*\*  
 16 4

DEPTH	AREA	VOLUME	DISCH	***
(FT)	(ACRES)	(AC-FT)	(CFS)	***
0.00	8.94	0.00	0.00	
0.20	9.15	1.81	4.64	
0.40	9.35	3.66	14.75	
0.60	9.55	5.55	29.03	
0.80	9.75	7.48	46.94	
1.00	9.96	9.45	68.19	
1.30	10.26	12.48	105.86	
1.70	10.66	16.67	166.19	
2.00	10.97	19.91	218.59	
2.30	11.27	23.25	276.88	
2.70	11.68	27.84	363.51	
3.00	11.98	31.39	435.02	
6.00	15.02	71.89	1448.46	
9.00	18.06	121.50	3008.60	
12.00	21.09	180.22	5147.54	
58.00	67.67	2221.75	142706.41	

END FTABLE 5  
 FTABLE 6  
 ROWS COLS \*\*\*  
 17 4

DEPTH	AREA	VOLUME	DISCH	***
(FT)	(ACRES)	(AC-FT)	(CFS)	***
0.00	7.64	0.00	0.00	
0.20	7.78	1.54	5.06	
0.40	7.92	3.11	16.08	
0.60	8.06	4.71	31.63	
0.80	8.20	6.34	51.14	
1.00	8.34	7.99	74.27	

1.30	8.56	10.53	115.24	
1.70	8.84	14.01	180.76	
2.00	9.05	16.69	237.60	
2.30	9.26	19.44	300.75	
2.70	9.54	23.20	394.44	
3.00	9.76	26.09	471.65	
6.00	11.87	58.53	1556.19	
9.00	13.99	97.32	3202.02	
12.00	16.10	142.45	5430.19	
15.00	18.22	193.93	8276.35	
58.00	48.54	1629.24	141041.23	

END FTABLE 6  
 FTABLE 7  
 ROWS COLS \*\*\*  
 16 4

DEPTH (FT)	AREA (ACRES)	VOLUME (AC-FT)	DISCH (CFS)	***
0.00	10.53	0.00	0.00	***
0.20	10.73	2.13	8.35	
0.40	10.92	4.29	26.56	
0.60	11.11	6.49	52.31	
0.80	11.31	8.74	84.68	
1.00	11.50	11.02	123.11	
1.30	11.79	14.51	191.34	
1.70	12.18	19.31	300.81	
2.00	12.47	23.00	396.05	
2.30	12.76	26.79	502.14	
2.70	13.15	31.97	660.01	
3.00	13.44	35.96	790.47	
6.00	16.35	80.66	2647.03	
9.00	19.26	134.08	5515.92	
12.00	22.17	196.24	9455.89	
24.00	33.81	532.16	37571.06	

END FTABLE 7  
 FTABLE 8  
 ROWS COLS \*\*\*  
 17 4

DEPTH (FT)	AREA (ACRES)	VOLUME (AC-FT)	DISCH (CFS)	***
0.00	10.34	0.00	0.00	***
0.20	10.53	2.09	8.49	
0.40	10.72	4.21	27.01	
0.60	10.91	6.37	53.19	
0.80	11.10	8.57	86.08	
1.00	11.29	10.81	125.11	
1.30	11.57	14.24	194.36	
1.70	11.95	18.95	305.34	
2.00	12.24	22.57	401.78	
2.30	12.52	26.29	509.10	
2.70	12.90	31.37	668.59	
3.00	13.19	35.29	800.22	
6.00	16.04	79.13	2660.86	
9.00	18.89	131.53	5505.65	
12.00	21.74	192.48	9376.55	
15.00	24.59	261.98	14339.04	
25.00	34.10	555.45	39708.38	

END FTABLE 8  
 FTABLE 9  
 ROWS COLS \*\*\*  
 18 4

DEPTH (FT)	AREA (ACRES)	VOLUME (AC-FT)	DISCH (CFS)	***
0.00	17.26	0.00	0.00	***
0.20	17.55	3.48	9.93	
0.40	17.83	7.02	31.59	
0.60	18.12	10.61	62.19	
0.80	18.41	14.27	100.62	
1.00	18.70	17.98	146.22	
1.30	19.13	23.65	227.07	
1.70	19.70	31.42	356.56	
2.00	20.14	37.39	469.02	

2.30	20.57	43.50	594.06	
2.70	21.14	51.84	779.75	
3.00	21.57	58.25	932.87	
6.00	25.89	129.44	3087.80	
9.00	30.20	213.58	6359.15	
12.00	34.52	310.67	10782.20	
15.00	38.83	420.69	16421.67	
25.00	53.22	880.94	44979.76	
50.00	89.17	2660.79	197754.51	

END FTABLE 9  
 FTABLE 10  
 ROWS COLS \*\*\*  
 18 4

DEPTH (FT)	AREA (ACRES)	VOLUME (AC-FT)	DISCH (CFS)	*** ***
0.00	19.58	0.00	0.00	
0.20	19.88	3.95	11.22	
0.40	20.18	7.95	35.67	
0.60	20.47	12.02	70.22	
0.80	20.77	16.14	113.60	
1.00	21.06	20.32	165.03	
1.30	21.51	26.71	256.20	
1.70	22.10	35.43	402.07	
2.00	22.54	42.12	528.65	
2.30	22.98	48.95	669.29	
2.70	23.57	58.26	877.93	
3.00	24.02	65.40	1049.81	
6.00	28.45	144.11	3455.64	
9.00	32.89	236.12	7075.47	
12.00	37.32	341.43	11929.84	
15.00	41.75	460.04	18075.19	
25.00	56.53	951.48	48802.16	
50.00	93.49	2826.74	209904.75	

END FTABLE 10  
 END FTABLES  
 END RUN

# Medium Density (Cluster) Full Build Out without Restrictions

RUN

GLOBAL

```

Back Creek above Dundee, VA
START      1956 10 1 0 0  END      1999  9 30  0  0
RUN INTERP OUTPUT LEVEL   3     2
RESUME     0 RUN      1                UNIT SYSTEM      1
END GLOBAL

```

FILES

```

<FILE> <UN#>***<----FILE NAME----->
WDM      16      backcr.wdm
MESSU    24      scenario.ech
          91      scenario.out
          92      backcr1.plt
          93      backcr2.plt
          94      backcr3.plt
END FILES

```

OPN SEQUENCE

```

INGRP                                INDELT 01:00
PERLND      11
PERLND      12
PERLND      13
PERLND      14
IMPLND      11
RCHRES      1
PERLND      21
PERLND      22
PERLND      23
PERLND      24
IMPLND      21
RCHRES      2
PERLND      31
PERLND      32
PERLND      33
PERLND      34
IMPLND      31
RCHRES      3
PERLND      41
PERLND      42
PERLND      43
PERLND      44
IMPLND      41
RCHRES      4
PERLND      51
PERLND      52
PERLND      53
PERLND      54
IMPLND      51
RCHRES      5
PERLND      61
PERLND      62
PERLND      63
PERLND      64
IMPLND      61
RCHRES      6
PERLND      71
PERLND      72
PERLND      73
PERLND      74
IMPLND      71
RCHRES      7
PERLND      81
PERLND      82

```

```

PERLND      83
PERLND      84
IMPLND      81
RCHRES       8
PERLND      91
PERLND      92
PERLND      93
PERLND      94
IMPLND      91
RCHRES       9
PERLND     101
PERLND     102
PERLND     103
PERLND     104
IMPLND     101
RCHRES     10
COPY       100
COPY       101
COPY       102
COPY       103
COPY       104
COPY       105
COPY       106
COPY       107
COPY       108
COPY       109
COPY       110
PLTGEN     100
PLTGEN     200
PLTGEN     300
END INGRP
END OPN SEQUENCE

```

```

PERLND
ACTIVITY
# # ATMP SNOW PWAT SED PST PWG PQAL MSTL PEST NITR PHOS TRAC ***
11 104 0 0 1 0 0 0 0 0 0 0 0 0 0
END ACTIVITY

```

```

PRINT-INFO
# # ATMP SNOW PWAT SED PST PWG PQAL MSTL PEST NITR PHOS TRAC PIVL***PY
11 104 6 6 5 6 6 6 6 6 6 6 6 6 1 9
END PRINT-INFO

```

```

GEN-INFO
# # NAME NBLKS UCI IN OUT ENGL METR ***
11 FOREST 1 1 1 1 91 0
21 FOREST 1 1 1 1 91 0
31 FOREST 1 1 1 1 91 0
41 FOREST 1 1 1 1 91 0
51 FOREST 1 1 1 1 91 0
61 FOREST 1 1 1 1 91 0
71 FOREST 1 1 1 1 91 0
81 FOREST 1 1 1 1 91 0
91 FOREST 1 1 1 1 91 0
101 FOREST 1 1 1 1 91 0
12 HERBACEOUS/AG 1 1 1 1 91 0
22 HERBACEOUS/AG 1 1 1 1 91 0
32 HERBACEOUS/AG 1 1 1 1 91 0
42 HERBACEOUS/AG 1 1 1 1 91 0
52 HERBACEOUS/AG 1 1 1 1 91 0
62 HERBACEOUS/AG 1 1 1 1 91 0
72 HERBACEOUS/AG 1 1 1 1 91 0
82 HERBACEOUS/AG 1 1 1 1 91 0
92 HERBACEOUS/AG 1 1 1 1 91 0
102 HERBACEOUS/AG 1 1 1 1 91 0
13 DISTURBED 1 1 1 1 91 0
23 DISTURBED 1 1 1 1 91 0
33 DISTURBED 1 1 1 1 91 0
43 DISTURBED 1 1 1 1 91 0
53 DISTURBED 1 1 1 1 91 0

```



63	DISTURBED	1	1	1	1	91	0
73	DISTURBED	1	1	1	1	91	0
83	DISTURBED	1	1	1	1	91	0
93	DISTURBED	1	1	1	1	91	0
103	DISTURBED	1	1	1	1	91	0
14	MIXED FOREST/AG	1	1	1	1	91	0
24	MIXED FOREST/AG	1	1	1	1	91	0
34	MIXED FOREST/AG	1	1	1	1	91	0
44	MIXED FOREST/AG	1	1	1	1	91	0
54	MIXED FOREST/AG	1	1	1	1	91	0
64	MIXED FOREST/AG	1	1	1	1	91	0
74	MIXED FOREST/AG	1	1	1	1	91	0
84	MIXED FOREST/AG	1	1	1	1	91	0
94	MIXED FOREST/AG	1	1	1	1	91	0
104	MIXED FOREST/AG	1	1	1	1	91	0

END GEN-INFO

PWAT-PARM1

#	#	CSNO	RTOP	UZFG	VCS	VUZ	NVV	VIFW	VIRC	VLE	***
11		0	1	1	1	0	0	0	0	1	0
12		0	1	1	1	1	0	0	0	1	0
13		0	1	1	1	0	0	0	0	1	0
14		0	1	1	1	1	0	0	0	1	0
21		0	1	1	1	0	0	0	0	1	0
22		0	1	1	1	1	0	0	0	1	0
23		0	1	1	1	0	0	0	0	1	0
24		0	1	1	1	1	0	0	0	1	0
31		0	1	1	1	0	0	0	0	1	0
32		0	1	1	1	1	0	0	0	1	0
33		0	1	1	1	0	0	0	0	1	0
34		0	1	1	1	1	0	0	0	1	0
41		0	1	1	1	0	0	0	0	1	0
42		0	1	1	1	1	0	0	0	1	0
43		0	1	1	1	0	0	0	0	1	0
44		0	1	1	1	1	0	0	0	1	0
51		0	1	1	1	0	0	0	0	1	0
52		0	1	1	1	1	0	0	0	1	0
53		0	1	1	1	0	0	0	0	1	0
54		0	1	1	1	1	0	0	0	1	0
61		0	1	1	1	0	0	0	0	1	0
62		0	1	1	1	1	0	0	0	1	0
63		0	1	1	1	0	0	0	0	1	0
64		0	1	1	1	1	0	0	0	1	0
71		0	1	1	1	0	0	0	0	1	0
72		0	1	1	1	1	0	0	0	1	0
73		0	1	1	1	0	0	0	0	1	0
74		0	1	1	1	1	0	0	0	1	0
81		0	1	1	1	0	0	0	0	1	0
82		0	1	1	1	1	0	0	0	1	0
83		0	1	1	1	0	0	0	0	1	0
84		0	1	1	1	1	0	0	0	1	0
91		0	1	1	1	0	0	0	0	1	0
92		0	1	1	1	1	0	0	0	1	0
93		0	1	1	1	0	0	0	0	1	0
94		0	1	1	1	1	0	0	0	1	0
101		0	1	1	1	0	0	0	0	1	0
102		0	1	1	1	1	0	0	0	1	0
103		0	1	1	1	0	0	0	0	1	0
104		0	1	1	1	1	0	0	0	1	0

END PWAT-PARM1

PWAT-PARM2

#	#	***FOREST	LZSN	INFILT	LSUR	SLSUR	KVARY	AGWR
11		0.000	9.5	0.105	200.	0.24000	0.000	.960
21		0.000	9.5	0.105	200.	0.24000	0.000	.960
31		0.000	9.5	0.105	200.	0.22000	0.000	.960
41		0.000	9.5	0.105	300.	0.14000	0.000	.960
51		0.000	9.5	0.105	250.	0.19000	0.000	.960
61		0.000	9.5	0.105	200.	0.20000	0.000	.960
71		0.000	9.5	0.105	250.	0.19000	0.000	.960
81		0.000	9.5	0.105	250.	0.19000	0.000	.960

91	0.000	9.5	0.105	200.	0.22000	0.000	.960
101	0.000	9.5	0.105	250.	0.16000	0.000	.960
12	0.000	9.5	0.086	200.	0.24000	0.000	.960
22	0.000	9.5	0.086	200.	0.24000	0.000	.960
32	0.000	9.5	0.086	200.	0.22000	0.000	.960
42	0.000	9.5	0.086	300.	0.14000	0.000	.960
52	0.000	9.5	0.086	250.	0.19000	0.000	.960
62	0.000	9.5	0.086	200.	0.20000	0.000	.960
72	0.000	9.5	0.086	250.	0.19000	0.000	.960
82	0.000	9.5	0.086	250.	0.19000	0.000	.960
92	0.000	9.5	0.086	200.	0.22000	0.000	.960
102	0.000	9.5	0.086	250.	0.16000	0.000	.960
13	0.000	9.5	0.067	200.	0.24000	0.000	.960
23	0.000	9.5	0.067	200.	0.24000	0.000	.960
33	0.000	9.5	0.067	200.	0.22000	0.000	.960
43	0.000	9.5	0.067	300.	0.14000	0.000	.960
53	0.000	9.5	0.067	250.	0.19000	0.000	.960
63	0.000	9.5	0.067	200.	0.20000	0.000	.960
73	0.000	9.5	0.067	250.	0.19000	0.000	.960
83	0.000	9.5	0.067	250.	0.19000	0.000	.960
93	0.000	9.5	0.067	200.	0.22000	0.000	.960
103	0.000	9.5	0.067	250.	0.16000	0.000	.960
14	0.000	9.5	0.096	200.	0.24000	0.000	.960
24	0.000	9.5	0.096	200.	0.24000	0.000	.960
34	0.000	9.5	0.096	200.	0.22000	0.000	.960
44	0.000	9.5	0.096	300.	0.14000	0.000	.960
54	0.000	9.5	0.096	250.	0.19000	0.000	.960
64	0.000	9.5	0.096	200.	0.20000	0.000	.960
74	0.000	9.5	0.096	250.	0.19000	0.000	.960
84	0.000	9.5	0.096	250.	0.19000	0.000	.960
94	0.000	9.5	0.096	200.	0.22000	0.000	.960
104	0.000	9.5	0.096	250.	0.16000	0.000	.960

END PWAT-PARM2

PWAT-PARM3

***<PLS>	PETMAX	PETMIN	INFEXP	INFILD	DEEPPFR	BASETP	AGWETP
***x - x	(deg F)	(deg F)					
11 104	40.0	35.0	2.0	2.0	0.210	0.000	0.000

END PWAT-PARM3

PWAT-PARM4

#	#	CEPSC	UZSN	NSUR	INTFW	IRC	LZETP	***
11		0.200	1.30	0.40	3.7	0.65	0.90	
21		0.200	1.30	0.40	3.7	0.65	0.90	
31		0.200	1.30	0.40	3.7	0.65	0.90	
41		0.200	1.30	0.40	3.7	0.65	0.90	
51		0.200	1.30	0.40	3.7	0.65	0.90	
61		0.200	1.30	0.40	3.7	0.65	0.90	
71		0.200	1.30	0.40	3.7	0.65	0.90	
81		0.200	1.30	0.40	3.7	0.65	0.90	
91		0.200	1.30	0.40	3.7	0.65	0.90	
101		0.200	1.30	0.40	3.7	0.65	0.90	
12		0.200	1.00	0.20	2.8	0.60	0.90	
22		0.200	1.00	0.20	2.8	0.60	0.90	
32		0.200	1.00	0.20	2.8	0.60	0.90	
42		0.200	1.00	0.20	2.8	0.60	0.90	
52		0.200	1.00	0.20	2.8	0.60	0.90	
62		0.200	1.00	0.20	2.8	0.60	0.90	
72		0.200	1.00	0.20	2.8	0.60	0.90	
82		0.200	1.00	0.20	2.8	0.60	0.90	
92		0.200	1.00	0.20	2.8	0.60	0.90	
102		0.200	1.00	0.20	2.8	0.60	0.90	
13		0.200	0.92	0.15	2.8	0.60	0.90	
23		0.200	0.92	0.15	2.8	0.60	0.90	
33		0.200	0.92	0.15	2.8	0.60	0.90	
43		0.200	0.92	0.15	2.8	0.60	0.90	
53		0.200	0.92	0.15	2.8	0.60	0.90	
63		0.200	0.92	0.15	2.8	0.60	0.90	
73		0.200	0.92	0.15	2.8	0.60	0.90	
83		0.200	0.92	0.15	2.8	0.60	0.90	
93		0.200	0.92	0.15	2.8	0.60	0.90	

103	0.200	0.92	0.15	2.8	0.60	0.90
14	0.200	1.00	0.30	3.3	0.63	0.90
24	0.200	1.00	0.30	3.3	0.63	0.90
34	0.200	1.00	0.30	3.3	0.63	0.90
44	0.200	1.00	0.30	3.3	0.63	0.90
54	0.200	1.00	0.30	3.3	0.63	0.90
64	0.200	1.00	0.30	3.3	0.63	0.90
74	0.200	1.00	0.30	3.3	0.63	0.90
84	0.200	1.00	0.30	3.3	0.63	0.90
94	0.200	1.00	0.30	3.3	0.63	0.90
104	0.200	1.00	0.30	3.3	0.63	0.90

END PWAT-PARM4

PWAT-PARM5  
 \*\*\* <PLS > FZG FZGL  
 \*\*\* x - x  
 11 104 1.0 0.1  
 END PWAT-PARM5

MON-INTERCEP  
 \*\*\* <PLS > Interception storage capacity at start of each month (in)  
 \*\*\* x - x JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

11	0.0250	0.0250	0.0250	1.000	3.500	4.000	4.000	4.000	3.500	1.000	0.0250	0.0250
21	0.0250	0.0250	0.0250	1.000	3.500	4.000	4.000	4.000	3.500	1.000	0.0250	0.0250
31	0.0250	0.0250	0.0250	1.000	3.500	4.000	4.000	4.000	3.500	1.000	0.0250	0.0250
41	0.0250	0.0250	0.0250	1.000	3.500	4.000	4.000	4.000	3.500	1.000	0.0250	0.0250
51	0.0250	0.0250	0.0250	1.000	3.500	4.000	4.000	4.000	3.500	1.000	0.0250	0.0250
61	0.0250	0.0250	0.0250	1.000	3.500	4.000	4.000	4.000	3.500	1.000	0.0250	0.0250
71	0.0250	0.0250	0.0250	1.000	3.500	4.000	4.000	4.000	3.500	1.000	0.0250	0.0250
81	0.0250	0.0250	0.0250	1.000	3.500	4.000	4.000	4.000	3.500	1.000	0.0250	0.0250
91	0.0250	0.0250	0.0250	1.000	3.500	4.000	4.000	4.000	3.500	1.000	0.0250	0.0250
101	0.0250	0.0250	0.0250	1.000	3.500	4.000	4.000	4.000	3.500	1.000	0.0250	0.0250
12	0.0250	0.0250	0.0250	1.000	2.500	3.000	3.000	3.000	2.500	1.000	0.0250	0.0250
22	0.0250	0.0250	0.0250	1.000	2.500	3.000	3.000	3.000	2.500	1.000	0.0250	0.0250
32	0.0250	0.0250	0.0250	1.000	2.500	3.000	3.000	3.000	2.500	1.000	0.0250	0.0250
42	0.0250	0.0250	0.0250	1.000	2.500	3.000	3.000	3.000	2.500	1.000	0.0250	0.0250
52	0.0250	0.0250	0.0250	1.000	2.500	3.000	3.000	3.000	2.500	1.000	0.0250	0.0250
62	0.0250	0.0250	0.0250	1.000	2.500	3.000	3.000	3.000	2.500	1.000	0.0250	0.0250
72	0.0250	0.0250	0.0250	1.000	2.500	3.000	3.000	3.000	2.500	1.000	0.0250	0.0250
82	0.0250	0.0250	0.0250	1.000	2.500	3.000	3.000	3.000	2.500	1.000	0.0250	0.0250
92	0.0250	0.0250	0.0250	1.000	2.500	3.000	3.000	3.000	2.500	1.000	0.0250	0.0250
102	0.0250	0.0250	0.0250	1.000	2.500	3.000	3.000	3.000	2.500	1.000	0.0250	0.0250
13	0.0250	0.0250	0.0250	1.000	1.500	1.500	1.500	1.500	1.000	1.000	0.0250	0.0250
23	0.0250	0.0250	0.0250	1.000	1.500	1.500	1.500	1.500	1.000	1.000	0.0250	0.0250
33	0.0250	0.0250	0.0250	1.000	1.500	1.500	1.500	1.500	1.000	1.000	0.0250	0.0250
43	0.0250	0.0250	0.0250	1.000	1.500	1.500	1.500	1.500	1.000	1.000	0.0250	0.0250
53	0.0250	0.0250	0.0250	1.000	1.500	1.500	1.500	1.500	1.000	1.000	0.0250	0.0250
63	0.0250	0.0250	0.0250	1.000	1.500	1.500	1.500	1.500	1.000	1.000	0.0250	0.0250
73	0.0250	0.0250	0.0250	1.000	1.500	1.500	1.500	1.500	1.000	1.000	0.0250	0.0250
83	0.0250	0.0250	0.0250	1.000	1.500	1.500	1.500	1.500	1.000	1.000	0.0250	0.0250
93	0.0250	0.0250	0.0250	1.000	1.500	1.500	1.500	1.500	1.000	1.000	0.0250	0.0250
103	0.0250	0.0250	0.0250	1.000	1.500	1.500	1.500	1.500	1.000	1.000	0.0250	0.0250
14	0.0250	0.0250	0.0250	1.000	3.000	3.500	3.500	3.500	3.000	1.000	0.0250	0.0250
24	0.0250	0.0250	0.0250	1.000	3.000	3.500	3.500	3.500	3.000	1.000	0.0250	0.0250
34	0.0250	0.0250	0.0250	1.000	3.000	3.500	3.500	3.500	3.000	1.000	0.0250	0.0250
44	0.0250	0.0250	0.0250	1.000	3.000	3.500	3.500	3.500	3.000	1.000	0.0250	0.0250
54	0.0250	0.0250	0.0250	1.000	3.000	3.500	3.500	3.500	3.000	1.000	0.0250	0.0250
64	0.0250	0.0250	0.0250	1.000	3.000	3.500	3.500	3.500	3.000	1.000	0.0250	0.0250
74	0.0250	0.0250	0.0250	1.000	3.000	3.500	3.500	3.500	3.000	1.000	0.0250	0.0250
84	0.0250	0.0250	0.0250	1.000	3.000	3.500	3.500	3.500	3.000	1.000	0.0250	0.0250
94	0.0250	0.0250	0.0250	1.000	3.000	3.500	3.500	3.500	3.000	1.000	0.0250	0.0250
104	0.0250	0.0250	0.0250	1.000	3.000	3.500	3.500	3.500	3.000	1.000	0.0250	0.0250

END MON-INTERCEP

MON-UZSN  
 \*\*\* <PLS > Upper zone storage at start of each month  
 \*\*\* x - x JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

12	0.1000	1.000	2.000	4.001	0.401	2.801	2.801	2.501	0.400	4.000	2.000	1.00
22	0.1000	1.000	2.000	4.001	0.401	2.801	2.801	2.801	0.400	4.000	2.000	1.00
32	0.1000	1.000	2.000	4.001	0.401	2.801	2.801	2.801	0.400	4.000	2.000	1.00
42	0.1000	1.000	2.000	4.001	0.401	2.801	2.801	2.801	0.400	4.000	2.000	1.00

```

52 0.1000.1000.2000.4001.0401.2801.2801.2801.0400.4000.2000.100
62 0.1000.1000.2000.4001.0401.2801.2801.2801.0400.4000.2000.100
72 0.1000.1000.2000.4001.0401.2801.2801.2801.0400.4000.2000.100
82 0.1000.1000.2000.4001.0401.2801.2801.2801.0400.4000.2000.100
92 0.1000.1000.2000.4001.0401.2801.2801.2801.0400.4000.2000.100
102 0.1000.1000.2000.4001.0401.2801.2801.2801.0400.4000.2000.100
14 0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
24 0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
34 0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
44 0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
54 0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
64 0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
74 0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
84 0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
94 0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
104 0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
END MON-UZSN

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MON-LZETPARM

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*** <PLS > Lower zone evapotransp parm at start of each month
*** x - x JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC
11 0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
21 0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
31 0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
41 0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
51 0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
61 0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
71 0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
81 0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
91 0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
101 0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
12 0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
22 0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
32 0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
42 0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
52 0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
62 0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
72 0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
82 0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
92 0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
102 0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
13 0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
23 0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
33 0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
43 0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
53 0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
63 0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
73 0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
83 0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
93 0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
103 0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
14 0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
24 0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
34 0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
44 0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
54 0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
64 0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
74 0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
84 0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
94 0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
104 0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
END MON-LZETPARM

```

PWAT-STATE1

#	# ***	CEPS	SURS	UZS	IFWS	LZS	AGWS	GWVS
11		0.020	0.020	0.550	0.000	7.470	0.319	0.000
21		0.020	0.020	0.550	0.000	7.470	0.319	0.000
31		0.020	0.020	0.550	0.000	7.470	0.319	0.000
41		0.020	0.020	0.550	0.000	7.470	0.319	0.000
51		0.020	0.020	0.550	0.000	7.470	0.319	0.000
61		0.020	0.020	0.550	0.000	7.470	0.319	0.000

71	0.020	0.020	0.550	0.000	7.470	0.319	0.000
81	0.020	0.020	0.550	0.000	7.470	0.319	0.000
91	0.020	0.020	0.550	0.000	7.470	0.319	0.000
101	0.020	0.020	0.550	0.000	7.470	0.319	0.000
12	0.020	0.020	0.340	0.001	6.450	0.224	0.000
22	0.020	0.020	0.340	0.001	6.450	0.224	0.000
32	0.020	0.020	0.340	0.001	6.450	0.224	0.000
42	0.020	0.020	0.340	0.001	6.450	0.224	0.000
52	0.020	0.020	0.340	0.001	6.450	0.224	0.000
62	0.020	0.020	0.340	0.001	6.450	0.224	0.000
72	0.020	0.020	0.340	0.001	6.450	0.224	0.000
82	0.020	0.020	0.340	0.001	6.450	0.224	0.000
92	0.020	0.020	0.340	0.001	6.450	0.224	0.000
102	0.020	0.020	0.340	0.001	6.450	0.224	0.000
13	0.020	0.020	0.940	0.004	8.630	0.411	0.000
23	0.020	0.020	0.940	0.004	8.630	0.411	0.000
33	0.020	0.020	0.940	0.004	8.630	0.411	0.000
43	0.020	0.020	0.940	0.004	8.630	0.411	0.000
53	0.020	0.020	0.940	0.004	8.630	0.411	0.000
63	0.020	0.020	0.940	0.004	8.630	0.411	0.000
73	0.020	0.020	0.940	0.004	8.630	0.411	0.000
83	0.020	0.020	0.940	0.004	8.630	0.411	0.000
93	0.020	0.020	0.940	0.004	8.630	0.411	0.000
103	0.020	0.020	0.940	0.004	8.630	0.411	0.000
14	0.020	0.020	0.420	0.001	6.560	0.261	0.000
24	0.020	0.020	0.420	0.001	6.560	0.261	0.000
34	0.020	0.020	0.420	0.001	6.560	0.261	0.000
44	0.020	0.020	0.420	0.001	6.560	0.261	0.000
54	0.020	0.020	0.420	0.001	6.560	0.261	0.000
64	0.020	0.020	0.420	0.001	6.560	0.261	0.000
74	0.020	0.020	0.420	0.001	6.560	0.261	0.000
84	0.020	0.020	0.420	0.001	6.560	0.261	0.000
94	0.020	0.020	0.420	0.001	6.560	0.261	0.000
104	0.020	0.020	0.420	0.001	6.560	0.261	0.000

END PWAT-STATE1

END PERLND

IMPLND

ACTIVITY

#	#	ATMP	SNOW	IWAT	SLD	IWG	IQAL	***
11	1017	0	0	1	0	0	0	

END ACTIVITY

PRINT-INFO

#	#	ATMP	SNOW	IWAT	SLD	IWG	IQAL	PIVL	PYR	***
11	101	6	6	5	6	6	6	1	9	

END PRINT-INFO

GEN-INFO

#	#	NAME	UCI	IN	OUT	ENGL	METR	***
11	101	IMPERV LAND	1	1	1	91	0	

END GEN-INFO

IWAT-PARM1

#	#	CSNO	RTOP	VRS	VNN	RTLI	***
11	101	0	1	0	0	0	

END IWAT-PARM1

IWAT-PARM2

#	#	LSUR	SLSUR	NSUR	RETSC	***
11		200.0	0.2400	0.10	0.05	
21		200.0	0.2400	0.10	0.05	
31		200.0	0.2200	0.10	0.05	
41		300.0	0.1400	0.10	0.05	
51		250.0	0.1900	0.10	0.05	
61		200.0	0.2000	0.10	0.05	
71		250.0	0.1900	0.10	0.05	
81		250.0	0.1900	0.10	0.05	
91		200.0	0.2200	0.10	0.05	
101		250.0	0.1600	0.10	0.05	

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END IWAT-PARM2

IWAT-PARM3
*** <ILS >   PETMAX   PETMIN
*** x - x   (deg F)   (deg F)
   11 101   40.0     35.0
END IWAT-PARM3

IWAT-STATE1
*** <ILS > IWATER state variables (inches)
*** x - x   RETS     SURS
   11 101   0.03     0.01
END IWAT-STATE1

END IMPLND

RCHRES
ACTIVITY
  RCHRES Active Sections (1=Active; 0=Inactive)      ***
  # - # HYFG ADFG CNFG HTFG SDFG GQFG OXFG NUFG PKFG PHFG ***
   1 10 1 0 0 0 0 0 0 0 0
END ACTIVITY

PRINT-INFO
  RCHRES Print-flags      ***
  # - # HYDR ADCA CONS HEAT SED  GQL OXRX NUTR PLNK PHCB PIVL  PYR ***
   1 10 5 5 5 5 5 5 5 5 12
END PRINT-INFO

GEN-INFO
  RCHRES<-----Name----->Nexit  Unit Systems  Printer      ***
  # - # User t-series  Engr Metr LKFG ***
  # - # in out
   1 Little Back Creek 1 1 1 1 91 0 0
   2 Upper Back Creek 1 1 1 1 91 0 0
   3 Poages Mill 1 1 1 1 91 0 0
   4 Cave Spring 1 1 1 1 91 0 0
   5 Blue Ridge Parkway 1 1 1 1 91 0 0
   6 Cattail Hollow 1 1 1 1 91 0 0
   7 State Rd #676 1 1 1 1 91 0 0
   8 Red Hill Church 1 1 1 1 91 0 0
   9 State Rd #667 1 1 1 1 91 0 0
  10 Dundee 1 1 1 1 91 0 0
END GEN-INFO

HYDR-PARM1
  RCHRES Flags for HYDR section      ***
  # - # VC A1 A2 A3 ODFVFG for each  ODGTFG for each *** FUNCT for each
  # - # FG FG FG FG possible exit possible exit *** possible exit
  # - # 1 2 3 4 5 1 2 3 4 5 *** 1 2 3 4 5
   1 10 0 1 1 1 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 1 1 1 1
END HYDR-PARM1

HYDR-PARM2
  RCHRES      ***
  # - # FTABNO LEN DELTH STCOR KS DB50 ***
   1 1 2.62 387.0 0.0 0.5 0.01
   2 2 2.99 561.0 0.0 0.5 0.01
   3 3 2.08 69.0 0.0 0.5 0.01
   4 4 2.35 85.0 0.0 0.5 0.01
   5 5 2.78 85.0 0.0 0.5 0.01
   6 6 1.94 36.0 0.0 0.5 0.01
   7 7 2.29 56.0 0.0 0.5 0.01
   8 8 1.96 26.0 0.0 0.5 0.01
   9 9 2.97 52.0 0.0 0.5 0.01
  10 10 3.05 56.0 0.0 0.5 0.01
END HYDR-PARM2

HYDR-INIT
  RCHRES Initial conditions for HYDR section ***
  # - # VOL Initial value of COLIND *** Initial value of OUTDGT

```

```

                (ac-ft)          for each possible exit *** for each possible exit
                EX1 EX2 EX3 EX4 EX5 *** EX1 EX2 EX3 EX4 EX5
1              0.10
2              0.25
3              0.45
4              0.65
5              0.85
6              1.00
7              1.50
8              2.00
9              2.50
10             3.00
END HYDR-INIT
END RCHRES

COPY
TIMESERIES
Copy-opn***
*** x - x NPT NMN
100           0 7
101 110      0 2
END TIMESERIES
END COPY

PLTGEN
PLOTINFO
*** x - x FILE NPT NMN LABL PYR PIVL
100           92 0 10
200           93 0 10
300           94 0 10
END PLOTINFO
GEN-LABELS
*** x - x<-----title-----> <-----y-axis lab---->
100 Reach Outflows Flow (cfs)
200 Land Segment Outflows Runoff (in/hr)
300 Groundwater Recharge Recharge (in/hr)
END GEN-LABELS
SCALING
*** x - x<--ymin--><--ymax--><--ivlin--><--thresh-->
100           0 100000 10
200           0 1.0000 10
300           0 1.0000 10
END SCALING
CURV-DATA
*** x - x <----label----> LIN INT COL TR
100 300 Outflow
END CURV-DATA
END PLTGEN

EXT SOURCES

<-Volume-> <Member> SsysSgap<--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name> x <Name> x tem strg<-factor->strg <Name> x x <Name> x x ***
WDM 210 EVAP ENGL PERLND 11 104 EXTNL PETINP 1 1
WDM 210 EVAP ENGL IMPLND 11 101 EXTNL PETINP 1 1

WDM 82 PRCP ENGL PERLND 11 104 EXTNL PREC 1 1
WDM 82 PRCP ENGL IMPLND 11 101 EXTNL PREC 1 1

WDM 541 FLOW ENGL PLTGEN 100 INPUT MEAN 1 1
WDM 542 FLOW ENGL PLTGEN 100 INPUT MEAN 2 1
WDM 543 FLOW ENGL PLTGEN 100 INPUT MEAN 3 1
WDM 544 FLOW ENGL PLTGEN 100 INPUT MEAN 4 1
WDM 545 FLOW ENGL PLTGEN 100 INPUT MEAN 5 1
WDM 546 FLOW ENGL PLTGEN 100 INPUT MEAN 6 1
WDM 547 FLOW ENGL PLTGEN 100 INPUT MEAN 7 1
WDM 548 FLOW ENGL PLTGEN 100 INPUT MEAN 8 1
WDM 549 FLOW ENGL PLTGEN 100 INPUT MEAN 9 1
WDM 550 FLOW ENGL PLTGEN 100 INPUT MEAN 10 1

WDM 531 SIMQ ENGL PLTGEN 200 INPUT MEAN 1 1

```

WDM	532	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	2	1
WDM	533	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	3	1
WDM	534	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	4	1
WDM	535	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	5	1
WDM	536	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	6	1
WDM	537	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	7	1
WDM	538	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	8	1
WDM	539	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	9	1
WDM	540	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	10	1
WDM	551	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	1	1
WDM	552	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	2	1
WDM	553	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	3	1
WDM	554	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	4	1
WDM	555	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	5	1
WDM	556	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	6	1
WDM	557	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	7	1
WDM	558	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	8	1
WDM	559	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	9	1
WDM	560	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	10	1

END EXT SOURCES

EXT TARGETS

<-Volume->	<-Grp>	<-Member->	<--Mult-->	Tran	<-Volume->	<Member>	Tsys	Aggr	Amd	***		
<Name>	x	<Name>	x	<-factor->	strg	<Name>	x	<Name>	qf	tem	strg	strg***
RCHRES	10	ROFLOW	ROVOL	1	13.35965E-4	WDM	320	SIMQ	1	ENGL		REPL
COPY	100	OUTPUT	MEAN	1	12.79971E-5	WDM	321	SURO	1	ENGL		REPL
COPY	100	OUTPUT	MEAN	2	12.79971E-5	WDM	322	IFWO	1	ENGL		REPL
COPY	100	OUTPUT	MEAN	3	12.79971E-5	WDM	323	AGWO	1	ENGL		REPL
COPY	100	OUTPUT	MEAN	4	12.79971E-5	WDM	325	PETX	1	ENGL	AGGR	REPL
COPY	100	OUTPUT	MEAN	5	12.79971E-5	WDM	326	SAET	1	ENGL	AGGR	REPL
COPY	100	OUTPUT	MEAN	6	12.79971E-5	WDM	327	UZSX	1	ENGL	AGGR	REPL
COPY	100	OUTPUT	MEAN	7	12.79971E-5	WDM	328	LZSX	1	ENGL	AGGR	REPL
RCHRES	1	ROFLOW	ROVOL	1	12.1	WDM	541	FLOW	1	ENGL		REPL
RCHRES	2	ROFLOW	ROVOL	1	12.1	WDM	542	FLOW	1	ENGL		REPL
RCHRES	3	ROFLOW	ROVOL	1	12.1	WDM	543	FLOW	1	ENGL		REPL
RCHRES	4	ROFLOW	ROVOL	1	12.1	WDM	544	FLOW	1	ENGL		REPL
RCHRES	5	ROFLOW	ROVOL	1	12.1	WDM	545	FLOW	1	ENGL		REPL
RCHRES	6	ROFLOW	ROVOL	1	12.1	WDM	546	FLOW	1	ENGL		REPL
RCHRES	7	ROFLOW	ROVOL	1	12.1	WDM	547	FLOW	1	ENGL		REPL
RCHRES	8	ROFLOW	ROVOL	1	12.1	WDM	548	FLOW	1	ENGL		REPL
RCHRES	9	ROFLOW	ROVOL	1	12.1	WDM	549	FLOW	1	ENGL		REPL
RCHRES	10	ROFLOW	ROVOL	1	12.1	WDM	550	FLOW	1	ENGL		REPL
COPY	101	OUTPUT	MEAN	1	13.96983E-4	WDM	531	SIMQ	1	ENGL		REPL
COPY	102	OUTPUT	MEAN	1	12.14041E-4	WDM	532	SIMQ	1	ENGL		REPL
COPY	103	OUTPUT	MEAN	1	11.74398E-4	WDM	533	SIMQ	1	ENGL		REPL
COPY	104	OUTPUT	MEAN	1	15.00000E-4	WDM	534	SIMQ	1	ENGL		REPL
COPY	105	OUTPUT	MEAN	1	12.26809E-4	WDM	535	SIMQ	1	ENGL		REPL
COPY	106	OUTPUT	MEAN	1	12.80820E-4	WDM	536	SIMQ	1	ENGL		REPL
COPY	107	OUTPUT	MEAN	1	13.25407E-4	WDM	537	SIMQ	1	ENGL		REPL
COPY	108	OUTPUT	MEAN	1	13.15560E-4	WDM	538	SIMQ	1	ENGL		REPL
COPY	109	OUTPUT	MEAN	1	13.39789E-4	WDM	539	SIMQ	1	ENGL		REPL
COPY	110	OUTPUT	MEAN	1	12.72554E-4	WDM	540	SIMQ	1	ENGL		REPL
COPY	101	OUTPUT	MEAN	2	13.96983E-4	WDM	551	SIMQ	1	ENGL		REPL
COPY	102	OUTPUT	MEAN	2	12.14041E-4	WDM	552	SIMQ	1	ENGL		REPL
COPY	103	OUTPUT	MEAN	2	11.74398E-4	WDM	553	SIMQ	1	ENGL		REPL
COPY	104	OUTPUT	MEAN	2	15.00000E-4	WDM	554	SIMQ	1	ENGL		REPL
COPY	105	OUTPUT	MEAN	2	12.26809E-4	WDM	555	SIMQ	1	ENGL		REPL
COPY	106	OUTPUT	MEAN	2	12.80820E-4	WDM	556	SIMQ	1	ENGL		REPL
COPY	107	OUTPUT	MEAN	2	13.25407E-4	WDM	557	SIMQ	1	ENGL		REPL
COPY	108	OUTPUT	MEAN	2	13.15560E-4	WDM	558	SIMQ	1	ENGL		REPL
COPY	109	OUTPUT	MEAN	2	13.39789E-4	WDM	559	SIMQ	1	ENGL		REPL
COPY	110	OUTPUT	MEAN	2	12.72554E-4	WDM	560	SIMQ	1	ENGL		REPL

END EXT TARGETS



SCHEMATIC					
<-Volume->		<--Area-->	<-Volume->	<ML#>	***
<Name>	x	<-factor->	<Name>	x	***
PERLND	11	949.	RCHRES	1	1
PERLND	12	935.	RCHRES	1	1
PERLND	13	19.	RCHRES	1	1
PERLND	14	113.	RCHRES	1	1
IMPLND	11	503.	RCHRES	1	3
PERLND	21	1591.	RCHRES	2	1
PERLND	22	1814.	RCHRES	2	1
PERLND	23	37.	RCHRES	2	1
PERLND	24	297.	RCHRES	2	1
IMPLND	21	933.	RCHRES	2	3
PERLND	31	1994.	RCHRES	3	1
PERLND	32	2201.	RCHRES	3	1
PERLND	33	72.	RCHRES	3	1
PERLND	34	322.	RCHRES	3	1
IMPLND	31	1144.	RCHRES	3	3
PERLND	41	579.	RCHRES	4	1
PERLND	42	766.	RCHRES	4	1
PERLND	43	85.	RCHRES	4	1
PERLND	44	174.	RCHRES	4	1
IMPLND	41	397.	RCHRES	4	3
PERLND	51	1223.	RCHRES	5	1
PERLND	52	1405.	RCHRES	5	1
PERLND	53	591.	RCHRES	5	1
PERLND	54	330.	RCHRES	5	1
IMPLND	51	860.	RCHRES	5	3
PERLND	61	1251.	RCHRES	6	1
PERLND	62	1303.	RCHRES	6	1
PERLND	63	71.	RCHRES	6	1
PERLND	64	226.	RCHRES	6	1
IMPLND	61	710.	RCHRES	6	3
PERLND	71	1044.	RCHRES	7	1
PERLND	72	1105.	RCHRES	7	1
PERLND	73	65.	RCHRES	7	1
PERLND	74	225.	RCHRES	7	1
IMPLND	71	607.	RCHRES	7	3
PERLND	81	954.	RCHRES	8	1
PERLND	82	1056.	RCHRES	8	1
PERLND	83	328.	RCHRES	8	1
PERLND	84	207.	RCHRES	8	1
IMPLND	81	621.	RCHRES	8	3
PERLND	91	991.	RCHRES	9	1
PERLND	92	1099.	RCHRES	9	1
PERLND	93	103.	RCHRES	9	1
PERLND	94	165.	RCHRES	9	1
IMPLND	91	585.	RCHRES	9	3
PERLND	101	709.	RCHRES	10	1
PERLND	102	1544.	RCHRES	10	1
PERLND	103	272.	RCHRES	10	1
PERLND	104	420.	RCHRES	10	1
IMPLND	101	724.	RCHRES	10	3
RCHRES	1		RCHRES	3	5
RCHRES	2		RCHRES	3	5
RCHRES	3		RCHRES	4	5
RCHRES	4		RCHRES	5	5
RCHRES	5		RCHRES	6	5
RCHRES	6		RCHRES	7	5
RCHRES	7		RCHRES	8	5
RCHRES	8		RCHRES	9	5

RCHRES	9		RCHRES	10	5
PERLND	11	949.	COPY	100	90
PERLND	12	935.	COPY	100	90
PERLND	13	19.	COPY	100	90
PERLND	14	113.	COPY	100	90
IMPLND	11	503.	COPY	100	91
PERLND	11	949.	COPY	101	92
PERLND	12	935.	COPY	101	92
PERLND	13	19.	COPY	101	92
PERLND	14	113.	COPY	101	92
IMPLND	11	503.	COPY	101	93
PERLND	21	1591.	COPY	100	90
PERLND	22	1814.	COPY	100	90
PERLND	23	37.	COPY	100	90
PERLND	24	297.	COPY	100	90
IMPLND	21	933.	COPY	100	91
PERLND	21	1591.	COPY	102	92
PERLND	22	1814.	COPY	102	92
PERLND	23	37.	COPY	102	92
PERLND	24	297.	COPY	102	92
IMPLND	21	933.	COPY	102	93
PERLND	31	1994.	COPY	100	90
PERLND	32	2201.	COPY	100	90
PERLND	33	72.	COPY	100	90
PERLND	34	322.	COPY	100	90
IMPLND	31	1144.	COPY	100	91
PERLND	31	1994.	COPY	103	92
PERLND	32	2201.	COPY	103	92
PERLND	33	72.	COPY	103	92
PERLND	34	322.	COPY	103	92
IMPLND	31	1144.	COPY	103	93
PERLND	41	579.	COPY	100	90
PERLND	42	766.	COPY	100	90
PERLND	43	85.	COPY	100	90
PERLND	44	174.	COPY	100	90
IMPLND	41	397.	COPY	100	91
PERLND	41	579.	COPY	104	92
PERLND	42	766.	COPY	104	92
PERLND	43	85.	COPY	104	92
PERLND	44	174.	COPY	104	92
IMPLND	41	397.	COPY	104	93
PERLND	51	1223.	COPY	100	90
PERLND	52	1405.	COPY	100	90
PERLND	53	591.	COPY	100	90
PERLND	54	330.	COPY	100	90
IMPLND	51	860.	COPY	100	91
PERLND	51	1223.	COPY	105	92
PERLND	52	1405.	COPY	105	92
PERLND	53	591.	COPY	105	92
PERLND	54	330.	COPY	105	92
IMPLND	51	860.	COPY	105	93
PERLND	61	1251.	COPY	100	90
PERLND	62	1303.	COPY	100	90
PERLND	63	71.	COPY	100	90
PERLND	64	226.	COPY	100	90
IMPLND	61	710.	COPY	100	91
PERLND	61	1251.	COPY	106	92
PERLND	62	1303.	COPY	106	92
PERLND	63	71.	COPY	106	92
PERLND	64	226.	COPY	106	92
IMPLND	61	710.	COPY	106	93
PERLND	71	1044.	COPY	100	90
PERLND	72	1105.	COPY	100	90
PERLND	73	65.	COPY	100	90

PERLND	74	225.	COPY	100	90
IMPLND	71	607.	COPY	100	91
PERLND	71	1044.	COPY	107	92
PERLND	72	1105.	COPY	107	92
PERLND	73	65.	COPY	107	92
PERLND	74	225.	COPY	107	92
IMPLND	71	607.	COPY	107	93
PERLND	81	954.	COPY	100	90
PERLND	82	1056.	COPY	100	90
PERLND	83	328.	COPY	100	90
PERLND	84	207.	COPY	100	90
IMPLND	81	621.	COPY	100	91
PERLND	81	954.	COPY	108	92
PERLND	82	1056.	COPY	108	92
PERLND	83	328.	COPY	108	92
PERLND	84	207.	COPY	108	92
IMPLND	81	621.	COPY	108	93
PERLND	91	991.	COPY	100	90
PERLND	92	1099.	COPY	100	90
PERLND	93	103.	COPY	100	90
PERLND	94	165.	COPY	100	90
IMPLND	91	585.	COPY	100	91
PERLND	91	991.	COPY	109	92
PERLND	92	1099.	COPY	109	92
PERLND	93	103.	COPY	109	92
PERLND	94	165.	COPY	109	92
IMPLND	91	585.	COPY	109	93
PERLND	101	709.	COPY	100	90
PERLND	102	1544.	COPY	100	90
PERLND	103	272.	COPY	100	90
PERLND	104	420.	COPY	100	90
IMPLND	101	724.	COPY	100	91
PERLND	101	709.	COPY	110	92
PERLND	102	1544.	COPY	110	92
PERLND	103	272.	COPY	110	92
PERLND	104	420.	COPY	110	92
IMPLND	101	724.	COPY	110	93

END SCHEMATIC

MASS-LINK

```

MASS-LINK      1
<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name>      <Name> x x<-factor->strg <Name>      <Name> x x ***
PERLND      PWATER PERO      0.0533333      RCHRES      INFLOW IVOL
END MASS-LINK      1

```

```

MASS-LINK      3
<Src>      <-Grp> <-Member-><--Mult-->      <Targ>      <-Grp> <-Member-> ***
<Name>      <Name> <Name> # #<-factor->      <Name>      <Name> <Name> # # ***
IMPLND      IWATER SURO      0.0533333      RCHRES      INFLOW IVOL
END MASS-LINK      3

```

```

MASS-LINK      5
<Src>      <-Grp> <-Member-><--Mult-->      <Targ>      <-Grp> <-Member-> ***
<Name>      <Name> <Name> # #<-factor->      <Name>      <Name> <Name> # # ***
RCHRES      ROFLOW      RCHRES      INFLOW
END MASS-LINK      5

```

```

MASS-LINK      90
<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name>      <Name> x x<-factor->strg <Name>      <Name> x x ***
PERLND      PWATER SURO      COPY      INPUT MEAN      1
PERLND      PWATER IFWO      COPY      INPUT MEAN      2
PERLND      PWATER AGWO      COPY      INPUT MEAN      3
PERLND      PWATER PET      COPY      INPUT MEAN      4
PERLND      PWATER TAET      COPY      INPUT MEAN      5
PERLND      PWATER UZS      COPY      INPUT MEAN      6

```

```

PERLND      PWATER LZS              COPY          INPUT MEAN  7
END MASS-LINK 90

MASS-LINK    91
<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name>      <Name> x x<-factor->strg <Name>          <Name> x x ***
IMPLND      IWATER SURO              COPY          INPUT MEAN  1
IMPLND      IWATER PET                COPY          INPUT MEAN  4
IMPLND      IWATER IMPEV              COPY          INPUT MEAN  5
END MASS-LINK 91

MASS-LINK    92
<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name>      <Name> x x<-factor->strg <Name>          <Name> x x ***
PERLND      PWATER PERO              COPY          INPUT MEAN  1
PERLND      PWATER AGWI              COPY          INPUT MEAN  2
END MASS-LINK 92

MASS-LINK    93
<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name>      <Name> x x<-factor->strg <Name>          <Name> x x ***
IMPLND      IWATER SURO              COPY          INPUT MEAN  1
END MASS-LINK 93
END MASS-LINK

```

FTABLES

```

FTABLE      1
ROWS COLS ***
15         4
DEPTH      AREA      VOLUME      DISCH      ***
(FE)      (ACRES)    (AC-FT)     (CFS)     ***
0.00      1.90      0.00      0.00
0.20      1.97      0.39      2.66
0.40      2.03      0.79      8.43
0.60      2.09      1.20     16.54
0.80      2.16      1.62     26.70
1.00      2.22      2.06     38.73
1.20      2.28      2.51     52.50
1.40      2.35      2.97     67.95
1.60      2.41      3.45     85.02
1.80      2.47      3.94    103.65
2.00      2.54      4.44    123.83
4.00      3.17     10.14   408.06
8.00      4.44     25.36  1443.51
12.00     5.71     45.65  3184.35
18.00     7.61     85.59  7362.11

```

```

END FTABLE  1
FTABLE      2
ROWS COLS ***
15         4
DEPTH      AREA      VOLUME      DISCH      ***
(FE)      (ACRES)    (AC-FT)     (CFS)     ***
0.00      2.53      0.00      0.00
0.20      2.61      0.51      3.43
0.40      2.68      1.04     10.87
0.60      2.75      1.59     21.33
0.80      2.82      2.14     34.41
1.00      2.90      2.72     49.89
1.20      2.97      3.30     67.61
1.40      3.04      3.90     87.46
1.60      3.11      4.52    109.35
1.80      3.19      5.15    133.23
2.00      3.26      5.79    159.04
4.00      3.98     13.03   519.10
8.00      5.43     31.86  1799.90
12.00     6.88     56.48  3905.86
21.00    10.35    134.42 12263.77

```

```

END FTABLE  2
FTABLE      3
ROWS COLS ***
16         4

```

DEPTH (FT)	AREA (ACRES)	VOLUME (AC-FT)	DISCH (CFS)	*** ***
0.00	4.29	0.00	0.00	
0.20	4.42	0.87	3.68	
0.40	4.55	1.77	11.69	
0.60	4.67	2.69	23.02	
0.80	4.80	3.64	37.28	
1.00	4.92	4.61	54.22	
1.30	5.11	6.11	84.35	
1.70	5.37	8.21	132.84	
2.00	5.56	9.85	175.20	
2.30	5.75	11.54	222.55	
2.70	6.00	13.89	293.34	
3.00	6.19	15.72	352.14	
6.00	8.08	37.12	1211.65	
9.00	9.98	64.21	2596.60	
12.00	11.87	96.98	4566.48	
36.00	27.02	563.67	48712.37	

END FTABLE 3  
FTABLE 4  
ROWS COLS \*\*\*  
16 4

DEPTH (FT)	AREA (ACRES)	VOLUME (AC-FT)	DISCH (CFS)	*** ***
0.00	6.12	0.00	0.00	
0.20	6.29	1.24	4.15	
0.40	6.46	2.52	13.20	
0.60	6.63	3.83	25.99	
0.80	6.80	5.17	42.06	
1.00	6.98	6.55	61.14	
1.30	7.23	8.68	95.03	
1.70	7.57	11.64	149.46	
2.00	7.83	13.95	196.90	
2.30	8.09	16.34	249.83	
2.70	8.43	19.64	328.77	
3.00	8.68	22.21	394.17	
6.00	11.25	52.10	1338.90	
9.00	13.81	89.68	2535.59	
12.00	16.37	134.95	4936.63	
36.00	36.87	773.82	50457.43	

END FTABLE 4  
FTABLE 5  
ROWS COLS \*\*\*  
16 4

DEPTH (FT)	AREA (ACRES)	VOLUME (AC-FT)	DISCH (CFS)	*** ***
0.00	8.94	0.00	0.00	
0.20	9.15	1.81	4.64	
0.40	9.35	3.66	14.75	
0.60	9.55	5.55	29.03	
0.80	9.75	7.48	46.94	
1.00	9.96	9.45	68.19	
1.30	10.26	12.48	105.86	
1.70	10.66	16.67	166.19	
2.00	10.97	19.91	218.59	
2.30	11.27	23.25	276.88	
2.70	11.68	27.84	363.51	
3.00	11.98	31.39	435.02	
6.00	15.02	71.89	1448.46	
9.00	18.06	121.50	3008.60	
12.00	21.09	180.22	5147.54	
58.00	67.67	2221.75	142706.41	

END FTABLE 5  
FTABLE 6  
ROWS COLS \*\*\*  
17 4

DEPTH (FT)	AREA (ACRES)	VOLUME (AC-FT)	DISCH (CFS)	*** ***
0.00	7.64	0.00	0.00	
0.20	7.78	1.54	5.06	
0.40	7.92	3.11	16.08	

0.60	8.06	4.71	31.63	
0.80	8.20	6.34	51.14	
1.00	8.34	7.99	74.27	
1.30	8.56	10.53	115.24	
1.70	8.84	14.01	180.76	
2.00	9.05	16.69	237.60	
2.30	9.26	19.44	300.75	
2.70	9.54	23.20	394.44	
3.00	9.76	26.09	471.65	
6.00	11.87	58.53	1556.19	
9.00	13.99	97.32	3202.02	
12.00	16.10	142.45	5430.19	
15.00	18.22	193.93	8276.35	
58.00	48.54	1629.24	141041.23	
END FTABLE 6				
FTABLE 7				
ROWS COLS ***				
16	4			
DEPTH	AREA	VOLUME	DISCH	***
(FT)	(ACRES)	(AC-FT)	(CFS)	***
0.00	10.53	0.00	0.00	
0.20	10.73	2.13	8.35	
0.40	10.92	4.29	26.56	
0.60	11.11	6.49	52.31	
0.80	11.31	8.74	84.68	
1.00	11.50	11.02	123.11	
1.30	11.79	14.51	191.34	
1.70	12.18	19.31	300.81	
2.00	12.47	23.00	396.05	
2.30	12.76	26.79	502.14	
2.70	13.15	31.97	660.01	
3.00	13.44	35.96	790.47	
6.00	16.35	80.66	2647.03	
9.00	19.26	134.08	5515.92	
12.00	22.17	196.24	9455.89	
24.00	33.81	532.16	37571.06	
END FTABLE 7				
FTABLE 8				
ROWS COLS ***				
17	4			
DEPTH	AREA	VOLUME	DISCH	***
(FT)	(ACRES)	(AC-FT)	(CFS)	***
0.00	10.34	0.00	0.00	
0.20	10.53	2.09	8.49	
0.40	10.72	4.21	27.01	
0.60	10.91	6.37	53.19	
0.80	11.10	8.57	86.08	
1.00	11.29	10.81	125.11	
1.30	11.57	14.24	194.36	
1.70	11.95	18.95	305.34	
2.00	12.24	22.57	401.78	
2.30	12.52	26.29	509.10	
2.70	12.90	31.37	668.59	
3.00	13.19	35.29	800.22	
6.00	16.04	79.13	2660.86	
9.00	18.89	131.53	5505.65	
12.00	21.74	192.48	9376.55	
15.00	24.59	261.98	14339.04	
25.00	34.10	555.45	39708.38	
END FTABLE 8				
FTABLE 9				
ROWS COLS ***				
18	4			
DEPTH	AREA	VOLUME	DISCH	***
(FT)	(ACRES)	(AC-FT)	(CFS)	***
0.00	17.26	0.00	0.00	
0.20	17.55	3.48	9.93	
0.40	17.83	7.02	31.59	
0.60	18.12	10.61	62.19	
0.80	18.41	14.27	100.62	
1.00	18.70	17.98	146.22	

1.30	19.13	23.65	227.07	
1.70	19.70	31.42	356.56	
2.00	20.14	37.39	469.02	
2.30	20.57	43.50	594.06	
2.70	21.14	51.84	779.75	
3.00	21.57	58.25	932.87	
6.00	25.89	129.44	3087.80	
9.00	30.20	213.58	6359.15	
12.00	34.52	310.67	10782.20	
15.00	38.83	420.69	16421.67	
25.00	53.22	880.94	44979.76	
50.00	89.17	2660.79	197754.51	

END FTABLE 9  
 FTABLE 10  
 ROWS COLS \*\*\*  
 18 4

DEPTH	AREA	VOLUME	DISCH	***
(FT)	(ACRES)	(AC-FT)	(CFS)	***
0.00	19.58	0.00	0.00	
0.20	19.88	3.95	11.22	
0.40	20.18	7.95	35.67	
0.60	20.47	12.02	70.22	
0.80	20.77	16.14	113.60	
1.00	21.06	20.32	165.03	
1.30	21.51	26.71	256.20	
1.70	22.10	35.43	402.07	
2.00	22.54	42.12	528.65	
2.30	22.98	48.95	669.29	
2.70	23.57	58.26	877.93	
3.00	24.02	65.40	1049.81	
6.00	28.45	144.11	3455.64	
9.00	32.89	236.12	7075.47	
12.00	37.32	341.43	11929.84	
15.00	41.75	460.04	18075.19	
25.00	56.53	951.48	48802.16	
50.00	93.49	2826.74	209904.75	

END FTABLE 10  
 END FTABLES  
 END RUN

# Medium Density (Cluster) Full Build Out with Restrictions

RUN

GLOBAL

```
Back Creek above Dundee, VA
START      1956 10 1 0 0  END      1999 9 30 0 0
RUN INTERP OUTPUT LEVEL  3      2
RESUME     0 RUN      1              UNIT SYSTEM  1
END GLOBAL
```

FILES

```
<FILE> <UN#>***<----FILE NAME----->
WDM      16      backcr.wdm
MESSU    24      scenario.ech
          91      scenario.out
          92      backcr1.plt
          93      backcr2.plt
          94      backcr3.plt
END FILES
```

OPN SEQUENCE

```
INGRP                                INDELT 01:00
PERLND      11
PERLND      12
PERLND      13
PERLND      14
IMPLND      11
RCHRES       1
PERLND      21
PERLND      22
PERLND      23
PERLND      24
IMPLND      21
RCHRES       2
PERLND      31
PERLND      32
PERLND      33
PERLND      34
IMPLND      31
RCHRES       3
PERLND      41
PERLND      42
PERLND      43
PERLND      44
IMPLND      41
RCHRES       4
PERLND      51
PERLND      52
PERLND      53
PERLND      54
IMPLND      51
RCHRES       5
PERLND      61
PERLND      62
PERLND      63
PERLND      64
IMPLND      61
RCHRES       6
PERLND      71
PERLND      72
PERLND      73
PERLND      74
IMPLND      71
RCHRES       7
PERLND      81
PERLND      82
```



```

PERLND      83
PERLND      84
IMPLND      81
RCHRES       8
PERLND      91
PERLND      92
PERLND      93
PERLND      94
IMPLND      91
RCHRES       9
PERLND     101
PERLND     102
PERLND     103
PERLND     104
IMPLND     101
RCHRES     10
COPY       100
COPY       101
COPY       102
COPY       103
COPY       104
COPY       105
COPY       106
COPY       107
COPY       108
COPY       109
COPY       110
PLTGEN     100
PLTGEN     200
PLTGEN     300
END INGRP
END OPN SEQUENCE

```

```

PERLND
ACTIVITY
# # ATMP SNOW PWAT SED PST PWG PQAL MSTL PEST NITR PHOS TRAC ***
11 104 0 0 1 0 0 0 0 0 0 0 0 0 0
END ACTIVITY

```

```

PRINT-INFO
# # ATMP SNOW PWAT SED PST PWG PQAL MSTL PEST NITR PHOS TRAC PIVL***PY
11 104 6 6 5 6 6 6 6 6 6 6 6 6 1 9
END PRINT-INFO

```

```

GEN-INFO
# # NAME NBLKS UCI IN OUT ENGL METR ***
11 FOREST 1 1 1 1 91 0
21 FOREST 1 1 1 1 91 0
31 FOREST 1 1 1 1 91 0
41 FOREST 1 1 1 1 91 0
51 FOREST 1 1 1 1 91 0
61 FOREST 1 1 1 1 91 0
71 FOREST 1 1 1 1 91 0
81 FOREST 1 1 1 1 91 0
91 FOREST 1 1 1 1 91 0
101 FOREST 1 1 1 1 91 0
12 HERBACEOUS/AG 1 1 1 1 91 0
22 HERBACEOUS/AG 1 1 1 1 91 0
32 HERBACEOUS/AG 1 1 1 1 91 0
42 HERBACEOUS/AG 1 1 1 1 91 0
52 HERBACEOUS/AG 1 1 1 1 91 0
62 HERBACEOUS/AG 1 1 1 1 91 0
72 HERBACEOUS/AG 1 1 1 1 91 0
82 HERBACEOUS/AG 1 1 1 1 91 0
92 HERBACEOUS/AG 1 1 1 1 91 0
102 HERBACEOUS/AG 1 1 1 1 91 0
13 DISTURBED 1 1 1 1 91 0
23 DISTURBED 1 1 1 1 91 0
33 DISTURBED 1 1 1 1 91 0
43 DISTURBED 1 1 1 1 91 0
53 DISTURBED 1 1 1 1 91 0

```

63	DISTURBED	1	1	1	1	91	0
73	DISTURBED	1	1	1	1	91	0
83	DISTURBED	1	1	1	1	91	0
93	DISTURBED	1	1	1	1	91	0
103	DISTURBED	1	1	1	1	91	0
14	MIXED FOREST/AG	1	1	1	1	91	0
24	MIXED FOREST/AG	1	1	1	1	91	0
34	MIXED FOREST/AG	1	1	1	1	91	0
44	MIXED FOREST/AG	1	1	1	1	91	0
54	MIXED FOREST/AG	1	1	1	1	91	0
64	MIXED FOREST/AG	1	1	1	1	91	0
74	MIXED FOREST/AG	1	1	1	1	91	0
84	MIXED FOREST/AG	1	1	1	1	91	0
94	MIXED FOREST/AG	1	1	1	1	91	0
104	MIXED FOREST/AG	1	1	1	1	91	0

END GEN-INFO

PWAT-PARM1

#	#	CSNO	RTOP	UZFG	VCS	VUZ	NVV	VIFW	VIRC	VLE	***
11		0	1	1	1	0	0	0	0	1	0
12		0	1	1	1	1	0	0	0	1	0
13		0	1	1	1	0	0	0	0	1	0
14		0	1	1	1	1	0	0	0	1	0
21		0	1	1	1	0	0	0	0	1	0
22		0	1	1	1	1	0	0	0	1	0
23		0	1	1	1	0	0	0	0	1	0
24		0	1	1	1	1	0	0	0	1	0
31		0	1	1	1	0	0	0	0	1	0
32		0	1	1	1	1	0	0	0	1	0
33		0	1	1	1	0	0	0	0	1	0
34		0	1	1	1	1	0	0	0	1	0
41		0	1	1	1	0	0	0	0	1	0
42		0	1	1	1	1	0	0	0	1	0
43		0	1	1	1	0	0	0	0	1	0
44		0	1	1	1	1	0	0	0	1	0
51		0	1	1	1	0	0	0	0	1	0
52		0	1	1	1	1	0	0	0	1	0
53		0	1	1	1	0	0	0	0	1	0
54		0	1	1	1	1	0	0	0	1	0
61		0	1	1	1	0	0	0	0	1	0
62		0	1	1	1	1	0	0	0	1	0
63		0	1	1	1	0	0	0	0	1	0
64		0	1	1	1	1	0	0	0	1	0
71		0	1	1	1	0	0	0	0	1	0
72		0	1	1	1	1	0	0	0	1	0
73		0	1	1	1	0	0	0	0	1	0
74		0	1	1	1	1	0	0	0	1	0
81		0	1	1	1	0	0	0	0	1	0
82		0	1	1	1	1	0	0	0	1	0
83		0	1	1	1	0	0	0	0	1	0
84		0	1	1	1	1	0	0	0	1	0
91		0	1	1	1	0	0	0	0	1	0
92		0	1	1	1	1	0	0	0	1	0
93		0	1	1	1	0	0	0	0	1	0
94		0	1	1	1	1	0	0	0	1	0
101		0	1	1	1	0	0	0	0	1	0
102		0	1	1	1	1	0	0	0	1	0
103		0	1	1	1	0	0	0	0	1	0
104		0	1	1	1	1	0	0	0	1	0

END PWAT-PARM1

PWAT-PARM2

#	#	***FOREST	LZSN	INFILT	LSUR	SLSUR	KVARY	AGWR
11		0.000	9.5	0.105	200.	0.24000	0.000	.960
21		0.000	9.5	0.105	200.	0.24000	0.000	.960
31		0.000	9.5	0.105	200.	0.22000	0.000	.960
41		0.000	9.5	0.105	300.	0.14000	0.000	.960
51		0.000	9.5	0.105	250.	0.19000	0.000	.960
61		0.000	9.5	0.105	200.	0.20000	0.000	.960
71		0.000	9.5	0.105	250.	0.19000	0.000	.960
81		0.000	9.5	0.105	250.	0.19000	0.000	.960

91	0.000	9.5	0.105	200.	0.22000	0.000	.960
101	0.000	9.5	0.105	250.	0.16000	0.000	.960
12	0.000	9.5	0.086	200.	0.24000	0.000	.960
22	0.000	9.5	0.086	200.	0.24000	0.000	.960
32	0.000	9.5	0.086	200.	0.22000	0.000	.960
42	0.000	9.5	0.086	300.	0.14000	0.000	.960
52	0.000	9.5	0.086	250.	0.19000	0.000	.960
62	0.000	9.5	0.086	200.	0.20000	0.000	.960
72	0.000	9.5	0.086	250.	0.19000	0.000	.960
82	0.000	9.5	0.086	250.	0.19000	0.000	.960
92	0.000	9.5	0.086	200.	0.22000	0.000	.960
102	0.000	9.5	0.086	250.	0.16000	0.000	.960
13	0.000	9.5	0.067	200.	0.24000	0.000	.960
23	0.000	9.5	0.067	200.	0.24000	0.000	.960
33	0.000	9.5	0.067	200.	0.22000	0.000	.960
43	0.000	9.5	0.067	300.	0.14000	0.000	.960
53	0.000	9.5	0.067	250.	0.19000	0.000	.960
63	0.000	9.5	0.067	200.	0.20000	0.000	.960
73	0.000	9.5	0.067	250.	0.19000	0.000	.960
83	0.000	9.5	0.067	250.	0.19000	0.000	.960
93	0.000	9.5	0.067	200.	0.22000	0.000	.960
103	0.000	9.5	0.067	250.	0.16000	0.000	.960
14	0.000	9.5	0.096	200.	0.24000	0.000	.960
24	0.000	9.5	0.096	200.	0.24000	0.000	.960
34	0.000	9.5	0.096	200.	0.22000	0.000	.960
44	0.000	9.5	0.096	300.	0.14000	0.000	.960
54	0.000	9.5	0.096	250.	0.19000	0.000	.960
64	0.000	9.5	0.096	200.	0.20000	0.000	.960
74	0.000	9.5	0.096	250.	0.19000	0.000	.960
84	0.000	9.5	0.096	250.	0.19000	0.000	.960
94	0.000	9.5	0.096	200.	0.22000	0.000	.960
104	0.000	9.5	0.096	250.	0.16000	0.000	.960

END PWAT-PARM2

PWAT-PARM3

***<PLS>	PETMAX	PETMIN	INFEXP	INFILD	DEEPFR	BASETP	AGWETP
***x - x	(deg F)	(deg F)					
11 104	40.0	35.0	2.0	2.0	0.210	0.000	0.000

END PWAT-PARM3

PWAT-PARM4

#	#	CEPSC	UZSN	NSUR	INTFW	IRC	LZETP	***
11		0.200	1.30	0.40	3.7	0.65	0.90	
21		0.200	1.30	0.40	3.7	0.65	0.90	
31		0.200	1.30	0.40	3.7	0.65	0.90	
41		0.200	1.30	0.40	3.7	0.65	0.90	
51		0.200	1.30	0.40	3.7	0.65	0.90	
61		0.200	1.30	0.40	3.7	0.65	0.90	
71		0.200	1.30	0.40	3.7	0.65	0.90	
81		0.200	1.30	0.40	3.7	0.65	0.90	
91		0.200	1.30	0.40	3.7	0.65	0.90	
101		0.200	1.30	0.40	3.7	0.65	0.90	
12		0.200	1.00	0.20	2.8	0.60	0.90	
22		0.200	1.00	0.20	2.8	0.60	0.90	
32		0.200	1.00	0.20	2.8	0.60	0.90	
42		0.200	1.00	0.20	2.8	0.60	0.90	
52		0.200	1.00	0.20	2.8	0.60	0.90	
62		0.200	1.00	0.20	2.8	0.60	0.90	
72		0.200	1.00	0.20	2.8	0.60	0.90	
82		0.200	1.00	0.20	2.8	0.60	0.90	
92		0.200	1.00	0.20	2.8	0.60	0.90	
102		0.200	1.00	0.20	2.8	0.60	0.90	
13		0.200	0.92	0.15	2.8	0.60	0.90	
23		0.200	0.92	0.15	2.8	0.60	0.90	
33		0.200	0.92	0.15	2.8	0.60	0.90	
43		0.200	0.92	0.15	2.8	0.60	0.90	
53		0.200	0.92	0.15	2.8	0.60	0.90	
63		0.200	0.92	0.15	2.8	0.60	0.90	
73		0.200	0.92	0.15	2.8	0.60	0.90	
83		0.200	0.92	0.15	2.8	0.60	0.90	
93		0.200	0.92	0.15	2.8	0.60	0.90	

103	0.200	0.92	0.15	2.8	0.60	0.90
14	0.200	1.00	0.30	3.3	0.63	0.90
24	0.200	1.00	0.30	3.3	0.63	0.90
34	0.200	1.00	0.30	3.3	0.63	0.90
44	0.200	1.00	0.30	3.3	0.63	0.90
54	0.200	1.00	0.30	3.3	0.63	0.90
64	0.200	1.00	0.30	3.3	0.63	0.90
74	0.200	1.00	0.30	3.3	0.63	0.90
84	0.200	1.00	0.30	3.3	0.63	0.90
94	0.200	1.00	0.30	3.3	0.63	0.90
104	0.200	1.00	0.30	3.3	0.63	0.90

END PWAT-PARM4

PWAT-PARM5  
 \*\*\* <PLS > FZG FZGL  
 \*\*\* x - x  
 11 104 1.0 0.1  
 END PWAT-PARM5

MON-INTERCEP  
 \*\*\* <PLS > Interception storage capacity at start of each month (in)  
 \*\*\* x - x JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

11	0.0250	0.0250	0.0250	1.000	3.500	4.000	4.000	4.000	3.500	1.000	0.0250	0.0250
21	0.0250	0.0250	0.0250	1.000	3.500	4.000	4.000	4.000	3.500	1.000	0.0250	0.0250
31	0.0250	0.0250	0.0250	1.000	3.500	4.000	4.000	4.000	3.500	1.000	0.0250	0.0250
41	0.0250	0.0250	0.0250	1.000	3.500	4.000	4.000	4.000	3.500	1.000	0.0250	0.0250
51	0.0250	0.0250	0.0250	1.000	3.500	4.000	4.000	4.000	3.500	1.000	0.0250	0.0250
61	0.0250	0.0250	0.0250	1.000	3.500	4.000	4.000	4.000	3.500	1.000	0.0250	0.0250
71	0.0250	0.0250	0.0250	1.000	3.500	4.000	4.000	4.000	3.500	1.000	0.0250	0.0250
81	0.0250	0.0250	0.0250	1.000	3.500	4.000	4.000	4.000	3.500	1.000	0.0250	0.0250
91	0.0250	0.0250	0.0250	1.000	3.500	4.000	4.000	4.000	3.500	1.000	0.0250	0.0250
101	0.0250	0.0250	0.0250	1.000	3.500	4.000	4.000	4.000	3.500	1.000	0.0250	0.0250
12	0.0250	0.0250	0.0250	1.000	2.500	3.000	3.000	3.000	2.500	1.000	0.0250	0.0250
22	0.0250	0.0250	0.0250	1.000	2.500	3.000	3.000	3.000	2.500	1.000	0.0250	0.0250
32	0.0250	0.0250	0.0250	1.000	2.500	3.000	3.000	3.000	2.500	1.000	0.0250	0.0250
42	0.0250	0.0250	0.0250	1.000	2.500	3.000	3.000	3.000	2.500	1.000	0.0250	0.0250
52	0.0250	0.0250	0.0250	1.000	2.500	3.000	3.000	3.000	2.500	1.000	0.0250	0.0250
62	0.0250	0.0250	0.0250	1.000	2.500	3.000	3.000	3.000	2.500	1.000	0.0250	0.0250
72	0.0250	0.0250	0.0250	1.000	2.500	3.000	3.000	3.000	2.500	1.000	0.0250	0.0250
82	0.0250	0.0250	0.0250	1.000	2.500	3.000	3.000	3.000	2.500	1.000	0.0250	0.0250
92	0.0250	0.0250	0.0250	1.000	2.500	3.000	3.000	3.000	2.500	1.000	0.0250	0.0250
102	0.0250	0.0250	0.0250	1.000	2.500	3.000	3.000	3.000	2.500	1.000	0.0250	0.0250
13	0.0250	0.0250	0.0250	1.000	1.500	1.500	1.500	1.500	1.000	1.000	0.0250	0.0250
23	0.0250	0.0250	0.0250	1.000	1.500	1.500	1.500	1.500	1.000	1.000	0.0250	0.0250
33	0.0250	0.0250	0.0250	1.000	1.500	1.500	1.500	1.500	1.000	1.000	0.0250	0.0250
43	0.0250	0.0250	0.0250	1.000	1.500	1.500	1.500	1.500	1.000	1.000	0.0250	0.0250
53	0.0250	0.0250	0.0250	1.000	1.500	1.500	1.500	1.500	1.000	1.000	0.0250	0.0250
63	0.0250	0.0250	0.0250	1.000	1.500	1.500	1.500	1.500	1.000	1.000	0.0250	0.0250
73	0.0250	0.0250	0.0250	1.000	1.500	1.500	1.500	1.500	1.000	1.000	0.0250	0.0250
83	0.0250	0.0250	0.0250	1.000	1.500	1.500	1.500	1.500	1.000	1.000	0.0250	0.0250
93	0.0250	0.0250	0.0250	1.000	1.500	1.500	1.500	1.500	1.000	1.000	0.0250	0.0250
103	0.0250	0.0250	0.0250	1.000	1.500	1.500	1.500	1.500	1.000	1.000	0.0250	0.0250
14	0.0250	0.0250	0.0250	1.000	3.000	3.500	3.500	3.500	3.000	1.000	0.0250	0.0250
24	0.0250	0.0250	0.0250	1.000	3.000	3.500	3.500	3.500	3.000	1.000	0.0250	0.0250
34	0.0250	0.0250	0.0250	1.000	3.000	3.500	3.500	3.500	3.000	1.000	0.0250	0.0250
44	0.0250	0.0250	0.0250	1.000	3.000	3.500	3.500	3.500	3.000	1.000	0.0250	0.0250
54	0.0250	0.0250	0.0250	1.000	3.000	3.500	3.500	3.500	3.000	1.000	0.0250	0.0250
64	0.0250	0.0250	0.0250	1.000	3.000	3.500	3.500	3.500	3.000	1.000	0.0250	0.0250
74	0.0250	0.0250	0.0250	1.000	3.000	3.500	3.500	3.500	3.000	1.000	0.0250	0.0250
84	0.0250	0.0250	0.0250	1.000	3.000	3.500	3.500	3.500	3.000	1.000	0.0250	0.0250
94	0.0250	0.0250	0.0250	1.000	3.000	3.500	3.500	3.500	3.000	1.000	0.0250	0.0250
104	0.0250	0.0250	0.0250	1.000	3.000	3.500	3.500	3.500	3.000	1.000	0.0250	0.0250

END MON-INTERCEP

MON-UZSN  
 \*\*\* <PLS > Upper zone storage at start of each month  
 \*\*\* x - x JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

12	0.1000	1.000	2.000	4.001	0.401	2.801	2.801	2.501	0.400	4.000	2.000	1.00
22	0.1000	1.000	2.000	4.001	0.401	2.801	2.801	2.801	0.400	4.000	2.000	1.00
32	0.1000	1.000	2.000	4.001	0.401	2.801	2.801	2.801	0.400	4.000	2.000	1.00
42	0.1000	1.000	2.000	4.001	0.401	2.801	2.801	2.801	0.400	4.000	2.000	1.00

```

52 0.1000.1000.2000.4001.0401.2801.2801.2801.0400.4000.2000.100
62 0.1000.1000.2000.4001.0401.2801.2801.2801.0400.4000.2000.100
72 0.1000.1000.2000.4001.0401.2801.2801.2801.0400.4000.2000.100
82 0.1000.1000.2000.4001.0401.2801.2801.2801.0400.4000.2000.100
92 0.1000.1000.2000.4001.0401.2801.2801.2801.0400.4000.2000.100
102 0.1000.1000.2000.4001.0401.2801.2801.2801.0400.4000.2000.100
14 0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
24 0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
34 0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
44 0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
54 0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
64 0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
74 0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
84 0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
94 0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
104 0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
END MON-UZSN

```

MON-LZETPARM

```

*** <PLS > Lower zone evapotransp parm at start of each month
*** x - x JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC
11 0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
21 0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
31 0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
41 0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
51 0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
61 0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
71 0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
81 0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
91 0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
101 0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
12 0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
22 0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
32 0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
42 0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
52 0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
62 0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
72 0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
82 0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
92 0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
102 0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
13 0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
23 0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
33 0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
43 0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
53 0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
63 0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
73 0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
83 0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
93 0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
103 0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
14 0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
24 0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
34 0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
44 0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
54 0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
64 0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
74 0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
84 0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
94 0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
104 0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
END MON-LZETPARM

```

PWAT-STATE1

#	# ***	CEPS	SURS	UZS	IFWS	LZS	AGWS	GWVS
11		0.020	0.020	0.550	0.000	7.470	0.319	0.000
21		0.020	0.020	0.550	0.000	7.470	0.319	0.000
31		0.020	0.020	0.550	0.000	7.470	0.319	0.000
41		0.020	0.020	0.550	0.000	7.470	0.319	0.000
51		0.020	0.020	0.550	0.000	7.470	0.319	0.000
61		0.020	0.020	0.550	0.000	7.470	0.319	0.000

71	0.020	0.020	0.550	0.000	7.470	0.319	0.000
81	0.020	0.020	0.550	0.000	7.470	0.319	0.000
91	0.020	0.020	0.550	0.000	7.470	0.319	0.000
101	0.020	0.020	0.550	0.000	7.470	0.319	0.000
12	0.020	0.020	0.340	0.001	6.450	0.224	0.000
22	0.020	0.020	0.340	0.001	6.450	0.224	0.000
32	0.020	0.020	0.340	0.001	6.450	0.224	0.000
42	0.020	0.020	0.340	0.001	6.450	0.224	0.000
52	0.020	0.020	0.340	0.001	6.450	0.224	0.000
62	0.020	0.020	0.340	0.001	6.450	0.224	0.000
72	0.020	0.020	0.340	0.001	6.450	0.224	0.000
82	0.020	0.020	0.340	0.001	6.450	0.224	0.000
92	0.020	0.020	0.340	0.001	6.450	0.224	0.000
102	0.020	0.020	0.340	0.001	6.450	0.224	0.000
13	0.020	0.020	0.940	0.004	8.630	0.411	0.000
23	0.020	0.020	0.940	0.004	8.630	0.411	0.000
33	0.020	0.020	0.940	0.004	8.630	0.411	0.000
43	0.020	0.020	0.940	0.004	8.630	0.411	0.000
53	0.020	0.020	0.940	0.004	8.630	0.411	0.000
63	0.020	0.020	0.940	0.004	8.630	0.411	0.000
73	0.020	0.020	0.940	0.004	8.630	0.411	0.000
83	0.020	0.020	0.940	0.004	8.630	0.411	0.000
93	0.020	0.020	0.940	0.004	8.630	0.411	0.000
103	0.020	0.020	0.940	0.004	8.630	0.411	0.000
14	0.020	0.020	0.420	0.001	6.560	0.261	0.000
24	0.020	0.020	0.420	0.001	6.560	0.261	0.000
34	0.020	0.020	0.420	0.001	6.560	0.261	0.000
44	0.020	0.020	0.420	0.001	6.560	0.261	0.000
54	0.020	0.020	0.420	0.001	6.560	0.261	0.000
64	0.020	0.020	0.420	0.001	6.560	0.261	0.000
74	0.020	0.020	0.420	0.001	6.560	0.261	0.000
84	0.020	0.020	0.420	0.001	6.560	0.261	0.000
94	0.020	0.020	0.420	0.001	6.560	0.261	0.000
104	0.020	0.020	0.420	0.001	6.560	0.261	0.000

END PWAT-STATE1

END PERLND

IMPLND

ACTIVITY

#	#	ATMP	SNOW	IWAT	SLD	IWG	IQAL	***
11	1017	0	0	1	0	0	0	

END ACTIVITY

PRINT-INFO

#	#	ATMP	SNOW	IWAT	SLD	IWG	IQAL	PIVL	PYR	***
11	101	6	6	5	6	6	6	1	9	

END PRINT-INFO

GEN-INFO

#	#	NAME	UCI	IN	OUT	ENGL	METR	***
11	101	IMPERV LAND	1	1	1	91	0	

END GEN-INFO

IWAT-PARM1

#	#	CSNO	RTOP	VRS	VNN	RTLI	***
11	101	0	1	0	0	0	

END IWAT-PARM1

IWAT-PARM2

#	#	LSUR	SLSUR	NSUR	RETSC	***
11		200.0	0.2400	0.10	0.05	
21		200.0	0.2400	0.10	0.05	
31		200.0	0.2200	0.10	0.05	
41		300.0	0.1400	0.10	0.05	
51		250.0	0.1900	0.10	0.05	
61		200.0	0.2000	0.10	0.05	
71		250.0	0.1900	0.10	0.05	
81		250.0	0.1900	0.10	0.05	
91		200.0	0.2200	0.10	0.05	
101		250.0	0.1600	0.10	0.05	

```

END IWAT-PARM2

IWAT-PARM3
*** <ILS >      PETMAX      PETMIN
*** x - x      (deg F)      (deg F)
   11 101      40.0        35.0
END IWAT-PARM3

IWAT-STATE1
*** <ILS > IWATER state variables (inches)
*** x - x      RETS      SURS
   11 101      0.03      0.01
END IWAT-STATE1

END IMPLND

RCHRES
ACTIVITY
  RCHRES Active Sections (1=Active; 0=Inactive)      ***
  # - # HYFG ADFG CNFG HTFG SDFG GQFG OXFG NUFG PKFG PHFG ***
   1 10 1 0 0 0 0 0 0 0 0
END ACTIVITY

PRINT-INFO
  RCHRES Print-flags      ***
  # - # HYDR ADCA CONS HEAT SED GQL OXRX NUTR PLNK PHCB PIVL PYR ***
   1 10 5 5 5 5 5 5 5 5 12
END PRINT-INFO

GEN-INFO
  RCHRES<-----Name----->Nexit Unit Systems Printer      ***
  # - # User t-series Engr Metr LKFG ***
  # - # in out ***
   1 Little Back Creek 1 1 1 1 91 0 0
   2 Upper Back Creek 1 1 1 1 91 0 0
   3 Poages Mill 1 1 1 1 91 0 0
   4 Cave Spring 1 1 1 1 91 0 0
   5 Blue Ridge Parkway 1 1 1 1 91 0 0
   6 Cattail Hollow 1 1 1 1 91 0 0
   7 State Rd #676 1 1 1 1 91 0 0
   8 Red Hill Church 1 1 1 1 91 0 0
   9 State Rd #667 1 1 1 1 91 0 0
  10 Dundee 1 1 1 1 91 0 0
END GEN-INFO

HYDR-PARM1
  RCHRES Flags for HYDR section      ***
  # - # VC A1 A2 A3 ODFVFG for each ODTGFG for each *** FUNCT for each ***
  # - # FG FG FG FG possible exit possible exit *** possible exit
  # - # 1 2 3 4 5 1 2 3 4 5 *** 1 2 3 4 5
   1 10 0 1 1 1 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 1 1 1 1
END HYDR-PARM1

HYDR-PARM2
  RCHRES      ***
  # - # FTABNO LEN DELTH STCOR KS DB50 ***
   1 1 2.62 387.0 0.0 0.5 0.01
   2 2 2.99 561.0 0.0 0.5 0.01
   3 3 2.08 69.0 0.0 0.5 0.01
   4 4 2.35 85.0 0.0 0.5 0.01
   5 5 2.78 85.0 0.0 0.5 0.01
   6 6 1.94 36.0 0.0 0.5 0.01
   7 7 2.29 56.0 0.0 0.5 0.01
   8 8 1.96 26.0 0.0 0.5 0.01
   9 9 2.97 52.0 0.0 0.5 0.01
  10 10 3.05 56.0 0.0 0.5 0.01
END HYDR-PARM2

HYDR-INIT
  RCHRES Initial conditions for HYDR section      ***
  # - # VOL Initial value of COLIND *** Initial value of OUTDGT

```

```

                (ac-ft)          for each possible exit *** for each possible exit
                EX1 EX2 EX3 EX4 EX5 *** EX1 EX2 EX3 EX4 EX5
1              0.10
2              0.25
3              0.45
4              0.65
5              0.85
6              1.00
7              1.50
8              2.00
9              2.50
10             3.00
END HYDR-INIT
END RCHRES

COPY
TIMESERIES
Copy-opn***
*** x - x NPT NMN
100           0 7
101 110      0 2
END TIMESERIES
END COPY

PLTGEN
PLOTINFO
*** x - x FILE NPT NMN LABL PYR PIVL
100           92 0 10
200           93 0 10
300           94 0 10
END PLOTINFO
GEN-LABELS
*** x - x<-----title-----> <-----y-axis lab---->
100 Reach Outflows Flow (cfs)
200 Land Segment Outflows Runoff (in/hr)
300 Groundwater Recharge Recharge (in/hr)
END GEN-LABELS
SCALING
*** x - x<--ymin--><--ymax--><--ivlin--><--thresh-->
100           0 100000 10
200           0 1.0000 10
300           0 1.0000 10
END SCALING
CURV-DATA
*** x - x <----label----> LIN INT COL TR
100 300 Outflow
END CURV-DATA
END PLTGEN

EXT SOURCES

<-Volume-> <Member> SsysSgap<--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name> x <Name> x tem strg<-factor->strg <Name> x x <Name> x x ***
WDM 210 EVAP ENGL PERLND 11 104 EXTNL PETINP 1 1
WDM 210 EVAP ENGL IMPLND 11 101 EXTNL PETINP 1 1

WDM 82 PRCP ENGL PERLND 11 104 EXTNL PREC 1 1
WDM 82 PRCP ENGL IMPLND 11 101 EXTNL PREC 1 1

WDM 541 FLOW ENGL PLTGEN 100 INPUT MEAN 1 1
WDM 542 FLOW ENGL PLTGEN 100 INPUT MEAN 2 1
WDM 543 FLOW ENGL PLTGEN 100 INPUT MEAN 3 1
WDM 544 FLOW ENGL PLTGEN 100 INPUT MEAN 4 1
WDM 545 FLOW ENGL PLTGEN 100 INPUT MEAN 5 1
WDM 546 FLOW ENGL PLTGEN 100 INPUT MEAN 6 1
WDM 547 FLOW ENGL PLTGEN 100 INPUT MEAN 7 1
WDM 548 FLOW ENGL PLTGEN 100 INPUT MEAN 8 1
WDM 549 FLOW ENGL PLTGEN 100 INPUT MEAN 9 1
WDM 550 FLOW ENGL PLTGEN 100 INPUT MEAN 10 1

WDM 531 SIMQ ENGL PLTGEN 200 INPUT MEAN 1 1

```



WDM	532	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	2	1
WDM	533	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	3	1
WDM	534	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	4	1
WDM	535	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	5	1
WDM	536	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	6	1
WDM	537	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	7	1
WDM	538	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	8	1
WDM	539	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	9	1
WDM	540	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	10	1
WDM	551	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	1	1
WDM	552	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	2	1
WDM	553	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	3	1
WDM	554	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	4	1
WDM	555	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	5	1
WDM	556	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	6	1
WDM	557	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	7	1
WDM	558	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	8	1
WDM	559	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	9	1
WDM	560	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	10	1

END EXT SOURCES

EXT TARGETS

<-Volume->	<-Grp>	<-Member->	<--Mult-->	Tran	<-Volume->	<Member>	Tsys	Aggr	Amd	***		
<Name>	x	<Name>	x	<-factor->	strg	<Name>	x	<Name>	qf	tem	strg	strg***
RCHRES	10	ROFLOW	ROVOL	1	13.35965E-4	WDM	320	SIMQ	1	ENGL		REPL
COPY	100	OUTPUT	MEAN	1	12.79971E-5	WDM	321	SURO	1	ENGL		REPL
COPY	100	OUTPUT	MEAN	2	12.79971E-5	WDM	322	IFWO	1	ENGL		REPL
COPY	100	OUTPUT	MEAN	3	12.79971E-5	WDM	323	AGWO	1	ENGL		REPL
COPY	100	OUTPUT	MEAN	4	12.79971E-5	WDM	325	PETX	1	ENGL	AGGR	REPL
COPY	100	OUTPUT	MEAN	5	12.79971E-5	WDM	326	SAET	1	ENGL	AGGR	REPL
COPY	100	OUTPUT	MEAN	6	12.79971E-5	WDM	327	UZSX	1	ENGL	AGGR	REPL
COPY	100	OUTPUT	MEAN	7	12.79971E-5	WDM	328	LZSX	1	ENGL	AGGR	REPL
RCHRES	1	ROFLOW	ROVOL	1	12.1	WDM	541	FLOW	1	ENGL		REPL
RCHRES	2	ROFLOW	ROVOL	1	12.1	WDM	542	FLOW	1	ENGL		REPL
RCHRES	3	ROFLOW	ROVOL	1	12.1	WDM	543	FLOW	1	ENGL		REPL
RCHRES	4	ROFLOW	ROVOL	1	12.1	WDM	544	FLOW	1	ENGL		REPL
RCHRES	5	ROFLOW	ROVOL	1	12.1	WDM	545	FLOW	1	ENGL		REPL
RCHRES	6	ROFLOW	ROVOL	1	12.1	WDM	546	FLOW	1	ENGL		REPL
RCHRES	7	ROFLOW	ROVOL	1	12.1	WDM	547	FLOW	1	ENGL		REPL
RCHRES	8	ROFLOW	ROVOL	1	12.1	WDM	548	FLOW	1	ENGL		REPL
RCHRES	9	ROFLOW	ROVOL	1	12.1	WDM	549	FLOW	1	ENGL		REPL
RCHRES	10	ROFLOW	ROVOL	1	12.1	WDM	550	FLOW	1	ENGL		REPL
COPY	101	OUTPUT	MEAN	1	13.96983E-4	WDM	531	SIMQ	1	ENGL		REPL
COPY	102	OUTPUT	MEAN	1	12.14041E-4	WDM	532	SIMQ	1	ENGL		REPL
COPY	103	OUTPUT	MEAN	1	11.74398E-4	WDM	533	SIMQ	1	ENGL		REPL
COPY	104	OUTPUT	MEAN	1	15.00000E-4	WDM	534	SIMQ	1	ENGL		REPL
COPY	105	OUTPUT	MEAN	1	12.26809E-4	WDM	535	SIMQ	1	ENGL		REPL
COPY	106	OUTPUT	MEAN	1	12.80820E-4	WDM	536	SIMQ	1	ENGL		REPL
COPY	107	OUTPUT	MEAN	1	13.25407E-4	WDM	537	SIMQ	1	ENGL		REPL
COPY	108	OUTPUT	MEAN	1	13.15560E-4	WDM	538	SIMQ	1	ENGL		REPL
COPY	109	OUTPUT	MEAN	1	13.39789E-4	WDM	539	SIMQ	1	ENGL		REPL
COPY	110	OUTPUT	MEAN	1	12.72554E-4	WDM	540	SIMQ	1	ENGL		REPL
COPY	101	OUTPUT	MEAN	2	13.96983E-4	WDM	551	SIMQ	1	ENGL		REPL
COPY	102	OUTPUT	MEAN	2	12.14041E-4	WDM	552	SIMQ	1	ENGL		REPL
COPY	103	OUTPUT	MEAN	2	11.74398E-4	WDM	553	SIMQ	1	ENGL		REPL
COPY	104	OUTPUT	MEAN	2	15.00000E-4	WDM	554	SIMQ	1	ENGL		REPL
COPY	105	OUTPUT	MEAN	2	12.26809E-4	WDM	555	SIMQ	1	ENGL		REPL
COPY	106	OUTPUT	MEAN	2	12.80820E-4	WDM	556	SIMQ	1	ENGL		REPL
COPY	107	OUTPUT	MEAN	2	13.25407E-4	WDM	557	SIMQ	1	ENGL		REPL
COPY	108	OUTPUT	MEAN	2	13.15560E-4	WDM	558	SIMQ	1	ENGL		REPL
COPY	109	OUTPUT	MEAN	2	13.39789E-4	WDM	559	SIMQ	1	ENGL		REPL
COPY	110	OUTPUT	MEAN	2	12.72554E-4	WDM	560	SIMQ	1	ENGL		REPL

END EXT TARGETS

SCHEMATIC					
<-Volume->		<--Area-->	<-Volume->	<ML#>	***
<Name>	x	<-factor->	<Name>	x	***
PERLND	11	1637.	RCHRES	1	1
PERLND	12	477.	RCHRES	1	1
PERLND	13	19.	RCHRES	1	1
PERLND	14	153.	RCHRES	1	1
IMPLND	11	233.	RCHRES	1	3
PERLND	21	2912.	RCHRES	2	1
PERLND	22	927.	RCHRES	2	1
PERLND	23	37.	RCHRES	2	1
PERLND	24	384.	RCHRES	2	1
IMPLND	21	411.	RCHRES	2	3
PERLND	31	3380.	RCHRES	3	1
PERLND	32	1286.	RCHRES	3	1
PERLND	33	72.	RCHRES	3	1
PERLND	34	405.	RCHRES	3	1
IMPLND	31	590.	RCHRES	3	3
PERLND	41	775.	RCHRES	4	1
PERLND	42	621.	RCHRES	4	1
PERLND	43	85.	RCHRES	4	1
PERLND	44	211.	RCHRES	4	1
IMPLND	41	307.	RCHRES	4	3
PERLND	51	2022.	RCHRES	5	1
PERLND	52	857.	RCHRES	5	1
PERLND	53	591.	RCHRES	5	1
PERLND	54	420.	RCHRES	5	1
IMPLND	51	519.	RCHRES	5	3
PERLND	61	2034.	RCHRES	6	1
PERLND	62	769.	RCHRES	6	1
PERLND	63	71.	RCHRES	6	1
PERLND	64	294.	RCHRES	6	1
IMPLND	61	393.	RCHRES	6	3
PERLND	71	1647.	RCHRES	7	1
PERLND	72	692.	RCHRES	7	1
PERLND	73	65.	RCHRES	7	1
PERLND	74	282.	RCHRES	7	1
IMPLND	71	360.	RCHRES	7	3
PERLND	81	1556.	RCHRES	8	1
PERLND	82	640.	RCHRES	8	1
PERLND	83	328.	RCHRES	8	1
PERLND	84	269.	RCHRES	8	1
IMPLND	81	373.	RCHRES	8	3
PERLND	91	1696.	RCHRES	9	1
PERLND	92	616.	RCHRES	9	1
PERLND	93	103.	RCHRES	9	1
PERLND	94	236.	RCHRES	9	1
IMPLND	91	291.	RCHRES	9	3
PERLND	101	1124.	RCHRES	10	1
PERLND	102	1238.	RCHRES	10	1
PERLND	103	272.	RCHRES	10	1
PERLND	104	504.	RCHRES	10	1
IMPLND	101	530.	RCHRES	10	3
RCHRES	1		RCHRES	3	5
RCHRES	2		RCHRES	3	5
RCHRES	3		RCHRES	4	5
RCHRES	4		RCHRES	5	5
RCHRES	5		RCHRES	6	5
RCHRES	6		RCHRES	7	5
RCHRES	7		RCHRES	8	5
RCHRES	8		RCHRES	9	5

RCHRES	9		RCHRES	10	5
PERLND	11	1637.	COPY	100	90
PERLND	12	477.	COPY	100	90
PERLND	13	19.	COPY	100	90
PERLND	14	153.	COPY	100	90
IMPLND	11	233.	COPY	100	91
PERLND	11	1637.	COPY	101	92
PERLND	12	477.	COPY	101	92
PERLND	13	19.	COPY	101	92
PERLND	14	153.	COPY	101	92
IMPLND	11	233.	COPY	101	93
PERLND	21	2912.	COPY	100	90
PERLND	22	927.	COPY	100	90
PERLND	23	37.	COPY	100	90
PERLND	24	384.	COPY	100	90
IMPLND	21	411.	COPY	100	91
PERLND	21	2912.	COPY	102	92
PERLND	22	927.	COPY	102	92
PERLND	23	37.	COPY	102	92
PERLND	24	384.	COPY	102	92
IMPLND	21	411.	COPY	102	93
PERLND	31	3380.	COPY	100	90
PERLND	32	1286.	COPY	100	90
PERLND	33	72.	COPY	100	90
PERLND	34	405.	COPY	100	90
IMPLND	31	590.	COPY	100	91
PERLND	31	3380.	COPY	103	92
PERLND	32	1286.	COPY	103	92
PERLND	33	72.	COPY	103	92
PERLND	34	405.	COPY	103	92
IMPLND	31	590.	COPY	103	93
PERLND	41	775.	COPY	100	90
PERLND	42	621.	COPY	100	90
PERLND	43	85.	COPY	100	90
PERLND	44	211.	COPY	100	90
IMPLND	41	307.	COPY	100	91
PERLND	41	775.	COPY	104	92
PERLND	42	621.	COPY	104	92
PERLND	43	85.	COPY	104	92
PERLND	44	211.	COPY	104	92
IMPLND	41	307.	COPY	104	93
PERLND	51	2022.	COPY	100	90
PERLND	52	857.	COPY	100	90
PERLND	53	591.	COPY	100	90
PERLND	54	420.	COPY	100	90
IMPLND	51	519.	COPY	100	91
PERLND	51	2022.	COPY	105	92
PERLND	52	857.	COPY	105	92
PERLND	53	591.	COPY	105	92
PERLND	54	420.	COPY	105	92
IMPLND	51	519.	COPY	105	93
PERLND	61	2034.	COPY	100	90
PERLND	62	769.	COPY	100	90
PERLND	63	71.	COPY	100	90
PERLND	64	294.	COPY	100	90
IMPLND	61	393.	COPY	100	91
PERLND	61	2034.	COPY	106	92
PERLND	62	769.	COPY	106	92
PERLND	63	71.	COPY	106	92
PERLND	64	294.	COPY	106	92
IMPLND	61	393.	COPY	106	93
PERLND	71	1647.	COPY	100	90
PERLND	72	692.	COPY	100	90
PERLND	73	65.	COPY	100	90

PERLND	74	282.	COPY	100	90
IMPLND	71	360.	COPY	100	91
PERLND	71	1647.	COPY	107	92
PERLND	72	692.	COPY	107	92
PERLND	73	65.	COPY	107	92
PERLND	74	282.	COPY	107	92
IMPLND	71	360.	COPY	107	93
PERLND	81	1556.	COPY	100	90
PERLND	82	640.	COPY	100	90
PERLND	83	328.	COPY	100	90
PERLND	84	269.	COPY	100	90
IMPLND	81	373.	COPY	100	91
PERLND	81	1556.	COPY	108	92
PERLND	82	640.	COPY	108	92
PERLND	83	328.	COPY	108	92
PERLND	84	269.	COPY	108	92
IMPLND	81	373.	COPY	108	93
PERLND	91	1696.	COPY	100	90
PERLND	92	616.	COPY	100	90
PERLND	93	103.	COPY	100	90
PERLND	94	236.	COPY	100	90
IMPLND	91	291.	COPY	100	91
PERLND	91	1696.	COPY	109	92
PERLND	92	616.	COPY	109	92
PERLND	93	103.	COPY	109	92
PERLND	94	236.	COPY	109	92
IMPLND	91	291.	COPY	109	93
PERLND	101	1124.	COPY	100	90
PERLND	102	1238.	COPY	100	90
PERLND	103	272.	COPY	100	90
PERLND	104	504.	COPY	100	90
IMPLND	101	530.	COPY	100	91
PERLND	101	1124.	COPY	110	92
PERLND	102	1238.	COPY	110	92
PERLND	103	272.	COPY	110	92
PERLND	104	504.	COPY	110	92
IMPLND	101	530.	COPY	110	93

END SCHEMATIC

MASS-LINK

```

MASS-LINK      1
<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name> <Name> x x<-factor->strg <Name> <Name> x x ***
PERLND PWATER PERO 0.0533333 RCHRES INFLOW IVOL
END MASS-LINK 1

```

```

MASS-LINK      3
<Src> <-Grp> <-Member-><--Mult--> <Targ> <-Grp> <-Member-> ***
<Name> <Name> <Name> # #<-factor-> <Name> <Name> <Name> # # ***
IMPLND IWATER SURO 0.0533333 RCHRES INFLOW IVOL
END MASS-LINK 3

```

```

MASS-LINK      5
<Src> <-Grp> <-Member-><--Mult--> <Targ> <-Grp> <-Member-> ***
<Name> <Name> <Name> # #<-factor-> <Name> <Name> <Name> # # ***
RCHRES ROFLOW RCHRES INFLOW
END MASS-LINK 5

```

```

MASS-LINK      90
<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name> <Name> x x<-factor->strg <Name> <Name> x x ***
PERLND PWATER SURO COPY INPUT MEAN 1
PERLND PWATER IFWO COPY INPUT MEAN 2
PERLND PWATER AGWO COPY INPUT MEAN 3
PERLND PWATER PET COPY INPUT MEAN 4
PERLND PWATER TAET COPY INPUT MEAN 5
PERLND PWATER UZS COPY INPUT MEAN 6

```

```

PERLND    PWATER LZS                COPY          INPUT MEAN  7
END MASS-LINK  90

MASS-LINK  91
<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name> <Name> x x<-factor->strg <Name> <Name> x x ***
IMPLND    IWATER SURO                COPY          INPUT MEAN  1
IMPLND    IWATER PET                  COPY          INPUT MEAN  4
IMPLND    IWATER IMPEV               COPY          INPUT MEAN  5
END MASS-LINK  91

MASS-LINK  92
<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name> <Name> x x<-factor->strg <Name> <Name> x x ***
PERLND    PWATER PERO                COPY          INPUT MEAN  1
PERLND    PWATER AGWI               COPY          INPUT MEAN  2
END MASS-LINK  92

MASS-LINK  93
<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name> <Name> x x<-factor->strg <Name> <Name> x x ***
IMPLND    IWATER SURO                COPY          INPUT MEAN  1
END MASS-LINK  93
END MASS-LINK

```

FTABLES

```

FTABLE 1
ROWS COLS ***
15 4
DEPTH AREA VOLUME DISCH ***
(FT) (ACRES) (AC-FT) (CFS) ***
0.00 1.90 0.00 0.00
0.20 1.97 0.39 2.66
0.40 2.03 0.79 8.43
0.60 2.09 1.20 16.54
0.80 2.16 1.62 26.70
1.00 2.22 2.06 38.73
1.20 2.28 2.51 52.50
1.40 2.35 2.97 67.95
1.60 2.41 3.45 85.02
1.80 2.47 3.94 103.65
2.00 2.54 4.44 123.83
4.00 3.17 10.14 408.06
8.00 4.44 25.36 1443.51
12.00 5.71 45.65 3184.35
18.00 7.61 85.59 7362.11

```

```

END FTABLE 1
FTABLE 2
ROWS COLS ***
15 4
DEPTH AREA VOLUME DISCH ***
(FT) (ACRES) (AC-FT) (CFS) ***
0.00 2.53 0.00 0.00
0.20 2.61 0.51 3.43
0.40 2.68 1.04 10.87
0.60 2.75 1.59 21.33
0.80 2.82 2.14 34.41
1.00 2.90 2.72 49.89
1.20 2.97 3.30 67.61
1.40 3.04 3.90 87.46
1.60 3.11 4.52 109.35
1.80 3.19 5.15 133.23
2.00 3.26 5.79 159.04
4.00 3.98 13.03 519.10
8.00 5.43 31.86 1799.90
12.00 6.88 56.48 3905.86
21.00 10.35 134.42 12263.77

```

```

END FTABLE 2
FTABLE 3
ROWS COLS ***
16 4

```

DEPTH (FT)	AREA (ACRES)	VOLUME (AC-FT)	DISCH (CFS)	***
0.00	4.29	0.00	0.00	***
0.20	4.42	0.87	3.68	
0.40	4.55	1.77	11.69	
0.60	4.67	2.69	23.02	
0.80	4.80	3.64	37.28	
1.00	4.92	4.61	54.22	
1.30	5.11	6.11	84.35	
1.70	5.37	8.21	132.84	
2.00	5.56	9.85	175.20	
2.30	5.75	11.54	222.55	
2.70	6.00	13.89	293.34	
3.00	6.19	15.72	352.14	
6.00	8.08	37.12	1211.65	
9.00	9.98	64.21	2596.60	
12.00	11.87	96.98	4566.48	
36.00	27.02	563.67	48712.37	

END FTABLE 3  
FTABLE 4  
ROWS COLS \*\*\*  
16 4

DEPTH (FT)	AREA (ACRES)	VOLUME (AC-FT)	DISCH (CFS)	***
0.00	6.12	0.00	0.00	***
0.20	6.29	1.24	4.15	
0.40	6.46	2.52	13.20	
0.60	6.63	3.83	25.99	
0.80	6.80	5.17	42.06	
1.00	6.98	6.55	61.14	
1.30	7.23	8.68	95.03	
1.70	7.57	11.64	149.46	
2.00	7.83	13.95	196.90	
2.30	8.09	16.34	249.83	
2.70	8.43	19.64	328.77	
3.00	8.68	22.21	394.17	
6.00	11.25	52.10	1338.90	
9.00	13.81	89.68	2535.59	
12.00	16.37	134.95	4936.63	
36.00	36.87	773.82	50457.43	

END FTABLE 4  
FTABLE 5  
ROWS COLS \*\*\*  
16 4

DEPTH (FT)	AREA (ACRES)	VOLUME (AC-FT)	DISCH (CFS)	***
0.00	8.94	0.00	0.00	***
0.20	9.15	1.81	4.64	
0.40	9.35	3.66	14.75	
0.60	9.55	5.55	29.03	
0.80	9.75	7.48	46.94	
1.00	9.96	9.45	68.19	
1.30	10.26	12.48	105.86	
1.70	10.66	16.67	166.19	
2.00	10.97	19.91	218.59	
2.30	11.27	23.25	276.88	
2.70	11.68	27.84	363.51	
3.00	11.98	31.39	435.02	
6.00	15.02	71.89	1448.46	
9.00	18.06	121.50	3008.60	
12.00	21.09	180.22	5147.54	
58.00	67.67	2221.75	142706.41	

END FTABLE 5  
FTABLE 6  
ROWS COLS \*\*\*  
17 4

DEPTH (FT)	AREA (ACRES)	VOLUME (AC-FT)	DISCH (CFS)	***
0.00	7.64	0.00	0.00	***
0.20	7.78	1.54	5.06	
0.40	7.92	3.11	16.08	

0.60	8.06	4.71	31.63	
0.80	8.20	6.34	51.14	
1.00	8.34	7.99	74.27	
1.30	8.56	10.53	115.24	
1.70	8.84	14.01	180.76	
2.00	9.05	16.69	237.60	
2.30	9.26	19.44	300.75	
2.70	9.54	23.20	394.44	
3.00	9.76	26.09	471.65	
6.00	11.87	58.53	1556.19	
9.00	13.99	97.32	3202.02	
12.00	16.10	142.45	5430.19	
15.00	18.22	193.93	8276.35	
58.00	48.54	1629.24	141041.23	
END FTABLE 6				
FTABLE 7				
ROWS COLS ***				
16	4			
DEPTH	AREA	VOLUME	DISCH	***
(FT)	(ACRES)	(AC-FT)	(CFS)	***
0.00	10.53	0.00	0.00	
0.20	10.73	2.13	8.35	
0.40	10.92	4.29	26.56	
0.60	11.11	6.49	52.31	
0.80	11.31	8.74	84.68	
1.00	11.50	11.02	123.11	
1.30	11.79	14.51	191.34	
1.70	12.18	19.31	300.81	
2.00	12.47	23.00	396.05	
2.30	12.76	26.79	502.14	
2.70	13.15	31.97	660.01	
3.00	13.44	35.96	790.47	
6.00	16.35	80.66	2647.03	
9.00	19.26	134.08	5515.92	
12.00	22.17	196.24	9455.89	
24.00	33.81	532.16	37571.06	
END FTABLE 7				
FTABLE 8				
ROWS COLS ***				
17	4			
DEPTH	AREA	VOLUME	DISCH	***
(FT)	(ACRES)	(AC-FT)	(CFS)	***
0.00	10.34	0.00	0.00	
0.20	10.53	2.09	8.49	
0.40	10.72	4.21	27.01	
0.60	10.91	6.37	53.19	
0.80	11.10	8.57	86.08	
1.00	11.29	10.81	125.11	
1.30	11.57	14.24	194.36	
1.70	11.95	18.95	305.34	
2.00	12.24	22.57	401.78	
2.30	12.52	26.29	509.10	
2.70	12.90	31.37	668.59	
3.00	13.19	35.29	800.22	
6.00	16.04	79.13	2660.86	
9.00	18.89	131.53	5505.65	
12.00	21.74	192.48	9376.55	
15.00	24.59	261.98	14339.04	
25.00	34.10	555.45	39708.38	
END FTABLE 8				
FTABLE 9				
ROWS COLS ***				
18	4			
DEPTH	AREA	VOLUME	DISCH	***
(FT)	(ACRES)	(AC-FT)	(CFS)	***
0.00	17.26	0.00	0.00	
0.20	17.55	3.48	9.93	
0.40	17.83	7.02	31.59	
0.60	18.12	10.61	62.19	
0.80	18.41	14.27	100.62	
1.00	18.70	17.98	146.22	

1.30	19.13	23.65	227.07	
1.70	19.70	31.42	356.56	
2.00	20.14	37.39	469.02	
2.30	20.57	43.50	594.06	
2.70	21.14	51.84	779.75	
3.00	21.57	58.25	932.87	
6.00	25.89	129.44	3087.80	
9.00	30.20	213.58	6359.15	
12.00	34.52	310.67	10782.20	
15.00	38.83	420.69	16421.67	
25.00	53.22	880.94	44979.76	
50.00	89.17	2660.79	197754.51	

END FTABLE 9  
 FTABLE 10  
 ROWS COLS \*\*\*  
 18 4

DEPTH	AREA	VOLUME	DISCH	***
(FT)	(ACRES)	(AC-FT)	(CFS)	***
0.00	19.58	0.00	0.00	
0.20	19.88	3.95	11.22	
0.40	20.18	7.95	35.67	
0.60	20.47	12.02	70.22	
0.80	20.77	16.14	113.60	
1.00	21.06	20.32	165.03	
1.30	21.51	26.71	256.20	
1.70	22.10	35.43	402.07	
2.00	22.54	42.12	528.65	
2.30	22.98	48.95	669.29	
2.70	23.57	58.26	877.93	
3.00	24.02	65.40	1049.81	
6.00	28.45	144.11	3455.64	
9.00	32.89	236.12	7075.47	
12.00	37.32	341.43	11929.84	
15.00	41.75	460.04	18075.19	
25.00	56.53	951.48	48802.16	
50.00	93.49	2826.74	209904.75	

END FTABLE 10  
 END FTABLES  
 END RUN



# Medium Density (Conventional) Full Build Out without Restrictions

RUN

GLOBAL

```

Back Creek above Dundee, VA
START      1956 10  1  0  0  END      1999  9 30  0  0
RUN INTERP OUTPUT LEVEL  3    2
RESUME     0 RUN      1                UNIT SYSTEM  1
END GLOBAL

```

FILES

```

<FILE> <UN#>***<----FILE NAME----->
WDM      16  backcr.wdm
MESSU    24  scenario.ech
          91  scenario.out
          92  backcr1.plt
          93  backcr2.plt
          94  backcr3.plt

```

END FILES

OPN SEQUENCE

```

INGRP      INDELT 01:00
PERLND     11
PERLND     12
PERLND     13
PERLND     14
IMPLND     11
RCHRES      1
PERLND     21
PERLND     22
PERLND     23
PERLND     24
IMPLND     21
RCHRES      2
PERLND     31
PERLND     32
PERLND     33
PERLND     34
IMPLND     31
RCHRES      3
PERLND     41
PERLND     42
PERLND     43
PERLND     44
IMPLND     41
RCHRES      4
PERLND     51
PERLND     52
PERLND     53
PERLND     54
IMPLND     51
RCHRES      5
PERLND     61
PERLND     62
PERLND     63
PERLND     64
IMPLND     61
RCHRES      6
PERLND     71
PERLND     72
PERLND     73
PERLND     74
IMPLND     71
RCHRES      7
PERLND     81
PERLND     82
PERLND     83

```

```

PERLND      84
IMPLND      81
RCHRES       8
PERLND      91
PERLND      92
PERLND      93
PERLND      94
IMPLND      91
RCHRES       9
PERLND     101
PERLND     102
PERLND     103
PERLND     104
IMPLND     101
RCHRES     10
COPY       100
COPY       101
COPY       102
COPY       103
COPY       104
COPY       105
COPY       106
COPY       107
COPY       108
COPY       109
COPY       110
PLTGEN     100
PLTGEN     200
PLTGEN     300
END INGRP
END OPN SEQUENCE

```

```

PERLND
ACTIVITY
# # ATMP SNOW PWAT SED PST PWG PQAL MSTL PEST NITR PHOS TRAC ***
11 104 0 0 1 0 0 0 0 0 0 0 0 0 0
END ACTIVITY

```

```

PRINT-INFO
# # ATMP SNOW PWAT SED PST PWG PQAL MSTL PEST NITR PHOS TRAC PIVL***PY
11 104 6 6 5 6 6 6 6 6 6 6 6 6 1 9
END PRINT-INFO

```

```

GEN-INFO
# # NAME NBLKS UCI IN OUT ENGL METR ***
11 FOREST 1 1 1 1 91 0
21 FOREST 1 1 1 1 91 0
31 FOREST 1 1 1 1 91 0
41 FOREST 1 1 1 1 91 0
51 FOREST 1 1 1 1 91 0
61 FOREST 1 1 1 1 91 0
71 FOREST 1 1 1 1 91 0
81 FOREST 1 1 1 1 91 0
91 FOREST 1 1 1 1 91 0
101 FOREST 1 1 1 1 91 0
12 HERBACEOUS/AG 1 1 1 1 91 0
22 HERBACEOUS/AG 1 1 1 1 91 0
32 HERBACEOUS/AG 1 1 1 1 91 0
42 HERBACEOUS/AG 1 1 1 1 91 0
52 HERBACEOUS/AG 1 1 1 1 91 0
62 HERBACEOUS/AG 1 1 1 1 91 0
72 HERBACEOUS/AG 1 1 1 1 91 0
82 HERBACEOUS/AG 1 1 1 1 91 0
92 HERBACEOUS/AG 1 1 1 1 91 0
102 HERBACEOUS/AG 1 1 1 1 91 0
13 DISTURBED 1 1 1 1 91 0
23 DISTURBED 1 1 1 1 91 0
33 DISTURBED 1 1 1 1 91 0
43 DISTURBED 1 1 1 1 91 0
53 DISTURBED 1 1 1 1 91 0
63 DISTURBED 1 1 1 1 91 0

```

73	DISTURBED	1	1	1	1	91	0
83	DISTURBED	1	1	1	1	91	0
93	DISTURBED	1	1	1	1	91	0
103	DISTURBED	1	1	1	1	91	0
14	MIXED FOREST/AG	1	1	1	1	91	0
24	MIXED FOREST/AG	1	1	1	1	91	0
34	MIXED FOREST/AG	1	1	1	1	91	0
44	MIXED FOREST/AG	1	1	1	1	91	0
54	MIXED FOREST/AG	1	1	1	1	91	0
64	MIXED FOREST/AG	1	1	1	1	91	0
74	MIXED FOREST/AG	1	1	1	1	91	0
84	MIXED FOREST/AG	1	1	1	1	91	0
94	MIXED FOREST/AG	1	1	1	1	91	0
104	MIXED FOREST/AG	1	1	1	1	91	0

END GEN-INFO

PWAT-PARM1

#	#	CSNO	RTOP	UZFG	VCS	VUZ	NVV	VIFW	VIRC	VLE	***
11		0	1	1	1	0	0	0	0	1	0
12		0	1	1	1	1	0	0	0	1	0
13		0	1	1	1	0	0	0	0	1	0
14		0	1	1	1	1	0	0	0	1	0
21		0	1	1	1	0	0	0	0	1	0
22		0	1	1	1	1	0	0	0	1	0
23		0	1	1	1	0	0	0	0	1	0
24		0	1	1	1	1	0	0	0	1	0
31		0	1	1	1	0	0	0	0	1	0
32		0	1	1	1	1	0	0	0	1	0
33		0	1	1	1	0	0	0	0	1	0
34		0	1	1	1	1	0	0	0	1	0
41		0	1	1	1	0	0	0	0	1	0
42		0	1	1	1	1	0	0	0	1	0
43		0	1	1	1	0	0	0	0	1	0
44		0	1	1	1	1	0	0	0	1	0
51		0	1	1	1	0	0	0	0	1	0
52		0	1	1	1	1	0	0	0	1	0
53		0	1	1	1	0	0	0	0	1	0
54		0	1	1	1	1	0	0	0	1	0
61		0	1	1	1	0	0	0	0	1	0
62		0	1	1	1	1	0	0	0	1	0
63		0	1	1	1	0	0	0	0	1	0
64		0	1	1	1	1	0	0	0	1	0
71		0	1	1	1	0	0	0	0	1	0
72		0	1	1	1	1	0	0	0	1	0
73		0	1	1	1	0	0	0	0	1	0
74		0	1	1	1	1	0	0	0	1	0
81		0	1	1	1	0	0	0	0	1	0
82		0	1	1	1	1	0	0	0	1	0
83		0	1	1	1	0	0	0	0	1	0
84		0	1	1	1	1	0	0	0	1	0
91		0	1	1	1	0	0	0	0	1	0
92		0	1	1	1	1	0	0	0	1	0
93		0	1	1	1	0	0	0	0	1	0
94		0	1	1	1	1	0	0	0	1	0
101		0	1	1	1	0	0	0	0	1	0
102		0	1	1	1	1	0	0	0	1	0
103		0	1	1	1	0	0	0	0	1	0
104		0	1	1	1	1	0	0	0	1	0

END PWAT-PARM1

PWAT-PARM2

#	#	***FOREST	LZSN	INFILT	LSUR	SLSUR	KVARY	AGWR
11		0.000	9.5	0.105	200.	0.24000	0.000	.960
21		0.000	9.5	0.105	200.	0.24000	0.000	.960
31		0.000	9.5	0.105	200.	0.22000	0.000	.960
41		0.000	9.5	0.105	300.	0.14000	0.000	.960
51		0.000	9.5	0.105	250.	0.19000	0.000	.960
61		0.000	9.5	0.105	200.	0.20000	0.000	.960
71		0.000	9.5	0.105	250.	0.19000	0.000	.960
81		0.000	9.5	0.105	250.	0.19000	0.000	.960
91		0.000	9.5	0.105	200.	0.22000	0.000	.960

101	0.000	9.5	0.105	250.	0.16000	0.000	.960
12	0.000	9.5	0.086	200.	0.24000	0.000	.960
22	0.000	9.5	0.086	200.	0.24000	0.000	.960
32	0.000	9.5	0.086	200.	0.22000	0.000	.960
42	0.000	9.5	0.086	300.	0.14000	0.000	.960
52	0.000	9.5	0.086	250.	0.19000	0.000	.960
62	0.000	9.5	0.086	200.	0.20000	0.000	.960
72	0.000	9.5	0.086	250.	0.19000	0.000	.960
82	0.000	9.5	0.086	250.	0.19000	0.000	.960
92	0.000	9.5	0.086	200.	0.22000	0.000	.960
102	0.000	9.5	0.086	250.	0.16000	0.000	.960
13	0.000	9.5	0.067	200.	0.24000	0.000	.960
23	0.000	9.5	0.067	200.	0.24000	0.000	.960
33	0.000	9.5	0.067	200.	0.22000	0.000	.960
43	0.000	9.5	0.067	300.	0.14000	0.000	.960
53	0.000	9.5	0.067	250.	0.19000	0.000	.960
63	0.000	9.5	0.067	200.	0.20000	0.000	.960
73	0.000	9.5	0.067	250.	0.19000	0.000	.960
83	0.000	9.5	0.067	250.	0.19000	0.000	.960
93	0.000	9.5	0.067	200.	0.22000	0.000	.960
103	0.000	9.5	0.067	250.	0.16000	0.000	.960
14	0.000	9.5	0.096	200.	0.24000	0.000	.960
24	0.000	9.5	0.096	200.	0.24000	0.000	.960
34	0.000	9.5	0.096	200.	0.22000	0.000	.960
44	0.000	9.5	0.096	300.	0.14000	0.000	.960
54	0.000	9.5	0.096	250.	0.19000	0.000	.960
64	0.000	9.5	0.096	200.	0.20000	0.000	.960
74	0.000	9.5	0.096	250.	0.19000	0.000	.960
84	0.000	9.5	0.096	250.	0.19000	0.000	.960
94	0.000	9.5	0.096	200.	0.22000	0.000	.960
104	0.000	9.5	0.096	250.	0.16000	0.000	.960

END PWAT-PARM2

PWAT-PARM3

***<PLS>	PETMAX	PETMIN	INFEXP	INFILD	DEEPFR	BASETP	AGWETP
***x - x	(deg F)	(deg F)					
11 104	40.0	35.0	2.0	2.0	0.210	0.000	0.000

END PWAT-PARM3

PWAT-PARM4

#	#	CEPSC	UZSN	NSUR	INTFW	IRC	LZETP	***
11		0.200	1.30	0.40	3.7	0.65	0.90	
21		0.200	1.30	0.40	3.7	0.65	0.90	
31		0.200	1.30	0.40	3.7	0.65	0.90	
41		0.200	1.30	0.40	3.7	0.65	0.90	
51		0.200	1.30	0.40	3.7	0.65	0.90	
61		0.200	1.30	0.40	3.7	0.65	0.90	
71		0.200	1.30	0.40	3.7	0.65	0.90	
81		0.200	1.30	0.40	3.7	0.65	0.90	
91		0.200	1.30	0.40	3.7	0.65	0.90	
101		0.200	1.30	0.40	3.7	0.65	0.90	
12		0.200	1.00	0.20	2.8	0.60	0.90	
22		0.200	1.00	0.20	2.8	0.60	0.90	
32		0.200	1.00	0.20	2.8	0.60	0.90	
42		0.200	1.00	0.20	2.8	0.60	0.90	
52		0.200	1.00	0.20	2.8	0.60	0.90	
62		0.200	1.00	0.20	2.8	0.60	0.90	
72		0.200	1.00	0.20	2.8	0.60	0.90	
82		0.200	1.00	0.20	2.8	0.60	0.90	
92		0.200	1.00	0.20	2.8	0.60	0.90	
102		0.200	1.00	0.20	2.8	0.60	0.90	
13		0.200	0.92	0.15	2.8	0.60	0.90	
23		0.200	0.92	0.15	2.8	0.60	0.90	
33		0.200	0.92	0.15	2.8	0.60	0.90	
43		0.200	0.92	0.15	2.8	0.60	0.90	
53		0.200	0.92	0.15	2.8	0.60	0.90	
63		0.200	0.92	0.15	2.8	0.60	0.90	
73		0.200	0.92	0.15	2.8	0.60	0.90	
83		0.200	0.92	0.15	2.8	0.60	0.90	
93		0.200	0.92	0.15	2.8	0.60	0.90	
103		0.200	0.92	0.15	2.8	0.60	0.90	

```

14      0.200      1.00      0.30      3.3      0.63      0.90
24      0.200      1.00      0.30      3.3      0.63      0.90
34      0.200      1.00      0.30      3.3      0.63      0.90
44      0.200      1.00      0.30      3.3      0.63      0.90
54      0.200      1.00      0.30      3.3      0.63      0.90
64      0.200      1.00      0.30      3.3      0.63      0.90
74      0.200      1.00      0.30      3.3      0.63      0.90
84      0.200      1.00      0.30      3.3      0.63      0.90
94      0.200      1.00      0.30      3.3      0.63      0.90
104     0.200      1.00      0.30      3.3      0.63      0.90
END PWAT-PARM4

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```

PWAT-PARM5
*** <PLS >      FZG      FZGL
*** x - x
11 104      1.0      0.1
END PWAT-PARM5

```

```

MON-INTERCEP
*** <PLS > Interception storage capacity at start of each month (in)
*** x - x JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC
11 0.0250.0250.0250.1000.3500.4000.4000.4000.3500.1000.0250.025
21 0.0250.0250.0250.1000.3500.4000.4000.4000.3500.1000.0250.025
31 0.0250.0250.0250.1000.3500.4000.4000.4000.3500.1000.0250.025
41 0.0250.0250.0250.1000.3500.4000.4000.4000.3500.1000.0250.025
51 0.0250.0250.0250.1000.3500.4000.4000.4000.3500.1000.0250.025
61 0.0250.0250.0250.1000.3500.4000.4000.4000.3500.1000.0250.025
71 0.0250.0250.0250.1000.3500.4000.4000.4000.3500.1000.0250.025
81 0.0250.0250.0250.1000.3500.4000.4000.4000.3500.1000.0250.025
91 0.0250.0250.0250.1000.3500.4000.4000.4000.3500.1000.0250.025
101 0.0250.0250.0250.1000.3500.4000.4000.4000.3500.1000.0250.025
12 0.0250.0250.0250.1000.2500.3000.3000.3000.2500.1000.0250.025
22 0.0250.0250.0250.1000.2500.3000.3000.3000.2500.1000.0250.025
32 0.0250.0250.0250.1000.2500.3000.3000.3000.2500.1000.0250.025
42 0.0250.0250.0250.1000.2500.3000.3000.3000.2500.1000.0250.025
52 0.0250.0250.0250.1000.2500.3000.3000.3000.2500.1000.0250.025
62 0.0250.0250.0250.1000.2500.3000.3000.3000.2500.1000.0250.025
72 0.0250.0250.0250.1000.2500.3000.3000.3000.2500.1000.0250.025
82 0.0250.0250.0250.1000.2500.3000.3000.3000.2500.1000.0250.025
92 0.0250.0250.0250.1000.2500.3000.3000.3000.2500.1000.0250.025
102 0.0250.0250.0250.1000.2500.3000.3000.3000.2500.1000.0250.025
13 0.0250.0250.0250.1000.1500.1500.1500.1500.1000.1000.0250.025
23 0.0250.0250.0250.1000.1500.1500.1500.1500.1000.1000.0250.025
33 0.0250.0250.0250.1000.1500.1500.1500.1500.1000.1000.0250.025
43 0.0250.0250.0250.1000.1500.1500.1500.1500.1000.1000.0250.025
53 0.0250.0250.0250.1000.1500.1500.1500.1500.1000.1000.0250.025
63 0.0250.0250.0250.1000.1500.1500.1500.1500.1000.1000.0250.025
73 0.0250.0250.0250.1000.1500.1500.1500.1500.1000.1000.0250.025
83 0.0250.0250.0250.1000.1500.1500.1500.1500.1000.1000.0250.025
93 0.0250.0250.0250.1000.1500.1500.1500.1500.1000.1000.0250.025
103 0.0250.0250.0250.1000.1500.1500.1500.1500.1000.1000.0250.025
14 0.0250.0250.0250.1000.3000.3500.3500.3500.3000.1000.0250.025
24 0.0250.0250.0250.1000.3000.3500.3500.3500.3000.1000.0250.025
34 0.0250.0250.0250.1000.3000.3500.3500.3500.3000.1000.0250.025
44 0.0250.0250.0250.1000.3000.3500.3500.3500.3000.1000.0250.025
54 0.0250.0250.0250.1000.3000.3500.3500.3500.3000.1000.0250.025
64 0.0250.0250.0250.1000.3000.3500.3500.3500.3000.1000.0250.025
74 0.0250.0250.0250.1000.3000.3500.3500.3500.3000.1000.0250.025
84 0.0250.0250.0250.1000.3000.3500.3500.3500.3000.1000.0250.025
94 0.0250.0250.0250.1000.3000.3500.3500.3500.3000.1000.0250.025
104 0.0250.0250.0250.1000.3000.3500.3500.3500.3000.1000.0250.025
END MON-INTERCEP

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MON-UZSN
*** <PLS > Upper zone storage at start of each month
*** x - x JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC
12 0.1000.1000.2000.4001.0401.2801.2801.2501.0400.4000.2000.100
22 0.1000.1000.2000.4001.0401.2801.2801.2801.0400.4000.2000.100
32 0.1000.1000.2000.4001.0401.2801.2801.2801.0400.4000.2000.100
42 0.1000.1000.2000.4001.0401.2801.2801.2801.0400.4000.2000.100
52 0.1000.1000.2000.4001.0401.2801.2801.2801.0400.4000.2000.100

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62 0.1000.1000.2000.4001.0401.2801.2801.2801.0400.4000.2000.100
72 0.1000.1000.2000.4001.0401.2801.2801.2801.0400.4000.2000.100
82 0.1000.1000.2000.4001.0401.2801.2801.2801.0400.4000.2000.100
92 0.1000.1000.2000.4001.0401.2801.2801.2801.0400.4000.2000.100
102 0.1000.1000.2000.4001.0401.2801.2801.2801.0400.4000.2000.100
14 0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
24 0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
34 0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
44 0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
54 0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
64 0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
74 0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
84 0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
94 0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
104 0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
END MON-UZSN

```

MON-LZETPARM

```

*** <PLS > Lower zone evapotransp parm at start of each month
*** x - x JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC
11 0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
21 0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
31 0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
41 0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
51 0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
61 0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
71 0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
81 0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
91 0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
101 0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
12 0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
22 0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
32 0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
42 0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
52 0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
62 0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
72 0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
82 0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
92 0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
102 0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
13 0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
23 0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
33 0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
43 0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
53 0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
63 0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
73 0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
83 0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
93 0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
103 0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
14 0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
24 0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
34 0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
44 0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
54 0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
64 0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
74 0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
84 0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
94 0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
104 0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
END MON-LZETPARM

```

PWAT-STATE1

#	# ***	CEPS	SURS	UZS	IFWS	LZS	AGWS	GWVS
11		0.020	0.020	0.550	0.000	7.470	0.319	0.000
21		0.020	0.020	0.550	0.000	7.470	0.319	0.000
31		0.020	0.020	0.550	0.000	7.470	0.319	0.000
41		0.020	0.020	0.550	0.000	7.470	0.319	0.000
51		0.020	0.020	0.550	0.000	7.470	0.319	0.000
61		0.020	0.020	0.550	0.000	7.470	0.319	0.000
71		0.020	0.020	0.550	0.000	7.470	0.319	0.000

81	0.020	0.020	0.550	0.000	7.470	0.319	0.000
91	0.020	0.020	0.550	0.000	7.470	0.319	0.000
101	0.020	0.020	0.550	0.000	7.470	0.319	0.000
12	0.020	0.020	0.340	0.001	6.450	0.224	0.000
22	0.020	0.020	0.340	0.001	6.450	0.224	0.000
32	0.020	0.020	0.340	0.001	6.450	0.224	0.000
42	0.020	0.020	0.340	0.001	6.450	0.224	0.000
52	0.020	0.020	0.340	0.001	6.450	0.224	0.000
62	0.020	0.020	0.340	0.001	6.450	0.224	0.000
72	0.020	0.020	0.340	0.001	6.450	0.224	0.000
82	0.020	0.020	0.340	0.001	6.450	0.224	0.000
92	0.020	0.020	0.340	0.001	6.450	0.224	0.000
102	0.020	0.020	0.340	0.001	6.450	0.224	0.000
13	0.020	0.020	0.940	0.004	8.630	0.411	0.000
23	0.020	0.020	0.940	0.004	8.630	0.411	0.000
33	0.020	0.020	0.940	0.004	8.630	0.411	0.000
43	0.020	0.020	0.940	0.004	8.630	0.411	0.000
53	0.020	0.020	0.940	0.004	8.630	0.411	0.000
63	0.020	0.020	0.940	0.004	8.630	0.411	0.000
73	0.020	0.020	0.940	0.004	8.630	0.411	0.000
83	0.020	0.020	0.940	0.004	8.630	0.411	0.000
93	0.020	0.020	0.940	0.004	8.630	0.411	0.000
103	0.020	0.020	0.940	0.004	8.630	0.411	0.000
14	0.020	0.020	0.420	0.001	6.560	0.261	0.000
24	0.020	0.020	0.420	0.001	6.560	0.261	0.000
34	0.020	0.020	0.420	0.001	6.560	0.261	0.000
44	0.020	0.020	0.420	0.001	6.560	0.261	0.000
54	0.020	0.020	0.420	0.001	6.560	0.261	0.000
64	0.020	0.020	0.420	0.001	6.560	0.261	0.000
74	0.020	0.020	0.420	0.001	6.560	0.261	0.000
84	0.020	0.020	0.420	0.001	6.560	0.261	0.000
94	0.020	0.020	0.420	0.001	6.560	0.261	0.000
104	0.020	0.020	0.420	0.001	6.560	0.261	0.000

END PWAT-STATE1

END PERLND

IMPLND

ACTIVITY

#	#	ATMP	SNOW	IWAT	SLD	IWG	IQAL	***
11	1017	0	0	1	0	0	0	

END ACTIVITY

PRINT-INFO

#	#	ATMP	SNOW	IWAT	SLD	IWG	IQAL	PIVL	PYR	***
11	101	6	6	5	6	6	6	1	9	

END PRINT-INFO

GEN-INFO

#	#	NAME	UCI	IN	OUT	ENGL	METR	***
11	101	IMPERV LAND	1	1	1	91	0	

END GEN-INFO

IWAT-PARM1

#	#	CSNO	RTOP	VRS	VNN	RTLI	***
11	101	0	1	0	0	0	

END IWAT-PARM1

IWAT-PARM2

#	#	LSUR	SLSUR	NSUR	RETSC	***
11		200.0	0.2400	0.10	0.05	
21		200.0	0.2400	0.10	0.05	
31		200.0	0.2200	0.10	0.05	
41		300.0	0.1400	0.10	0.05	
51		250.0	0.1900	0.10	0.05	
61		200.0	0.2000	0.10	0.05	
71		250.0	0.1900	0.10	0.05	
81		250.0	0.1900	0.10	0.05	
91		200.0	0.2200	0.10	0.05	
101		250.0	0.1600	0.10	0.05	

END IWAT-PARM2

```

IWAT-PARM3
*** <ILS >   PETMAX   PETMIN
*** x - x   (deg F)   (deg F)
    11 101    40.0    35.0
END IWAT-PARM3

```

```

IWAT-STATE1
*** <ILS >   IWATER state variables (inches)
*** x - x     RETS     SURS
    11 101    0.03    0.01
END IWAT-STATE1

```

END IMPLND

RCHRES

```

ACTIVITY
RCHRES Active Sections (1=Active; 0=Inactive) ***
# - # HYFG ADFG CNFG HTFG SDFG GQFG OXFG NUFG PKFG PHFG ***
    1 10 1 0 0 0 0 0 0 0 0
END ACTIVITY

```

```

PRINT-INFO
RCHRES Print-flags ***
# - # HYDR ADCA CONS HEAT SED GQL OXRX NUTR PLNK PHCB PIVL PYR ***
    1 10 5 5 5 5 5 5 5 5 12
END PRINT-INFO

```

GEN-INFO

```

RCHRES<-----Name----->Nexit Unit Systems Printer ***
# - # User t-series Engl Metr LKFG ***
      in out
    1 Little Back Creek 1 1 1 1 91 0 0
    2 Upper Back Creek 1 1 1 1 91 0 0
    3 Poages Mill 1 1 1 1 91 0 0
    4 Cave Spring 1 1 1 1 91 0 0
    5 Blue Ridge Parkway 1 1 1 1 91 0 0
    6 Cattail Hollow 1 1 1 1 91 0 0
    7 State Rd #676 1 1 1 1 91 0 0
    8 Red Hill Church 1 1 1 1 91 0 0
    9 State Rd #667 1 1 1 1 91 0 0
   10 Dundee 1 1 1 1 91 0 0
END GEN-INFO

```

HYDR-PARM1

```

RCHRES Flags for HYDR section ***
# - # VC A1 A2 A3 ODFVFG for each ODGTFG for each *** FUNCT for each
      FG FG FG FG possible exit possible exit *** possible exit
      1 2 3 4 5 1 2 3 4 5 *** 1 2 3 4 5
    1 10 0 1 1 1 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 1 1 1 1
END HYDR-PARM1

```

HYDR-PARM2

```

RCHRES ***
# - # FTABNO LEN DELTH STCOR KS DB50 ***
    1 1 2.62 387.0 0.0 0.5 0.01
    2 2 2.99 561.0 0.0 0.5 0.01
    3 3 2.08 69.0 0.0 0.5 0.01
    4 4 2.35 85.0 0.0 0.5 0.01
    5 5 2.78 85.0 0.0 0.5 0.01
    6 6 1.94 36.0 0.0 0.5 0.01
    7 7 2.29 56.0 0.0 0.5 0.01
    8 8 1.96 26.0 0.0 0.5 0.01
    9 9 2.97 52.0 0.0 0.5 0.01
   10 10 3.05 56.0 0.0 0.5 0.01
END HYDR-PARM2

```

HYDR-INIT

```

RCHRES Initial conditions for HYDR section ***
# - # VOL Initial value of COLIND *** Initial value of OUTDGT
      (ac-ft) for each possible exit *** for each possible exit

```



```

EX1 EX2 EX3 EX4 EX5 *** EX1 EX2 EX3 EX4 EX5
1 0.10
2 0.25
3 0.45
4 0.65
5 0.85
6 1.00
7 1.50
8 2.00
9 2.50
10 3.00
END HYDR-INIT
END RCHRES

COPY
TIMESERIES
Copy-opn***
*** x - x NPT NMN
100 0 7
101 110 0 2
END TIMESERIES
END COPY

PLTGEN
PLOTINFO
*** x - x FILE NPT NMN LABL PYR PIVL
100 92 0 10
200 93 0 10
300 94 0 10
END PLOTINFO
GEN-LABELS
*** x - x<-----title-----> <-----y-axis lab---->
100 Reach Outflows Flow (cfs)
200 Land Segment Outflows Runoff (in/hr)
300 Groundwater Recharge Recharge (in/hr)
END GEN-LABELS
SCALING
*** x - x<---ymin--><---ymax--><---ivlin--><---thresh-->
100 0 100000 10
200 0 1.0000 10
300 0 1.0000 10
END SCALING
CURV-DATA
*** x - x <----label----> LIN INT COL TR
100 300 Outflow
END CURV-DATA
END PLTGEN

EXT SOURCES

<-Volume-> <Member> SsysSgap<--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name> x <Name> x tem strg<-factor->strg <Name> x x <Name> x x ***
WDM 210 EVAP ENGL PERLND 11 104 EXTNL PETINP 1 1
WDM 210 EVAP ENGL IMPLND 11 101 EXTNL PETINP 1 1

WDM 82 PRCP ENGL PERLND 11 104 EXTNL PREC 1 1
WDM 82 PRCP ENGL IMPLND 11 101 EXTNL PREC 1 1

WDM 541 FLOW ENGL PLTGEN 100 INPUT MEAN 1 1
WDM 542 FLOW ENGL PLTGEN 100 INPUT MEAN 2 1
WDM 543 FLOW ENGL PLTGEN 100 INPUT MEAN 3 1
WDM 544 FLOW ENGL PLTGEN 100 INPUT MEAN 4 1
WDM 545 FLOW ENGL PLTGEN 100 INPUT MEAN 5 1
WDM 546 FLOW ENGL PLTGEN 100 INPUT MEAN 6 1
WDM 547 FLOW ENGL PLTGEN 100 INPUT MEAN 7 1
WDM 548 FLOW ENGL PLTGEN 100 INPUT MEAN 8 1
WDM 549 FLOW ENGL PLTGEN 100 INPUT MEAN 9 1
WDM 550 FLOW ENGL PLTGEN 100 INPUT MEAN 10 1

WDM 531 SIMQ ENGL PLTGEN 200 INPUT MEAN 1 1
WDM 532 SIMQ ENGL PLTGEN 200 INPUT MEAN 2 1

```

WDM	533	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	3	1
WDM	534	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	4	1
WDM	535	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	5	1
WDM	536	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	6	1
WDM	537	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	7	1
WDM	538	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	8	1
WDM	539	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	9	1
WDM	540	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	10	1
WDM	551	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	1	1
WDM	552	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	2	1
WDM	553	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	3	1
WDM	554	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	4	1
WDM	555	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	5	1
WDM	556	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	6	1
WDM	557	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	7	1
WDM	558	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	8	1
WDM	559	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	9	1
WDM	560	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	10	1

END EXT SOURCES

EXT TARGETS

<-Volume->	<-Grp>	<-Member->	<--Mult-->	Tran	<-Volume->	<Member>	Tsys	Aggr	Amd	***		
<Name>	x	<Name>	x	x<-factor->	strg	<Name>	x	<Name>	qf	tem	strg	strg***
RCHRES	10	ROFLOW	ROVOL	1	13.35965E-4	WDM	320	SIMQ	1	ENGL		REPL
COPY	100	OUTPUT	MEAN	1	12.79971E-5	WDM	321	SURO	1	ENGL		REPL
COPY	100	OUTPUT	MEAN	2	12.79971E-5	WDM	322	IFWO	1	ENGL		REPL
COPY	100	OUTPUT	MEAN	3	12.79971E-5	WDM	323	AGWO	1	ENGL		REPL
COPY	100	OUTPUT	MEAN	4	12.79971E-5	WDM	325	PETX	1	ENGL	AGGR	REPL
COPY	100	OUTPUT	MEAN	5	12.79971E-5	WDM	326	SAET	1	ENGL	AGGR	REPL
COPY	100	OUTPUT	MEAN	6	12.79971E-5	WDM	327	UZSX	1	ENGL	AGGR	REPL
COPY	100	OUTPUT	MEAN	7	12.79971E-5	WDM	328	LZSX	1	ENGL	AGGR	REPL
RCHRES	1	ROFLOW	ROVOL	1	1	12.1	WDM	541	FLOW	1	ENGL	REPL
RCHRES	2	ROFLOW	ROVOL	1	1	12.1	WDM	542	FLOW	1	ENGL	REPL
RCHRES	3	ROFLOW	ROVOL	1	1	12.1	WDM	543	FLOW	1	ENGL	REPL
RCHRES	4	ROFLOW	ROVOL	1	1	12.1	WDM	544	FLOW	1	ENGL	REPL
RCHRES	5	ROFLOW	ROVOL	1	1	12.1	WDM	545	FLOW	1	ENGL	REPL
RCHRES	6	ROFLOW	ROVOL	1	1	12.1	WDM	546	FLOW	1	ENGL	REPL
RCHRES	7	ROFLOW	ROVOL	1	1	12.1	WDM	547	FLOW	1	ENGL	REPL
RCHRES	8	ROFLOW	ROVOL	1	1	12.1	WDM	548	FLOW	1	ENGL	REPL
RCHRES	9	ROFLOW	ROVOL	1	1	12.1	WDM	549	FLOW	1	ENGL	REPL
RCHRES	10	ROFLOW	ROVOL	1	1	12.1	WDM	550	FLOW	1	ENGL	REPL
COPY	101	OUTPUT	MEAN	1	13.96983E-4	WDM	531	SIMQ	1	ENGL		REPL
COPY	102	OUTPUT	MEAN	1	12.14041E-4	WDM	532	SIMQ	1	ENGL		REPL
COPY	103	OUTPUT	MEAN	1	11.74398E-4	WDM	533	SIMQ	1	ENGL		REPL
COPY	104	OUTPUT	MEAN	1	15.00000E-4	WDM	534	SIMQ	1	ENGL		REPL
COPY	105	OUTPUT	MEAN	1	12.26809E-4	WDM	535	SIMQ	1	ENGL		REPL
COPY	106	OUTPUT	MEAN	1	12.80820E-4	WDM	536	SIMQ	1	ENGL		REPL
COPY	107	OUTPUT	MEAN	1	13.25407E-4	WDM	537	SIMQ	1	ENGL		REPL
COPY	108	OUTPUT	MEAN	1	13.15560E-4	WDM	538	SIMQ	1	ENGL		REPL
COPY	109	OUTPUT	MEAN	1	13.39789E-4	WDM	539	SIMQ	1	ENGL		REPL
COPY	110	OUTPUT	MEAN	1	12.72554E-4	WDM	540	SIMQ	1	ENGL		REPL
COPY	101	OUTPUT	MEAN	2	13.96983E-4	WDM	551	SIMQ	1	ENGL		REPL
COPY	102	OUTPUT	MEAN	2	12.14041E-4	WDM	552	SIMQ	1	ENGL		REPL
COPY	103	OUTPUT	MEAN	2	11.74398E-4	WDM	553	SIMQ	1	ENGL		REPL
COPY	104	OUTPUT	MEAN	2	15.00000E-4	WDM	554	SIMQ	1	ENGL		REPL
COPY	105	OUTPUT	MEAN	2	12.26809E-4	WDM	555	SIMQ	1	ENGL		REPL
COPY	106	OUTPUT	MEAN	2	12.80820E-4	WDM	556	SIMQ	1	ENGL		REPL
COPY	107	OUTPUT	MEAN	2	13.25407E-4	WDM	557	SIMQ	1	ENGL		REPL
COPY	108	OUTPUT	MEAN	2	13.15560E-4	WDM	558	SIMQ	1	ENGL		REPL
COPY	109	OUTPUT	MEAN	2	13.39789E-4	WDM	559	SIMQ	1	ENGL		REPL
COPY	110	OUTPUT	MEAN	2	12.72554E-4	WDM	560	SIMQ	1	ENGL		REPL

END EXT TARGETS

SCHEMATIC

<-Volume->	<-Area-->	<-Volume->	<ML#>	***
<Name> x	<-factor->	<Name> x		***
PERLND 11	485.	RCHRES 1	1	
PERLND 12	1280.	RCHRES 1	1	
PERLND 13	19.	RCHRES 1	1	
PERLND 14	58.	RCHRES 1	1	
IMPLND 11	678.	RCHRES 1	3	
PERLND 21	813.	RCHRES 2	1	
PERLND 22	2413.	RCHRES 2	1	
PERLND 23	37.	RCHRES 2	1	
PERLND 24	152.	RCHRES 2	1	
IMPLND 21	1257.	RCHRES 2	3	
PERLND 31	1019.	RCHRES 3	1	
PERLND 32	2938.	RCHRES 3	1	
PERLND 33	72.	RCHRES 3	1	
PERLND 34	164.	RCHRES 3	1	
IMPLND 31	1539.	RCHRES 3	3	
PERLND 41	296.	RCHRES 4	1	
PERLND 42	1001.	RCHRES 4	1	
PERLND 43	85.	RCHRES 4	1	
PERLND 44	89.	RCHRES 4	1	
IMPLND 41	530.	RCHRES 4	3	
PERLND 51	625.	RCHRES 5	1	
PERLND 52	1905.	RCHRES 5	1	
PERLND 53	591.	RCHRES 5	1	
PERLND 54	169.	RCHRES 5	1	
IMPLND 51	1119.	RCHRES 5	3	
PERLND 61	640.	RCHRES 6	1	
PERLND 62	1782.	RCHRES 6	1	
PERLND 63	71.	RCHRES 6	1	
PERLND 64	115.	RCHRES 6	1	
IMPLND 61	953.	RCHRES 6	3	
PERLND 71	534.	RCHRES 7	1	
PERLND 72	1517.	RCHRES 7	1	
PERLND 73	65.	RCHRES 7	1	
PERLND 74	115.	RCHRES 7	1	
IMPLND 71	814.	RCHRES 7	3	
PERLND 81	488.	RCHRES 8	1	
PERLND 82	1429.	RCHRES 8	1	
PERLND 83	328.	RCHRES 8	1	
PERLND 84	106.	RCHRES 8	1	
IMPLND 81	815.	RCHRES 8	3	
PERLND 91	506.	RCHRES 9	1	
PERLND 92	1467.	RCHRES 9	1	
PERLND 93	103.	RCHRES 9	1	
PERLND 94	84.	RCHRES 9	1	
IMPLND 91	782.	RCHRES 9	3	
PERLND 101	362.	RCHRES 10	1	
PERLND 102	1862.	RCHRES 10	1	
PERLND 103	272.	RCHRES 10	1	
PERLND 104	215.	RCHRES 10	1	
IMPLND 101	958.	RCHRES 10	3	
RCHRES 1		RCHRES 3	5	
RCHRES 2		RCHRES 3	5	
RCHRES 3		RCHRES 4	5	
RCHRES 4		RCHRES 5	5	
RCHRES 5		RCHRES 6	5	
RCHRES 6		RCHRES 7	5	
RCHRES 7		RCHRES 8	5	
RCHRES 8		RCHRES 9	5	
RCHRES 9		RCHRES 10	5	

PERLND	11	485.	COPY	100	90
PERLND	12	1280.	COPY	100	90
PERLND	13	19.	COPY	100	90
PERLND	14	58.	COPY	100	90
IMPLND	11	678.	COPY	100	91
PERLND	11	485.	COPY	101	92
PERLND	12	1280.	COPY	101	92
PERLND	13	19.	COPY	101	92
PERLND	14	58.	COPY	101	92
IMPLND	11	678.	COPY	101	93
PERLND	21	813.	COPY	100	90
PERLND	22	2413.	COPY	100	90
PERLND	23	37.	COPY	100	90
PERLND	24	152.	COPY	100	90
IMPLND	21	1257.	COPY	100	91
PERLND	21	813.	COPY	102	92
PERLND	22	2413.	COPY	102	92
PERLND	23	37.	COPY	102	92
PERLND	24	152.	COPY	102	92
IMPLND	21	1257.	COPY	102	93
PERLND	31	1019.	COPY	100	90
PERLND	32	2938.	COPY	100	90
PERLND	33	72.	COPY	100	90
PERLND	34	164.	COPY	100	90
IMPLND	31	1539.	COPY	100	91
PERLND	31	1019.	COPY	103	92
PERLND	32	2938.	COPY	103	92
PERLND	33	72.	COPY	103	92
PERLND	34	164.	COPY	103	92
IMPLND	31	1539.	COPY	103	93
PERLND	41	296.	COPY	100	90
PERLND	42	1001.	COPY	100	90
PERLND	43	85.	COPY	100	90
PERLND	44	89.	COPY	100	90
IMPLND	41	530.	COPY	100	91
PERLND	41	296.	COPY	104	92
PERLND	42	1001.	COPY	104	92
PERLND	43	85.	COPY	104	92
PERLND	44	89.	COPY	104	92
IMPLND	41	530.	COPY	104	93
PERLND	51	625.	COPY	100	90
PERLND	52	1905.	COPY	100	90
PERLND	53	591.	COPY	100	90
PERLND	54	169.	COPY	100	90
IMPLND	51	1119.	COPY	100	91
PERLND	51	625.	COPY	105	92
PERLND	52	1905.	COPY	105	92
PERLND	53	591.	COPY	105	92
PERLND	54	169.	COPY	105	92
IMPLND	51	1119.	COPY	105	93
PERLND	61	640.	COPY	100	90
PERLND	62	1782.	COPY	100	90
PERLND	63	71.	COPY	100	90
PERLND	64	115.	COPY	100	90
IMPLND	61	953.	COPY	100	91
PERLND	61	640.	COPY	106	92
PERLND	62	1782.	COPY	106	92
PERLND	63	71.	COPY	106	92
PERLND	64	115.	COPY	106	92
IMPLND	61	953.	COPY	106	93
PERLND	71	534.	COPY	100	90
PERLND	72	1517.	COPY	100	90
PERLND	73	65.	COPY	100	90
PERLND	74	115.	COPY	100	90

IMPLND	71		814.	COPY	100	91
PERLND	71		534.	COPY	107	92
PERLND	72		1517.	COPY	107	92
PERLND	73		65.	COPY	107	92
PERLND	74		115.	COPY	107	92
IMPLND	71		814.	COPY	107	93
PERLND	81		488.	COPY	100	90
PERLND	82		1429.	COPY	100	90
PERLND	83		328.	COPY	100	90
PERLND	84		106.	COPY	100	90
IMPLND	81		815.	COPY	100	91
PERLND	81		488.	COPY	108	92
PERLND	82		1429.	COPY	108	92
PERLND	83		328.	COPY	108	92
PERLND	84		106.	COPY	108	92
IMPLND	81		815.	COPY	108	93
PERLND	91		506.	COPY	100	90
PERLND	92		1467.	COPY	100	90
PERLND	93		103.	COPY	100	90
PERLND	94		84.	COPY	100	90
IMPLND	91		782.	COPY	100	91
PERLND	91		506.	COPY	109	92
PERLND	92		1467.	COPY	109	92
PERLND	93		103.	COPY	109	92
PERLND	94		84.	COPY	109	92
IMPLND	91		782.	COPY	109	93
PERLND	101		362.	COPY	100	90
PERLND	102		1862.	COPY	100	90
PERLND	103		272.	COPY	100	90
PERLND	104		215.	COPY	100	90
IMPLND	101		958.	COPY	100	91
PERLND	101		362.	COPY	110	92
PERLND	102		1862.	COPY	110	92
PERLND	103		272.	COPY	110	92
PERLND	104		215.	COPY	110	92
IMPLND	101		958.	COPY	110	93

END SCHEMATIC

MASS-LINK

MASS-LINK	1					
<-Volume->	<-Grp>	<-Member-><--Mult-->	Tran	<-Target vols>	<-Grp>	<-Member-> ***
<Name>	<Name>	x x<-factor->	strg	<Name>	<Name>	x x ***
PERLND	PWATER	PERO	0.0533333	RCHRES	INFLOW	IVOL
END MASS-LINK	1					
MASS-LINK	3					
<Srce>	<-Grp>	<-Member-><--Mult-->	<Targ>	<-Grp>	<-Member-> ***	
<Name>	<Name>	# #<-factor->	<Name>	<Name>	<Name>	# # ***
IMPLND	IWATER	SURO	0.0533333	RCHRES	INFLOW	IVOL
END MASS-LINK	3					
MASS-LINK	5					
<Srce>	<-Grp>	<-Member-><--Mult-->	<Targ>	<-Grp>	<-Member-> ***	
<Name>	<Name>	# #<-factor->	<Name>	<Name>	<Name>	# # ***
RCHRES	ROFLOW		RCHRES	INFLOW		
END MASS-LINK	5					
MASS-LINK	90					
<-Volume->	<-Grp>	<-Member-><--Mult-->	Tran	<-Target vols>	<-Grp>	<-Member-> ***
<Name>	<Name>	x x<-factor->	strg	<Name>	<Name>	x x ***
PERLND	PWATER	SURO		INPUT	MEAN	1
PERLND	PWATER	IFWO		INPUT	MEAN	2
PERLND	PWATER	AGWO		INPUT	MEAN	3
PERLND	PWATER	PET		INPUT	MEAN	4
PERLND	PWATER	TAET		INPUT	MEAN	5
PERLND	PWATER	UZS		INPUT	MEAN	6
PERLND	PWATER	LZS		INPUT	MEAN	7

```

END MASS-LINK 90

MASS-LINK 91
<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name> <Name> x x<-factor->strg <Name> <Name> x x ***
IMPLND IWATER SURO COPY INPUT MEAN 1
IMPLND IWATER PET COPY INPUT MEAN 4
IMPLND IWATER IMPEV COPY INPUT MEAN 5
END MASS-LINK 91

MASS-LINK 92
<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name> <Name> x x<-factor->strg <Name> <Name> x x ***
PERLND PWATER PERO COPY INPUT MEAN 1
PERLND PWATER AGWI COPY INPUT MEAN 2
END MASS-LINK 92

MASS-LINK 93
<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name> <Name> x x<-factor->strg <Name> <Name> x x ***
IMPLND IWATER SURO COPY INPUT MEAN 1
END MASS-LINK 93
END MASS-LINK

```

FTABLES

```

FTABLE 1
ROWS COLS ***
15 4
DEPTH AREA VOLUME DISCH ***
(FT) (ACRES) (AC-FT) (CFS) ***
0.00 1.90 0.00 0.00
0.20 1.97 0.39 2.66
0.40 2.03 0.79 8.43
0.60 2.09 1.20 16.54
0.80 2.16 1.62 26.70
1.00 2.22 2.06 38.73
1.20 2.28 2.51 52.50
1.40 2.35 2.97 67.95
1.60 2.41 3.45 85.02
1.80 2.47 3.94 103.65
2.00 2.54 4.44 123.83
4.00 3.17 10.14 408.06
8.00 4.44 25.36 1443.51
12.00 5.71 45.65 3184.35
18.00 7.61 85.59 7362.11
END FTABLE 1
FTABLE 2
ROWS COLS ***
15 4
DEPTH AREA VOLUME DISCH ***
(FT) (ACRES) (AC-FT) (CFS) ***
0.00 2.53 0.00 0.00
0.20 2.61 0.51 3.43
0.40 2.68 1.04 10.87
0.60 2.75 1.59 21.33
0.80 2.82 2.14 34.41
1.00 2.90 2.72 49.89
1.20 2.97 3.30 67.61
1.40 3.04 3.90 87.46
1.60 3.11 4.52 109.35
1.80 3.19 5.15 133.23
2.00 3.26 5.79 159.04
4.00 3.98 13.03 519.10
8.00 5.43 31.86 1799.90
12.00 6.88 56.48 3905.86
21.00 10.35 134.42 12263.77
END FTABLE 2
FTABLE 3
ROWS COLS ***
16 4
DEPTH AREA VOLUME DISCH ***

```

(FT)	(ACRES)	(AC-FT)	(CFS)	***
0.00	4.29	0.00	0.00	
0.20	4.42	0.87	3.68	
0.40	4.55	1.77	11.69	
0.60	4.67	2.69	23.02	
0.80	4.80	3.64	37.28	
1.00	4.92	4.61	54.22	
1.30	5.11	6.11	84.35	
1.70	5.37	8.21	132.84	
2.00	5.56	9.85	175.20	
2.30	5.75	11.54	222.55	
2.70	6.00	13.89	293.34	
3.00	6.19	15.72	352.14	
6.00	8.08	37.12	1211.65	
9.00	9.98	64.21	2596.60	
12.00	11.87	96.98	4566.48	
36.00	27.02	563.67	48712.37	

END FTABLE 3  
FTABLE 4  
ROWS COLS \*\*\*  
16 4

DEPTH	AREA	VOLUME	DISCH	***
(FT)	(ACRES)	(AC-FT)	(CFS)	***
0.00	6.12	0.00	0.00	
0.20	6.29	1.24	4.15	
0.40	6.46	2.52	13.20	
0.60	6.63	3.83	25.99	
0.80	6.80	5.17	42.06	
1.00	6.98	6.55	61.14	
1.30	7.23	8.68	95.03	
1.70	7.57	11.64	149.46	
2.00	7.83	13.95	196.90	
2.30	8.09	16.34	249.83	
2.70	8.43	19.64	328.77	
3.00	8.68	22.21	394.17	
6.00	11.25	52.10	1338.90	
9.00	13.81	89.68	2535.59	
12.00	16.37	134.95	4936.63	
36.00	36.87	773.82	50457.43	

END FTABLE 4  
FTABLE 5  
ROWS COLS \*\*\*  
16 4

DEPTH	AREA	VOLUME	DISCH	***
(FT)	(ACRES)	(AC-FT)	(CFS)	***
0.00	8.94	0.00	0.00	
0.20	9.15	1.81	4.64	
0.40	9.35	3.66	14.75	
0.60	9.55	5.55	29.03	
0.80	9.75	7.48	46.94	
1.00	9.96	9.45	68.19	
1.30	10.26	12.48	105.86	
1.70	10.66	16.67	166.19	
2.00	10.97	19.91	218.59	
2.30	11.27	23.25	276.88	
2.70	11.68	27.84	363.51	
3.00	11.98	31.39	435.02	
6.00	15.02	71.89	1448.46	
9.00	18.06	121.50	3008.60	
12.00	21.09	180.22	5147.54	
58.00	67.67	2221.75	142706.41	

END FTABLE 5  
FTABLE 6  
ROWS COLS \*\*\*  
17 4

DEPTH	AREA	VOLUME	DISCH	***
(FT)	(ACRES)	(AC-FT)	(CFS)	***
0.00	7.64	0.00	0.00	
0.20	7.78	1.54	5.06	
0.40	7.92	3.11	16.08	
0.60	8.06	4.71	31.63	

0.80	8.20	6.34	51.14	
1.00	8.34	7.99	74.27	
1.30	8.56	10.53	115.24	
1.70	8.84	14.01	180.76	
2.00	9.05	16.69	237.60	
2.30	9.26	19.44	300.75	
2.70	9.54	23.20	394.44	
3.00	9.76	26.09	471.65	
6.00	11.87	58.53	1556.19	
9.00	13.99	97.32	3202.02	
12.00	16.10	142.45	5430.19	
15.00	18.22	193.93	8276.35	
58.00	48.54	1629.24	141041.23	

END FTABLE 6  
FTABLE 7  
ROWS COLS \*\*\*  
16 4

DEPTH	AREA	VOLUME	DISCH	***
(FT)	(ACRES)	(AC-FT)	(CFS)	***
0.00	10.53	0.00	0.00	
0.20	10.73	2.13	8.35	
0.40	10.92	4.29	26.56	
0.60	11.11	6.49	52.31	
0.80	11.31	8.74	84.68	
1.00	11.50	11.02	123.11	
1.30	11.79	14.51	191.34	
1.70	12.18	19.31	300.81	
2.00	12.47	23.00	396.05	
2.30	12.76	26.79	502.14	
2.70	13.15	31.97	660.01	
3.00	13.44	35.96	790.47	
6.00	16.35	80.66	2647.03	
9.00	19.26	134.08	5515.92	
12.00	22.17	196.24	9455.89	
24.00	33.81	532.16	37571.06	

END FTABLE 7  
FTABLE 8  
ROWS COLS \*\*\*  
17 4

DEPTH	AREA	VOLUME	DISCH	***
(FT)	(ACRES)	(AC-FT)	(CFS)	***
0.00	10.34	0.00	0.00	
0.20	10.53	2.09	8.49	
0.40	10.72	4.21	27.01	
0.60	10.91	6.37	53.19	
0.80	11.10	8.57	86.08	
1.00	11.29	10.81	125.11	
1.30	11.57	14.24	194.36	
1.70	11.95	18.95	305.34	
2.00	12.24	22.57	401.78	
2.30	12.52	26.29	509.10	
2.70	12.90	31.37	668.59	
3.00	13.19	35.29	800.22	
6.00	16.04	79.13	2660.86	
9.00	18.89	131.53	5505.65	
12.00	21.74	192.48	9376.55	
15.00	24.59	261.98	14339.04	
25.00	34.10	555.45	39708.38	

END FTABLE 8  
FTABLE 9  
ROWS COLS \*\*\*  
18 4

DEPTH	AREA	VOLUME	DISCH	***
(FT)	(ACRES)	(AC-FT)	(CFS)	***
0.00	17.26	0.00	0.00	
0.20	17.55	3.48	9.93	
0.40	17.83	7.02	31.59	
0.60	18.12	10.61	62.19	
0.80	18.41	14.27	100.62	
1.00	18.70	17.98	146.22	
1.30	19.13	23.65	227.07	



1.70	19.70	31.42	356.56	
2.00	20.14	37.39	469.02	
2.30	20.57	43.50	594.06	
2.70	21.14	51.84	779.75	
3.00	21.57	58.25	932.87	
6.00	25.89	129.44	3087.80	
9.00	30.20	213.58	6359.15	
12.00	34.52	310.67	10782.20	
15.00	38.83	420.69	16421.67	
25.00	53.22	880.94	44979.76	
50.00	89.17	2660.79	197754.51	

END FTABLE 9  
 FTABLE 10  
 ROWS COLS \*\*\*  
 18 4

DEPTH	AREA	VOLUME	DISCH	***
(FT)	(ACRES)	(AC-FT)	(CFS)	***
0.00	19.58	0.00	0.00	
0.20	19.88	3.95	11.22	
0.40	20.18	7.95	35.67	
0.60	20.47	12.02	70.22	
0.80	20.77	16.14	113.60	
1.00	21.06	20.32	165.03	
1.30	21.51	26.71	256.20	
1.70	22.10	35.43	402.07	
2.00	22.54	42.12	528.65	
2.30	22.98	48.95	669.29	
2.70	23.57	58.26	877.93	
3.00	24.02	65.40	1049.81	
6.00	28.45	144.11	3455.64	
9.00	32.89	236.12	7075.47	
12.00	37.32	341.43	11929.84	
15.00	41.75	460.04	18075.19	
25.00	56.53	951.48	48802.16	
50.00	93.49	2826.74	209904.75	

END FTABLE 10  
 END FTABLES  
 END RUN

# Medium Density (Conventional) Full Build Out with Restrictions

RUN

GLOBAL

```
Back Creek above Dundee, VA
START      1956 10 1 0 0 END      1999 9 30 0 0
RUN INTERP OUTPUT LEVEL 3 2
RESUME     0 RUN      1          UNIT SYSTEM 1
END GLOBAL
```

FILES

```
<FILE> <UN#>***<----FILE NAME----->
WDM      16 backcr.wdm
MESSU    24 scenario.ech
          91 scenario.out
          92 backcr1.plt
          93 backcr2.plt
          94 backcr3.plt
END FILES
```

OPN SEQUENCE

```
INGRP          INDELT 01:00
PERLND         11
PERLND         12
PERLND         13
PERLND         14
IMPLND         11
RCHRES         1
PERLND         21
PERLND         22
PERLND         23
PERLND         24
IMPLND         21
RCHRES         2
PERLND         31
PERLND         32
PERLND         33
PERLND         34
IMPLND         31
RCHRES         3
PERLND         41
PERLND         42
PERLND         43
PERLND         44
IMPLND         41
RCHRES         4
PERLND         51
PERLND         52
PERLND         53
PERLND         54
IMPLND         51
RCHRES         5
PERLND         61
PERLND         62
PERLND         63
PERLND         64
IMPLND         61
RCHRES         6
PERLND         71
PERLND         72
PERLND         73
PERLND         74
IMPLND         71
RCHRES         7
PERLND         81
PERLND         82
```

```

PERLND      83
PERLND      84
IMPLND      81
RCHRES       8
PERLND      91
PERLND      92
PERLND      93
PERLND      94
IMPLND      91
RCHRES       9
PERLND     101
PERLND     102
PERLND     103
PERLND     104
IMPLND     101
RCHRES     10
COPY       100
COPY       101
COPY       102
COPY       103
COPY       104
COPY       105
COPY       106
COPY       107
COPY       108
COPY       109
COPY       110
PLTGEN     100
PLTGEN     200
PLTGEN     300
END INGRP
END OPN SEQUENCE

```

```

PERLND
ACTIVITY
# # ATMP SNOW PWAT SED PST PWG PQAL MSTL PEST NITR PHOS TRAC ***
11 104 0 0 1 0 0 0 0 0 0 0 0 0 0
END ACTIVITY

```

```

PRINT-INFO
# # ATMP SNOW PWAT SED PST PWG PQAL MSTL PEST NITR PHOS TRAC PIVL***PY
11 104 6 6 5 6 6 6 6 6 6 6 6 6 1 9
END PRINT-INFO

```

```

GEN-INFO
# # NAME NBLKS UCI IN OUT ENGL METR ***
11 FOREST 1 1 1 1 91 0
21 FOREST 1 1 1 1 91 0
31 FOREST 1 1 1 1 91 0
41 FOREST 1 1 1 1 91 0
51 FOREST 1 1 1 1 91 0
61 FOREST 1 1 1 1 91 0
71 FOREST 1 1 1 1 91 0
81 FOREST 1 1 1 1 91 0
91 FOREST 1 1 1 1 91 0
101 FOREST 1 1 1 1 91 0
12 HERBACEOUS/AG 1 1 1 1 91 0
22 HERBACEOUS/AG 1 1 1 1 91 0
32 HERBACEOUS/AG 1 1 1 1 91 0
42 HERBACEOUS/AG 1 1 1 1 91 0
52 HERBACEOUS/AG 1 1 1 1 91 0
62 HERBACEOUS/AG 1 1 1 1 91 0
72 HERBACEOUS/AG 1 1 1 1 91 0
82 HERBACEOUS/AG 1 1 1 1 91 0
92 HERBACEOUS/AG 1 1 1 1 91 0
102 HERBACEOUS/AG 1 1 1 1 91 0
13 DISTURBED 1 1 1 1 91 0
23 DISTURBED 1 1 1 1 91 0
33 DISTURBED 1 1 1 1 91 0
43 DISTURBED 1 1 1 1 91 0
53 DISTURBED 1 1 1 1 91 0

```

63	DISTURBED	1	1	1	1	91	0
73	DISTURBED	1	1	1	1	91	0
83	DISTURBED	1	1	1	1	91	0
93	DISTURBED	1	1	1	1	91	0
103	DISTURBED	1	1	1	1	91	0
14	MIXED FOREST/AG	1	1	1	1	91	0
24	MIXED FOREST/AG	1	1	1	1	91	0
34	MIXED FOREST/AG	1	1	1	1	91	0
44	MIXED FOREST/AG	1	1	1	1	91	0
54	MIXED FOREST/AG	1	1	1	1	91	0
64	MIXED FOREST/AG	1	1	1	1	91	0
74	MIXED FOREST/AG	1	1	1	1	91	0
84	MIXED FOREST/AG	1	1	1	1	91	0
94	MIXED FOREST/AG	1	1	1	1	91	0
104	MIXED FOREST/AG	1	1	1	1	91	0

END GEN-INFO

PWAT-PARM1

#	#	CSNO	RTOP	UZFG	VCS	VUZ	NVV	VIFW	VIRC	VLE	***
11		0	1	1	1	0	0	0	0	1	0
12		0	1	1	1	1	0	0	0	1	0
13		0	1	1	1	0	0	0	0	1	0
14		0	1	1	1	1	0	0	0	1	0
21		0	1	1	1	0	0	0	0	1	0
22		0	1	1	1	1	0	0	0	1	0
23		0	1	1	1	0	0	0	0	1	0
24		0	1	1	1	1	0	0	0	1	0
31		0	1	1	1	0	0	0	0	1	0
32		0	1	1	1	1	0	0	0	1	0
33		0	1	1	1	0	0	0	0	1	0
34		0	1	1	1	1	0	0	0	1	0
41		0	1	1	1	0	0	0	0	1	0
42		0	1	1	1	1	0	0	0	1	0
43		0	1	1	1	0	0	0	0	1	0
44		0	1	1	1	1	0	0	0	1	0
51		0	1	1	1	0	0	0	0	1	0
52		0	1	1	1	1	0	0	0	1	0
53		0	1	1	1	0	0	0	0	1	0
54		0	1	1	1	1	0	0	0	1	0
61		0	1	1	1	0	0	0	0	1	0
62		0	1	1	1	1	0	0	0	1	0
63		0	1	1	1	0	0	0	0	1	0
64		0	1	1	1	1	0	0	0	1	0
71		0	1	1	1	0	0	0	0	1	0
72		0	1	1	1	1	0	0	0	1	0
73		0	1	1	1	0	0	0	0	1	0
74		0	1	1	1	1	0	0	0	1	0
81		0	1	1	1	0	0	0	0	1	0
82		0	1	1	1	1	0	0	0	1	0
83		0	1	1	1	0	0	0	0	1	0
84		0	1	1	1	1	0	0	0	1	0
91		0	1	1	1	0	0	0	0	1	0
92		0	1	1	1	1	0	0	0	1	0
93		0	1	1	1	0	0	0	0	1	0
94		0	1	1	1	1	0	0	0	1	0
101		0	1	1	1	0	0	0	0	1	0
102		0	1	1	1	1	0	0	0	1	0
103		0	1	1	1	0	0	0	0	1	0
104		0	1	1	1	1	0	0	0	1	0

END PWAT-PARM1

PWAT-PARM2

#	#	***FOREST	LZSN	INFILT	LSUR	SLSUR	KVARY	AGWR
11		0.000	9.5	0.105	200.	0.24000	0.000	.960
21		0.000	9.5	0.105	200.	0.24000	0.000	.960
31		0.000	9.5	0.105	200.	0.22000	0.000	.960
41		0.000	9.5	0.105	300.	0.14000	0.000	.960
51		0.000	9.5	0.105	250.	0.19000	0.000	.960
61		0.000	9.5	0.105	200.	0.20000	0.000	.960
71		0.000	9.5	0.105	250.	0.19000	0.000	.960
81		0.000	9.5	0.105	250.	0.19000	0.000	.960

91	0.000	9.5	0.105	200.	0.22000	0.000	.960
101	0.000	9.5	0.105	250.	0.16000	0.000	.960
12	0.000	9.5	0.086	200.	0.24000	0.000	.960
22	0.000	9.5	0.086	200.	0.24000	0.000	.960
32	0.000	9.5	0.086	200.	0.22000	0.000	.960
42	0.000	9.5	0.086	300.	0.14000	0.000	.960
52	0.000	9.5	0.086	250.	0.19000	0.000	.960
62	0.000	9.5	0.086	200.	0.20000	0.000	.960
72	0.000	9.5	0.086	250.	0.19000	0.000	.960
82	0.000	9.5	0.086	250.	0.19000	0.000	.960
92	0.000	9.5	0.086	200.	0.22000	0.000	.960
102	0.000	9.5	0.086	250.	0.16000	0.000	.960
13	0.000	9.5	0.067	200.	0.24000	0.000	.960
23	0.000	9.5	0.067	200.	0.24000	0.000	.960
33	0.000	9.5	0.067	200.	0.22000	0.000	.960
43	0.000	9.5	0.067	300.	0.14000	0.000	.960
53	0.000	9.5	0.067	250.	0.19000	0.000	.960
63	0.000	9.5	0.067	200.	0.20000	0.000	.960
73	0.000	9.5	0.067	250.	0.19000	0.000	.960
83	0.000	9.5	0.067	250.	0.19000	0.000	.960
93	0.000	9.5	0.067	200.	0.22000	0.000	.960
103	0.000	9.5	0.067	250.	0.16000	0.000	.960
14	0.000	9.5	0.096	200.	0.24000	0.000	.960
24	0.000	9.5	0.096	200.	0.24000	0.000	.960
34	0.000	9.5	0.096	200.	0.22000	0.000	.960
44	0.000	9.5	0.096	300.	0.14000	0.000	.960
54	0.000	9.5	0.096	250.	0.19000	0.000	.960
64	0.000	9.5	0.096	200.	0.20000	0.000	.960
74	0.000	9.5	0.096	250.	0.19000	0.000	.960
84	0.000	9.5	0.096	250.	0.19000	0.000	.960
94	0.000	9.5	0.096	200.	0.22000	0.000	.960
104	0.000	9.5	0.096	250.	0.16000	0.000	.960

END PWAT-PARM2

PWAT-PARM3

***<PLS>	PETMAX	PETMIN	INFEXP	INFILD	DEEPFR	BASETP	AGWETP
***x - x	(deg F)	(deg F)					
11 104	40.0	35.0	2.0	2.0	0.210	0.000	0.000

END PWAT-PARM3

PWAT-PARM4

#	#	CEPSC	UZSN	NSUR	INTFW	IRC	LZETP	***
11		0.200	1.30	0.40	3.7	0.65	0.90	
21		0.200	1.30	0.40	3.7	0.65	0.90	
31		0.200	1.30	0.40	3.7	0.65	0.90	
41		0.200	1.30	0.40	3.7	0.65	0.90	
51		0.200	1.30	0.40	3.7	0.65	0.90	
61		0.200	1.30	0.40	3.7	0.65	0.90	
71		0.200	1.30	0.40	3.7	0.65	0.90	
81		0.200	1.30	0.40	3.7	0.65	0.90	
91		0.200	1.30	0.40	3.7	0.65	0.90	
101		0.200	1.30	0.40	3.7	0.65	0.90	
12		0.200	1.00	0.20	2.8	0.60	0.90	
22		0.200	1.00	0.20	2.8	0.60	0.90	
32		0.200	1.00	0.20	2.8	0.60	0.90	
42		0.200	1.00	0.20	2.8	0.60	0.90	
52		0.200	1.00	0.20	2.8	0.60	0.90	
62		0.200	1.00	0.20	2.8	0.60	0.90	
72		0.200	1.00	0.20	2.8	0.60	0.90	
82		0.200	1.00	0.20	2.8	0.60	0.90	
92		0.200	1.00	0.20	2.8	0.60	0.90	
102		0.200	1.00	0.20	2.8	0.60	0.90	
13		0.200	0.92	0.15	2.8	0.60	0.90	
23		0.200	0.92	0.15	2.8	0.60	0.90	
33		0.200	0.92	0.15	2.8	0.60	0.90	
43		0.200	0.92	0.15	2.8	0.60	0.90	
53		0.200	0.92	0.15	2.8	0.60	0.90	
63		0.200	0.92	0.15	2.8	0.60	0.90	
73		0.200	0.92	0.15	2.8	0.60	0.90	
83		0.200	0.92	0.15	2.8	0.60	0.90	
93		0.200	0.92	0.15	2.8	0.60	0.90	

103	0.200	0.92	0.15	2.8	0.60	0.90
14	0.200	1.00	0.30	3.3	0.63	0.90
24	0.200	1.00	0.30	3.3	0.63	0.90
34	0.200	1.00	0.30	3.3	0.63	0.90
44	0.200	1.00	0.30	3.3	0.63	0.90
54	0.200	1.00	0.30	3.3	0.63	0.90
64	0.200	1.00	0.30	3.3	0.63	0.90
74	0.200	1.00	0.30	3.3	0.63	0.90
84	0.200	1.00	0.30	3.3	0.63	0.90
94	0.200	1.00	0.30	3.3	0.63	0.90
104	0.200	1.00	0.30	3.3	0.63	0.90

END PWAT-PARM4

PWAT-PARM5  
 \*\*\* <PLS > FZG FZGL  
 \*\*\* x - x  
 11 104 1.0 0.1  
 END PWAT-PARM5

MON-INTERCEP  
 \*\*\* <PLS > Interception storage capacity at start of each month (in)  
 \*\*\* x - x JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

11	0.0250	0.0250	0.0250	1.000	3.500	4.000	4.000	4.000	3.500	1.000	0.0250	0.0250
21	0.0250	0.0250	0.0250	1.000	3.500	4.000	4.000	4.000	3.500	1.000	0.0250	0.0250
31	0.0250	0.0250	0.0250	1.000	3.500	4.000	4.000	4.000	3.500	1.000	0.0250	0.0250
41	0.0250	0.0250	0.0250	1.000	3.500	4.000	4.000	4.000	3.500	1.000	0.0250	0.0250
51	0.0250	0.0250	0.0250	1.000	3.500	4.000	4.000	4.000	3.500	1.000	0.0250	0.0250
61	0.0250	0.0250	0.0250	1.000	3.500	4.000	4.000	4.000	3.500	1.000	0.0250	0.0250
71	0.0250	0.0250	0.0250	1.000	3.500	4.000	4.000	4.000	3.500	1.000	0.0250	0.0250
81	0.0250	0.0250	0.0250	1.000	3.500	4.000	4.000	4.000	3.500	1.000	0.0250	0.0250
91	0.0250	0.0250	0.0250	1.000	3.500	4.000	4.000	4.000	3.500	1.000	0.0250	0.0250
101	0.0250	0.0250	0.0250	1.000	3.500	4.000	4.000	4.000	3.500	1.000	0.0250	0.0250
12	0.0250	0.0250	0.0250	1.000	2.500	3.000	3.000	3.000	2.500	1.000	0.0250	0.0250
22	0.0250	0.0250	0.0250	1.000	2.500	3.000	3.000	3.000	2.500	1.000	0.0250	0.0250
32	0.0250	0.0250	0.0250	1.000	2.500	3.000	3.000	3.000	2.500	1.000	0.0250	0.0250
42	0.0250	0.0250	0.0250	1.000	2.500	3.000	3.000	3.000	2.500	1.000	0.0250	0.0250
52	0.0250	0.0250	0.0250	1.000	2.500	3.000	3.000	3.000	2.500	1.000	0.0250	0.0250
62	0.0250	0.0250	0.0250	1.000	2.500	3.000	3.000	3.000	2.500	1.000	0.0250	0.0250
72	0.0250	0.0250	0.0250	1.000	2.500	3.000	3.000	3.000	2.500	1.000	0.0250	0.0250
82	0.0250	0.0250	0.0250	1.000	2.500	3.000	3.000	3.000	2.500	1.000	0.0250	0.0250
92	0.0250	0.0250	0.0250	1.000	2.500	3.000	3.000	3.000	2.500	1.000	0.0250	0.0250
102	0.0250	0.0250	0.0250	1.000	2.500	3.000	3.000	3.000	2.500	1.000	0.0250	0.0250
13	0.0250	0.0250	0.0250	1.000	1.500	1.500	1.500	1.500	1.000	1.000	0.0250	0.0250
23	0.0250	0.0250	0.0250	1.000	1.500	1.500	1.500	1.500	1.000	1.000	0.0250	0.0250
33	0.0250	0.0250	0.0250	1.000	1.500	1.500	1.500	1.500	1.000	1.000	0.0250	0.0250
43	0.0250	0.0250	0.0250	1.000	1.500	1.500	1.500	1.500	1.000	1.000	0.0250	0.0250
53	0.0250	0.0250	0.0250	1.000	1.500	1.500	1.500	1.500	1.000	1.000	0.0250	0.0250
63	0.0250	0.0250	0.0250	1.000	1.500	1.500	1.500	1.500	1.000	1.000	0.0250	0.0250
73	0.0250	0.0250	0.0250	1.000	1.500	1.500	1.500	1.500	1.000	1.000	0.0250	0.0250
83	0.0250	0.0250	0.0250	1.000	1.500	1.500	1.500	1.500	1.000	1.000	0.0250	0.0250
93	0.0250	0.0250	0.0250	1.000	1.500	1.500	1.500	1.500	1.000	1.000	0.0250	0.0250
103	0.0250	0.0250	0.0250	1.000	1.500	1.500	1.500	1.500	1.000	1.000	0.0250	0.0250
14	0.0250	0.0250	0.0250	1.000	3.000	3.500	3.500	3.500	3.000	1.000	0.0250	0.0250
24	0.0250	0.0250	0.0250	1.000	3.000	3.500	3.500	3.500	3.000	1.000	0.0250	0.0250
34	0.0250	0.0250	0.0250	1.000	3.000	3.500	3.500	3.500	3.000	1.000	0.0250	0.0250
44	0.0250	0.0250	0.0250	1.000	3.000	3.500	3.500	3.500	3.000	1.000	0.0250	0.0250
54	0.0250	0.0250	0.0250	1.000	3.000	3.500	3.500	3.500	3.000	1.000	0.0250	0.0250
64	0.0250	0.0250	0.0250	1.000	3.000	3.500	3.500	3.500	3.000	1.000	0.0250	0.0250
74	0.0250	0.0250	0.0250	1.000	3.000	3.500	3.500	3.500	3.000	1.000	0.0250	0.0250
84	0.0250	0.0250	0.0250	1.000	3.000	3.500	3.500	3.500	3.000	1.000	0.0250	0.0250
94	0.0250	0.0250	0.0250	1.000	3.000	3.500	3.500	3.500	3.000	1.000	0.0250	0.0250
104	0.0250	0.0250	0.0250	1.000	3.000	3.500	3.500	3.500	3.000	1.000	0.0250	0.0250

END MON-INTERCEP

MON-UZSN  
 \*\*\* <PLS > Upper zone storage at start of each month  
 \*\*\* x - x JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

12	0.1000	1.000	2.000	4.001	0.401	2.801	2.801	2.501	0.400	4.000	2.000	1.00
22	0.1000	1.000	2.000	4.001	0.401	2.801	2.801	2.801	0.400	4.000	2.000	1.00
32	0.1000	1.000	2.000	4.001	0.401	2.801	2.801	2.801	0.400	4.000	2.000	1.00
42	0.1000	1.000	2.000	4.001	0.401	2.801	2.801	2.801	0.400	4.000	2.000	1.00

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52      0.1000.1000.2000.4001.0401.2801.2801.2801.0400.4000.2000.100
62      0.1000.1000.2000.4001.0401.2801.2801.2801.0400.4000.2000.100
72      0.1000.1000.2000.4001.0401.2801.2801.2801.0400.4000.2000.100
82      0.1000.1000.2000.4001.0401.2801.2801.2801.0400.4000.2000.100
92      0.1000.1000.2000.4001.0401.2801.2801.2801.0400.4000.2000.100
102     0.1000.1000.2000.4001.0401.2801.2801.2801.0400.4000.2000.100
14      0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
24      0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
34      0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
44      0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
54      0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
64      0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
74      0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
84      0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
94      0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
104     0.4500.4500.5500.6501.1701.3001.3001.3001.1700.6500.5500.450
END MON-UZSN

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MON-LZETPARM

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*** <PLS > Lower zone evapotransp   parm at start of each month
*** x - x  JAN  FEB  MAR  APR  MAY  JUN  JUL  AUG  SEP  OCT  NOV  DEC
11      0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
21      0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
31      0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
41      0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
51      0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
61      0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
71      0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
81      0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
91      0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
101     0.1000.1000.3000.7000.9000.9000.9000.9000.9000.7000.3000.100
12      0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
22      0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
32      0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
42      0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
52      0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
62      0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
72      0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
82      0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
92      0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
102     0.1000.1000.3000.6000.7000.7000.7000.7000.7000.6000.3000.100
13      0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
23      0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
33      0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
43      0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
53      0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
63      0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
73      0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
83      0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
93      0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
103     0.1000.1000.2000.3000.4000.4000.4000.4000.4000.3000.2000.100
14      0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
24      0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
34      0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
44      0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
54      0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
64      0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
74      0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
84      0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
94      0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
104     0.1000.1000.3000.6500.8000.8000.8000.8000.8000.6500.3000.100
END MON-LZETPARM

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PWAT-STATE1

#	# ***	CEPS	SURS	UZS	IFWS	LZS	AGWS	GWVS
11		0.020	0.020	0.550	0.000	7.470	0.319	0.000
21		0.020	0.020	0.550	0.000	7.470	0.319	0.000
31		0.020	0.020	0.550	0.000	7.470	0.319	0.000
41		0.020	0.020	0.550	0.000	7.470	0.319	0.000
51		0.020	0.020	0.550	0.000	7.470	0.319	0.000
61		0.020	0.020	0.550	0.000	7.470	0.319	0.000

71	0.020	0.020	0.550	0.000	7.470	0.319	0.000
81	0.020	0.020	0.550	0.000	7.470	0.319	0.000
91	0.020	0.020	0.550	0.000	7.470	0.319	0.000
101	0.020	0.020	0.550	0.000	7.470	0.319	0.000
12	0.020	0.020	0.340	0.001	6.450	0.224	0.000
22	0.020	0.020	0.340	0.001	6.450	0.224	0.000
32	0.020	0.020	0.340	0.001	6.450	0.224	0.000
42	0.020	0.020	0.340	0.001	6.450	0.224	0.000
52	0.020	0.020	0.340	0.001	6.450	0.224	0.000
62	0.020	0.020	0.340	0.001	6.450	0.224	0.000
72	0.020	0.020	0.340	0.001	6.450	0.224	0.000
82	0.020	0.020	0.340	0.001	6.450	0.224	0.000
92	0.020	0.020	0.340	0.001	6.450	0.224	0.000
102	0.020	0.020	0.340	0.001	6.450	0.224	0.000
13	0.020	0.020	0.940	0.004	8.630	0.411	0.000
23	0.020	0.020	0.940	0.004	8.630	0.411	0.000
33	0.020	0.020	0.940	0.004	8.630	0.411	0.000
43	0.020	0.020	0.940	0.004	8.630	0.411	0.000
53	0.020	0.020	0.940	0.004	8.630	0.411	0.000
63	0.020	0.020	0.940	0.004	8.630	0.411	0.000
73	0.020	0.020	0.940	0.004	8.630	0.411	0.000
83	0.020	0.020	0.940	0.004	8.630	0.411	0.000
93	0.020	0.020	0.940	0.004	8.630	0.411	0.000
103	0.020	0.020	0.940	0.004	8.630	0.411	0.000
14	0.020	0.020	0.420	0.001	6.560	0.261	0.000
24	0.020	0.020	0.420	0.001	6.560	0.261	0.000
34	0.020	0.020	0.420	0.001	6.560	0.261	0.000
44	0.020	0.020	0.420	0.001	6.560	0.261	0.000
54	0.020	0.020	0.420	0.001	6.560	0.261	0.000
64	0.020	0.020	0.420	0.001	6.560	0.261	0.000
74	0.020	0.020	0.420	0.001	6.560	0.261	0.000
84	0.020	0.020	0.420	0.001	6.560	0.261	0.000
94	0.020	0.020	0.420	0.001	6.560	0.261	0.000
104	0.020	0.020	0.420	0.001	6.560	0.261	0.000

END PWAT-STATE1

END PERLND

IMPLND

ACTIVITY

#	#	ATMP	SNOW	IWAT	SLD	IWG	IQAL	***
11	1017	0	0	1	0	0	0	

END ACTIVITY

PRINT-INFO

#	#	ATMP	SNOW	IWAT	SLD	IWG	IQAL	PIVL	PYR	***
11	101	6	6	5	6	6	6	1	9	

END PRINT-INFO

GEN-INFO

#	#	NAME	UCI	IN	OUT	ENGL	METR	***
11	101	IMPERV LAND	1	1	1	91	0	

END GEN-INFO

IWAT-PARM1

#	#	CSNO	RTOP	VRS	VNN	RTLI	***
11	101	0	1	0	0	0	

END IWAT-PARM1

IWAT-PARM2

#	#	LSUR	SLSUR	NSUR	RETSC	***
11		200.0	0.2400	0.10	0.05	
21		200.0	0.2400	0.10	0.05	
31		200.0	0.2200	0.10	0.05	
41		300.0	0.1400	0.10	0.05	
51		250.0	0.1900	0.10	0.05	
61		200.0	0.2000	0.10	0.05	
71		250.0	0.1900	0.10	0.05	
81		250.0	0.1900	0.10	0.05	
91		200.0	0.2200	0.10	0.05	
101		250.0	0.1600	0.10	0.05	



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END IWAT-PARM2

IWAT-PARM3
*** <ILS >   PETMAX   PETMIN
*** x - x   (deg F)   (deg F)
   11 101   40.0     35.0
END IWAT-PARM3

IWAT-STATE1
*** <ILS > IWATER state variables (inches)
*** x - x   RETS     SURS
   11 101   0.03     0.01
END IWAT-STATE1

END IMPLND

RCHRES
ACTIVITY
  RCHRES Active Sections (1=Active; 0=Inactive)      ***
  # - # HYFG ADFG CNFG HTFG SDFG GQFG OXFG NUFG PKFG PHFG ***
   1 10 1 0 0 0 0 0 0 0 0
END ACTIVITY

PRINT-INFO
  RCHRES Print-flags      ***
  # - # HYDR ADCA CONS HEAT SED  GQL OXRX NUTR PLNK PHCB PIVL  PYR ***
   1 10 5 5 5 5 5 5 5 5 12
END PRINT-INFO

GEN-INFO
  RCHRES<-----Name----->Nexit  Unit Systems  Printer      ***
  # - # User t-series  Engr Metr LKFG ***
                                     in out      ***
   1 Little Back Creek  1 1 1 1 91 0 0
   2 Upper Back Creek  1 1 1 1 91 0 0
   3 Poages Mill       1 1 1 1 91 0 0
   4 Cave Spring       1 1 1 1 91 0 0
   5 Blue Ridge Parkway 1 1 1 1 91 0 0
   6 Cattail Hollow    1 1 1 1 91 0 0
   7 State Rd #676     1 1 1 1 91 0 0
   8 Red Hill Church   1 1 1 1 91 0 0
   9 State Rd #667     1 1 1 1 91 0 0
  10 Dundee            1 1 1 1 91 0 0
END GEN-INFO

HYDR-PARM1
  RCHRES Flags for HYDR section      ***
  # - # VC A1 A2 A3 ODFVFG for each  ODGTFG for each *** FUNCT for each ***
         FG FG FG FG possible exit possible exit *** possible exit
         1 2 3 4 5 1 2 3 4 5 *** 1 2 3 4 5
   1 10 0 1 1 1 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 1 1 1 1
END HYDR-PARM1

HYDR-PARM2
  RCHRES      ***
  # - # FTABNO  LEN  DELTH  STCOR  KS  DB50 ***
   1 1 2.62 387.0 0.0 0.5 0.01
   2 2 2.99 561.0 0.0 0.5 0.01
   3 3 2.08 69.0 0.0 0.5 0.01
   4 4 2.35 85.0 0.0 0.5 0.01
   5 5 2.78 85.0 0.0 0.5 0.01
   6 6 1.94 36.0 0.0 0.5 0.01
   7 7 2.29 56.0 0.0 0.5 0.01
   8 8 1.96 26.0 0.0 0.5 0.01
   9 9 2.97 52.0 0.0 0.5 0.01
  10 10 3.05 56.0 0.0 0.5 0.01
END HYDR-PARM2

HYDR-INIT
  RCHRES Initial conditions for HYDR section ***
  # - # VOL Initial value of COLIND *** Initial value of OUTDGT

```

```

                (ac-ft)          for each possible exit *** for each possible exit
                EX1 EX2 EX3 EX4 EX5 *** EX1 EX2 EX3 EX4 EX5
1              0.10
2              0.25
3              0.45
4              0.65
5              0.85
6              1.00
7              1.50
8              2.00
9              2.50
10             3.00
END HYDR-INIT
END RCHRES

COPY
TIMESERIES
Copy-opn***
*** x - x NPT NMN
100           0 7
101 110      0 2
END TIMESERIES
END COPY

PLTGEN
PLOTINFO
*** x - x FILE NPT NMN LABL PYR PIVL
100           92 0 10
200           93 0 10
300           94 0 10
END PLOTINFO
GEN-LABELS
*** x - x<-----title-----> <-----y-axis lab---->
100 Reach Outflows Flow (cfs)
200 Land Segment Outflows Runoff (in/hr)
300 Groundwater Recharge Recharge (in/hr)
END GEN-LABELS
SCALING
*** x - x<--ymin--><--ymax--><--ivlin--><--thresh-->
100           0 100000 10
200           0 1.0000 10
300           0 1.0000 10
END SCALING
CURV-DATA
*** x - x <----label----> LIN INT COL TR
100 300 Outflow
END CURV-DATA
END PLTGEN

EXT SOURCES

<-Volume-> <Member> SsysSgap<--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name> x <Name> x tem strg<-factor->strg <Name> x x <Name> x x ***
WDM 210 EVAP ENGL PERLND 11 104 EXTNL PETINP 1 1
WDM 210 EVAP ENGL IMPLND 11 101 EXTNL PETINP 1 1

WDM 82 PRCP ENGL PERLND 11 104 EXTNL PREC 1 1
WDM 82 PRCP ENGL IMPLND 11 101 EXTNL PREC 1 1

WDM 541 FLOW ENGL PLTGEN 100 INPUT MEAN 1 1
WDM 542 FLOW ENGL PLTGEN 100 INPUT MEAN 2 1
WDM 543 FLOW ENGL PLTGEN 100 INPUT MEAN 3 1
WDM 544 FLOW ENGL PLTGEN 100 INPUT MEAN 4 1
WDM 545 FLOW ENGL PLTGEN 100 INPUT MEAN 5 1
WDM 546 FLOW ENGL PLTGEN 100 INPUT MEAN 6 1
WDM 547 FLOW ENGL PLTGEN 100 INPUT MEAN 7 1
WDM 548 FLOW ENGL PLTGEN 100 INPUT MEAN 8 1
WDM 549 FLOW ENGL PLTGEN 100 INPUT MEAN 9 1
WDM 550 FLOW ENGL PLTGEN 100 INPUT MEAN 10 1

WDM 531 SIMQ ENGL PLTGEN 200 INPUT MEAN 1 1

```

WDM	532	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	2	1
WDM	533	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	3	1
WDM	534	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	4	1
WDM	535	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	5	1
WDM	536	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	6	1
WDM	537	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	7	1
WDM	538	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	8	1
WDM	539	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	9	1
WDM	540	SIMQ	ENGL	PLTGEN	200	INPUT	MEAN	10	1
WDM	551	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	1	1
WDM	552	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	2	1
WDM	553	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	3	1
WDM	554	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	4	1
WDM	555	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	5	1
WDM	556	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	6	1
WDM	557	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	7	1
WDM	558	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	8	1
WDM	559	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	9	1
WDM	560	SIMQ	ENGL	PLTGEN	300	INPUT	MEAN	10	1

END EXT SOURCES

EXT TARGETS

<-Volume->	<-Grp>	<-Member->	<--Mult-->	Tran	<-Volume->	<Member>	Tsys	Aggr	Amd	***		
<Name>	x	<Name>	x	<-factor->	strg	<Name>	x	<Name>	qf	tem	strg	strg***
RCHRES	10	ROFLOW	ROVOL	1	13.35965E-4	WDM	320	SIMQ	1	ENGL		REPL
COPY	100	OUTPUT	MEAN	1	12.79971E-5	WDM	321	SURO	1	ENGL		REPL
COPY	100	OUTPUT	MEAN	2	12.79971E-5	WDM	322	IFWO	1	ENGL		REPL
COPY	100	OUTPUT	MEAN	3	12.79971E-5	WDM	323	AGWO	1	ENGL		REPL
COPY	100	OUTPUT	MEAN	4	12.79971E-5	WDM	325	PETX	1	ENGL	AGGR	REPL
COPY	100	OUTPUT	MEAN	5	12.79971E-5	WDM	326	SAET	1	ENGL	AGGR	REPL
COPY	100	OUTPUT	MEAN	6	12.79971E-5	WDM	327	UZSX	1	ENGL	AGGR	REPL
COPY	100	OUTPUT	MEAN	7	12.79971E-5	WDM	328	LZSX	1	ENGL	AGGR	REPL
RCHRES	1	ROFLOW	ROVOL	1	12.1	WDM	541	FLOW	1	ENGL		REPL
RCHRES	2	ROFLOW	ROVOL	1	12.1	WDM	542	FLOW	1	ENGL		REPL
RCHRES	3	ROFLOW	ROVOL	1	12.1	WDM	543	FLOW	1	ENGL		REPL
RCHRES	4	ROFLOW	ROVOL	1	12.1	WDM	544	FLOW	1	ENGL		REPL
RCHRES	5	ROFLOW	ROVOL	1	12.1	WDM	545	FLOW	1	ENGL		REPL
RCHRES	6	ROFLOW	ROVOL	1	12.1	WDM	546	FLOW	1	ENGL		REPL
RCHRES	7	ROFLOW	ROVOL	1	12.1	WDM	547	FLOW	1	ENGL		REPL
RCHRES	8	ROFLOW	ROVOL	1	12.1	WDM	548	FLOW	1	ENGL		REPL
RCHRES	9	ROFLOW	ROVOL	1	12.1	WDM	549	FLOW	1	ENGL		REPL
RCHRES	10	ROFLOW	ROVOL	1	12.1	WDM	550	FLOW	1	ENGL		REPL
COPY	101	OUTPUT	MEAN	1	13.96983E-4	WDM	531	SIMQ	1	ENGL		REPL
COPY	102	OUTPUT	MEAN	1	12.14041E-4	WDM	532	SIMQ	1	ENGL		REPL
COPY	103	OUTPUT	MEAN	1	11.74398E-4	WDM	533	SIMQ	1	ENGL		REPL
COPY	104	OUTPUT	MEAN	1	15.00000E-4	WDM	534	SIMQ	1	ENGL		REPL
COPY	105	OUTPUT	MEAN	1	12.26809E-4	WDM	535	SIMQ	1	ENGL		REPL
COPY	106	OUTPUT	MEAN	1	12.80820E-4	WDM	536	SIMQ	1	ENGL		REPL
COPY	107	OUTPUT	MEAN	1	13.25407E-4	WDM	537	SIMQ	1	ENGL		REPL
COPY	108	OUTPUT	MEAN	1	13.15560E-4	WDM	538	SIMQ	1	ENGL		REPL
COPY	109	OUTPUT	MEAN	1	13.39789E-4	WDM	539	SIMQ	1	ENGL		REPL
COPY	110	OUTPUT	MEAN	1	12.72554E-4	WDM	540	SIMQ	1	ENGL		REPL
COPY	101	OUTPUT	MEAN	2	13.96983E-4	WDM	551	SIMQ	1	ENGL		REPL
COPY	102	OUTPUT	MEAN	2	12.14041E-4	WDM	552	SIMQ	1	ENGL		REPL
COPY	103	OUTPUT	MEAN	2	11.74398E-4	WDM	553	SIMQ	1	ENGL		REPL
COPY	104	OUTPUT	MEAN	2	15.00000E-4	WDM	554	SIMQ	1	ENGL		REPL
COPY	105	OUTPUT	MEAN	2	12.26809E-4	WDM	555	SIMQ	1	ENGL		REPL
COPY	106	OUTPUT	MEAN	2	12.80820E-4	WDM	556	SIMQ	1	ENGL		REPL
COPY	107	OUTPUT	MEAN	2	13.25407E-4	WDM	557	SIMQ	1	ENGL		REPL
COPY	108	OUTPUT	MEAN	2	13.15560E-4	WDM	558	SIMQ	1	ENGL		REPL
COPY	109	OUTPUT	MEAN	2	13.39789E-4	WDM	559	SIMQ	1	ENGL		REPL
COPY	110	OUTPUT	MEAN	2	12.72554E-4	WDM	560	SIMQ	1	ENGL		REPL

END EXT TARGETS

SCHEMATIC					
<-Volume->		<--Area-->	<-Volume->	<ML#>	***
<Name>	x	<-factor->	<Name>	x	***
PERLND	11	1449.	RCHRES	1	1
PERLND	12	625.	RCHRES	1	1
PERLND	13	19.	RCHRES	1	1
PERLND	14	113.	RCHRES	1	1
IMPLND	11	314.	RCHRES	1	3
PERLND	21	2663.	RCHRES	2	1
PERLND	22	1146.	RCHRES	2	1
PERLND	23	37.	RCHRES	2	1
PERLND	24	274.	RCHRES	2	1
IMPLND	21	553.	RCHRES	2	3
PERLND	31	2959.	RCHRES	3	1
PERLND	32	1630.	RCHRES	3	1
PERLND	33	72.	RCHRES	3	1
PERLND	34	281.	RCHRES	3	1
IMPLND	31	792.	RCHRES	3	3
PERLND	41	571.	RCHRES	4	1
PERLND	42	793.	RCHRES	4	1
PERLND	43	85.	RCHRES	4	1
PERLND	44	142.	RCHRES	4	1
IMPLND	41	409.	RCHRES	4	3
PERLND	51	1744.	RCHRES	5	1
PERLND	52	1121.	RCHRES	5	1
PERLND	53	591.	RCHRES	5	1
PERLND	54	295.	RCHRES	5	1
IMPLND	51	659.	RCHRES	5	3
PERLND	61	1735.	RCHRES	6	1
PERLND	62	1018.	RCHRES	6	1
PERLND	63	71.	RCHRES	6	1
PERLND	64	211.	RCHRES	6	1
IMPLND	61	526.	RCHRES	6	3
PERLND	71	1377.	RCHRES	7	1
PERLND	72	927.	RCHRES	7	1
PERLND	73	65.	RCHRES	7	1
PERLND	74	195.	RCHRES	7	1
IMPLND	71	481.	RCHRES	7	3
PERLND	81	1330.	RCHRES	8	1
PERLND	82	835.	RCHRES	8	1
PERLND	83	328.	RCHRES	8	1
PERLND	84	193.	RCHRES	8	1
IMPLND	81	480.	RCHRES	8	3
PERLND	91	1494.	RCHRES	9	1
PERLND	92	776.	RCHRES	9	1
PERLND	93	103.	RCHRES	9	1
PERLND	94	184.	RCHRES	9	1
IMPLND	91	386.	RCHRES	9	3
PERLND	101	944.	RCHRES	10	1
PERLND	102	1424.	RCHRES	10	1
PERLND	103	272.	RCHRES	10	1
PERLND	104	333.	RCHRES	10	1
IMPLND	101	696.	RCHRES	10	3
RCHRES	1		RCHRES	3	5
RCHRES	2		RCHRES	3	5
RCHRES	3		RCHRES	4	5
RCHRES	4		RCHRES	5	5
RCHRES	5		RCHRES	6	5
RCHRES	6		RCHRES	7	5
RCHRES	7		RCHRES	8	5
RCHRES	8		RCHRES	9	5

RCHRES	9		RCHRES	10	5
PERLND	11	1449.	COPY	100	90
PERLND	12	625.	COPY	100	90
PERLND	13	19.	COPY	100	90
PERLND	14	113.	COPY	100	90
IMPLND	11	314.	COPY	100	91
PERLND	11	1449.	COPY	101	92
PERLND	12	625.	COPY	101	92
PERLND	13	19.	COPY	101	92
PERLND	14	113.	COPY	101	92
IMPLND	11	314.	COPY	101	93
PERLND	21	2663.	COPY	100	90
PERLND	22	1146.	COPY	100	90
PERLND	23	37.	COPY	100	90
PERLND	24	274.	COPY	100	90
IMPLND	21	553.	COPY	100	91
PERLND	21	2663.	COPY	102	92
PERLND	22	1146.	COPY	102	92
PERLND	23	37.	COPY	102	92
PERLND	24	274.	COPY	102	92
IMPLND	21	553.	COPY	102	93
PERLND	31	2959.	COPY	100	90
PERLND	32	1630.	COPY	100	90
PERLND	33	72.	COPY	100	90
PERLND	34	281.	COPY	100	90
IMPLND	31	792.	COPY	100	91
PERLND	31	2959.	COPY	103	92
PERLND	32	1630.	COPY	103	92
PERLND	33	72.	COPY	103	92
PERLND	34	281.	COPY	103	92
IMPLND	31	792.	COPY	103	93
PERLND	41	571.	COPY	100	90
PERLND	42	793.	COPY	100	90
PERLND	43	85.	COPY	100	90
PERLND	44	142.	COPY	100	90
IMPLND	41	409.	COPY	100	91
PERLND	41	571.	COPY	104	92
PERLND	42	793.	COPY	104	92
PERLND	43	85.	COPY	104	92
PERLND	44	142.	COPY	104	92
IMPLND	41	409.	COPY	104	93
PERLND	51	1744.	COPY	100	90
PERLND	52	1121.	COPY	100	90
PERLND	53	591.	COPY	100	90
PERLND	54	295.	COPY	100	90
IMPLND	51	659.	COPY	100	91
PERLND	51	1744.	COPY	105	92
PERLND	52	1121.	COPY	105	92
PERLND	53	591.	COPY	105	92
PERLND	54	295.	COPY	105	92
IMPLND	51	659.	COPY	105	93
PERLND	61	1735.	COPY	100	90
PERLND	62	1018.	COPY	100	90
PERLND	63	71.	COPY	100	90
PERLND	64	211.	COPY	100	90
IMPLND	61	526.	COPY	100	91
PERLND	61	1735.	COPY	106	92
PERLND	62	1018.	COPY	106	92
PERLND	63	71.	COPY	106	92
PERLND	64	211.	COPY	106	92
IMPLND	61	526.	COPY	106	93
PERLND	71	1377.	COPY	100	90
PERLND	72	927.	COPY	100	90
PERLND	73	65.	COPY	100	90

PERLND	74	195.	COPY	100	90
IMPLND	71	481.	COPY	100	91
PERLND	71	1377.	COPY	107	92
PERLND	72	927.	COPY	107	92
PERLND	73	65.	COPY	107	92
PERLND	74	195.	COPY	107	92
IMPLND	71	481.	COPY	107	93
PERLND	81	1330.	COPY	100	90
PERLND	82	835.	COPY	100	90
PERLND	83	328.	COPY	100	90
PERLND	84	193.	COPY	100	90
IMPLND	81	480.	COPY	100	91
PERLND	81	1330.	COPY	108	92
PERLND	82	835.	COPY	108	92
PERLND	83	328.	COPY	108	92
PERLND	84	193.	COPY	108	92
IMPLND	81	480.	COPY	108	93
PERLND	91	1494.	COPY	100	90
PERLND	92	776.	COPY	100	90
PERLND	93	103.	COPY	100	90
PERLND	94	184.	COPY	100	90
IMPLND	91	386.	COPY	100	91
PERLND	91	1494.	COPY	109	92
PERLND	92	776.	COPY	109	92
PERLND	93	103.	COPY	109	92
PERLND	94	184.	COPY	109	92
IMPLND	91	386.	COPY	109	93
PERLND	101	944.	COPY	100	90
PERLND	102	1424.	COPY	100	90
PERLND	103	272.	COPY	100	90
PERLND	104	333.	COPY	100	90
IMPLND	101	696.	COPY	100	91
PERLND	101	944.	COPY	110	92
PERLND	102	1424.	COPY	110	92
PERLND	103	272.	COPY	110	92
PERLND	104	333.	COPY	110	92
IMPLND	101	696.	COPY	110	93

END SCHEMATIC

MASS-LINK

```

MASS-LINK      1
<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name>      <Name> x x<-factor->strg <Name>      <Name> x x ***
PERLND      PWATER PERO      0.0533333      RCHRES      INFLOW IVOL
END MASS-LINK      1

```

```

MASS-LINK      3
<Srce>      <-Grp> <-Member-><--Mult-->      <Targ>      <-Grp> <-Member-> ***
<Name>      <Name> <Name> # #<-factor->      <Name>      <Name> <Name> # # ***
IMPLND      IWATER SURO      0.0533333      RCHRES      INFLOW IVOL
END MASS-LINK      3

```

```

MASS-LINK      5
<Srce>      <-Grp> <-Member-><--Mult-->      <Targ>      <-Grp> <-Member-> ***
<Name>      <Name> <Name> # #<-factor->      <Name>      <Name> <Name> # # ***
RCHRES      ROFLOW      RCHRES      INFLOW
END MASS-LINK      5

```

```

MASS-LINK      90
<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name>      <Name> x x<-factor->strg <Name>      <Name> x x ***
PERLND      PWATER SURO      COPY      INPUT MEAN 1
PERLND      PWATER IFWO      COPY      INPUT MEAN 2
PERLND      PWATER AGWO      COPY      INPUT MEAN 3
PERLND      PWATER PET      COPY      INPUT MEAN 4
PERLND      PWATER TAET      COPY      INPUT MEAN 5
PERLND      PWATER UZS      COPY      INPUT MEAN 6

```

```

PERLND    PWATER LZS                COPY          INPUT MEAN  7
END MASS-LINK  90

MASS-LINK  91
<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name> <Name> x x<-factor->strg <Name> <Name> x x ***
IMPLND    IWATER SURO                COPY          INPUT MEAN  1
IMPLND    IWATER PET                 COPY          INPUT MEAN  4
IMPLND    IWATER IMPEV              COPY          INPUT MEAN  5
END MASS-LINK  91

MASS-LINK  92
<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name> <Name> x x<-factor->strg <Name> <Name> x x ***
PERLND    PWATER PERO                COPY          INPUT MEAN  1
PERLND    PWATER AGWI               COPY          INPUT MEAN  2
END MASS-LINK  92

MASS-LINK  93
<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name> <Name> x x<-factor->strg <Name> <Name> x x ***
IMPLND    IWATER SURO                COPY          INPUT MEAN  1
END MASS-LINK  93
END MASS-LINK

```

FTABLES

```

FTABLE 1
ROWS COLS ***
15 4
DEPTH AREA VOLUME DISCH ***
(FT) (ACRES) (AC-FT) (CFS) ***
0.00 1.90 0.00 0.00
0.20 1.97 0.39 2.66
0.40 2.03 0.79 8.43
0.60 2.09 1.20 16.54
0.80 2.16 1.62 26.70
1.00 2.22 2.06 38.73
1.20 2.28 2.51 52.50
1.40 2.35 2.97 67.95
1.60 2.41 3.45 85.02
1.80 2.47 3.94 103.65
2.00 2.54 4.44 123.83
4.00 3.17 10.14 408.06
8.00 4.44 25.36 1443.51
12.00 5.71 45.65 3184.35
18.00 7.61 85.59 7362.11

```

```

END FTABLE 1
FTABLE 2
ROWS COLS ***
15 4
DEPTH AREA VOLUME DISCH ***
(FT) (ACRES) (AC-FT) (CFS) ***
0.00 2.53 0.00 0.00
0.20 2.61 0.51 3.43
0.40 2.68 1.04 10.87
0.60 2.75 1.59 21.33
0.80 2.82 2.14 34.41
1.00 2.90 2.72 49.89
1.20 2.97 3.30 67.61
1.40 3.04 3.90 87.46
1.60 3.11 4.52 109.35
1.80 3.19 5.15 133.23
2.00 3.26 5.79 159.04
4.00 3.98 13.03 519.10
8.00 5.43 31.86 1799.90
12.00 6.88 56.48 3905.86
21.00 10.35 134.42 12263.77

```

```

END FTABLE 2
FTABLE 3
ROWS COLS ***
16 4

```

DEPTH (FT)	AREA (ACRES)	VOLUME (AC-FT)	DISCH (CFS)	*** ***
0.00	4.29	0.00	0.00	
0.20	4.42	0.87	3.68	
0.40	4.55	1.77	11.69	
0.60	4.67	2.69	23.02	
0.80	4.80	3.64	37.28	
1.00	4.92	4.61	54.22	
1.30	5.11	6.11	84.35	
1.70	5.37	8.21	132.84	
2.00	5.56	9.85	175.20	
2.30	5.75	11.54	222.55	
2.70	6.00	13.89	293.34	
3.00	6.19	15.72	352.14	
6.00	8.08	37.12	1211.65	
9.00	9.98	64.21	2596.60	
12.00	11.87	96.98	4566.48	
36.00	27.02	563.67	48712.37	

END FTABLE 3  
FTABLE 4  
ROWS COLS \*\*\*  
16 4

DEPTH (FT)	AREA (ACRES)	VOLUME (AC-FT)	DISCH (CFS)	*** ***
0.00	6.12	0.00	0.00	
0.20	6.29	1.24	4.15	
0.40	6.46	2.52	13.20	
0.60	6.63	3.83	25.99	
0.80	6.80	5.17	42.06	
1.00	6.98	6.55	61.14	
1.30	7.23	8.68	95.03	
1.70	7.57	11.64	149.46	
2.00	7.83	13.95	196.90	
2.30	8.09	16.34	249.83	
2.70	8.43	19.64	328.77	
3.00	8.68	22.21	394.17	
6.00	11.25	52.10	1338.90	
9.00	13.81	89.68	2535.59	
12.00	16.37	134.95	4936.63	
36.00	36.87	773.82	50457.43	

END FTABLE 4  
FTABLE 5  
ROWS COLS \*\*\*  
16 4

DEPTH (FT)	AREA (ACRES)	VOLUME (AC-FT)	DISCH (CFS)	*** ***
0.00	8.94	0.00	0.00	
0.20	9.15	1.81	4.64	
0.40	9.35	3.66	14.75	
0.60	9.55	5.55	29.03	
0.80	9.75	7.48	46.94	
1.00	9.96	9.45	68.19	
1.30	10.26	12.48	105.86	
1.70	10.66	16.67	166.19	
2.00	10.97	19.91	218.59	
2.30	11.27	23.25	276.88	
2.70	11.68	27.84	363.51	
3.00	11.98	31.39	435.02	
6.00	15.02	71.89	1448.46	
9.00	18.06	121.50	3008.60	
12.00	21.09	180.22	5147.54	
58.00	67.67	2221.75	142706.41	

END FTABLE 5  
FTABLE 6  
ROWS COLS \*\*\*  
17 4

DEPTH (FT)	AREA (ACRES)	VOLUME (AC-FT)	DISCH (CFS)	*** ***
0.00	7.64	0.00	0.00	
0.20	7.78	1.54	5.06	
0.40	7.92	3.11	16.08	



0.60	8.06	4.71	31.63	
0.80	8.20	6.34	51.14	
1.00	8.34	7.99	74.27	
1.30	8.56	10.53	115.24	
1.70	8.84	14.01	180.76	
2.00	9.05	16.69	237.60	
2.30	9.26	19.44	300.75	
2.70	9.54	23.20	394.44	
3.00	9.76	26.09	471.65	
6.00	11.87	58.53	1556.19	
9.00	13.99	97.32	3202.02	
12.00	16.10	142.45	5430.19	
15.00	18.22	193.93	8276.35	
58.00	48.54	1629.24	141041.23	

END FTABLE 6  
FTABLE 7  
ROWS COLS \*\*\*  
16 4

DEPTH	AREA	VOLUME	DISCH	***
(FT)	(ACRES)	(AC-FT)	(CFS)	***
0.00	10.53	0.00	0.00	
0.20	10.73	2.13	8.35	
0.40	10.92	4.29	26.56	
0.60	11.11	6.49	52.31	
0.80	11.31	8.74	84.68	
1.00	11.50	11.02	123.11	
1.30	11.79	14.51	191.34	
1.70	12.18	19.31	300.81	
2.00	12.47	23.00	396.05	
2.30	12.76	26.79	502.14	
2.70	13.15	31.97	660.01	
3.00	13.44	35.96	790.47	
6.00	16.35	80.66	2647.03	
9.00	19.26	134.08	5515.92	
12.00	22.17	196.24	9455.89	
24.00	33.81	532.16	37571.06	

END FTABLE 7  
FTABLE 8  
ROWS COLS \*\*\*  
17 4

DEPTH	AREA	VOLUME	DISCH	***
(FT)	(ACRES)	(AC-FT)	(CFS)	***
0.00	10.34	0.00	0.00	
0.20	10.53	2.09	8.49	
0.40	10.72	4.21	27.01	
0.60	10.91	6.37	53.19	
0.80	11.10	8.57	86.08	
1.00	11.29	10.81	125.11	
1.30	11.57	14.24	194.36	
1.70	11.95	18.95	305.34	
2.00	12.24	22.57	401.78	
2.30	12.52	26.29	509.10	
2.70	12.90	31.37	668.59	
3.00	13.19	35.29	800.22	
6.00	16.04	79.13	2660.86	
9.00	18.89	131.53	5505.65	
12.00	21.74	192.48	9376.55	
15.00	24.59	261.98	14339.04	
25.00	34.10	555.45	39708.38	

END FTABLE 8  
FTABLE 9  
ROWS COLS \*\*\*  
18 4

DEPTH	AREA	VOLUME	DISCH	***
(FT)	(ACRES)	(AC-FT)	(CFS)	***
0.00	17.26	0.00	0.00	
0.20	17.55	3.48	9.93	
0.40	17.83	7.02	31.59	
0.60	18.12	10.61	62.19	
0.80	18.41	14.27	100.62	
1.00	18.70	17.98	146.22	

1.30	19.13	23.65	227.07	
1.70	19.70	31.42	356.56	
2.00	20.14	37.39	469.02	
2.30	20.57	43.50	594.06	
2.70	21.14	51.84	779.75	
3.00	21.57	58.25	932.87	
6.00	25.89	129.44	3087.80	
9.00	30.20	213.58	6359.15	
12.00	34.52	310.67	10782.20	
15.00	38.83	420.69	16421.67	
25.00	53.22	880.94	44979.76	
50.00	89.17	2660.79	197754.51	

END FTABLE 9

18	4			
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FTABLE 10

ROWS COLS \*\*\*

DEPTH	AREA	VOLUME	DISCH	***
(FT)	(ACRES)	(AC-FT)	(CFS)	***
0.00	19.58	0.00	0.00	
0.20	19.88	3.95	11.22	
0.40	20.18	7.95	35.67	
0.60	20.47	12.02	70.22	
0.80	20.77	16.14	113.60	
1.00	21.06	20.32	165.03	
1.30	21.51	26.71	256.20	
1.70	22.10	35.43	402.07	
2.00	22.54	42.12	528.65	
2.30	22.98	48.95	669.29	
2.70	23.57	58.26	877.93	
3.00	24.02	65.40	1049.81	
6.00	28.45	144.11	3455.64	
9.00	32.89	236.12	7075.47	
12.00	37.32	341.43	11929.84	
15.00	41.75	460.04	18075.19	
25.00	56.53	951.48	48802.16	
50.00	93.49	2826.74	209904.75	

END FTABLE 10

END FTABLES

END RUN