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# **King County Watershed Modeling Services – Green River Water Quality Assessment, and Sammamish- Washington, Analysis and Modeling Program Watershed Modeling Calibration Report**

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In Progress



**King County**

Department of Natural Resources and Parks  
Water and Land Resources Division

**Science Section**

King Street Center, KSC-NR-0600  
201 South Jackson Street, Suite 600  
Seattle, WA 98104  
206-296-6519 TTY Relay: 711  
[dnr.metrokc.gov/wlr](http://dnr.metrokc.gov/wlr)

# Section 5—Appendix A

July 2003

## Prepared for:



**King County**

Department of Natural Resources and Parks  
**Water and Land Resources Division**

201 S. Jackson St, Suite 600  
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## Prepared by:

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Mountain View, California 94043

In conjunction with King County

Alternative formats available

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206-263-6317 TTY Relay: 711

Appendix A: Swamp Creek UCI File

RUN

GLOBAL

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SWAMP CREEK
*** PROJECT 20125; BEYERLEIN; 05/29/2003
*** AQUA TERRA CONSULTANTS
*** BASED ON LITTLE BEAR CREEK: LBEAR51.UCI
*** USE PREC MFACT=1.11 (ALDERWOOD COMPARED TO WATERSHED AVERAGE)
*** DOUBLE DEEPFR TO 0.24, HALVE TILL AND OUTWASH LZSN
*** DOUBLE DEEPFR TO 0.48
*** SEPARATE INTO UPPER AND LOWER WATERSHED
*** UPPER: 142,152,162,172,272,282,292,362,372,382,392,402,412,422,432,442,452
*** LOWER: 122,132,182,192,462,472,482,492,502
*** UPPER DEEPFR=0.60; LOWER DEEPFR=0.30
*** UPPER PREC MFACT=1.16; LOWER PREC MFACT=1.10
*** DECREASE TILL AND SATURATED IRC
*** DECREASE TILL INTFW
*** DECREASE TILL AND OUTWASH UZSN
*** INCREASE TILL UPPER DEEPFR=0.75
*** CHANGE TILL LOWER DEEPFR TO 0.20, UPPER DEEPFR TO 0.85
*** CHANGE TILL LOWER DEEPFR TO 0.00, UPPER DEEPFR TO 0.90
*** SET UPPER PREC MFACT=1.15, LOWER=1.11; UPPER DEEPFR=0.80
*** SET LOWER PREC MFACT=1.10; UPPER DEEPFR=0.85
*** AGGREGATE PERLND AREAS; MINIMUM AREA AT LEAST 5% OF SUBBASIN AREA
*** REVISED ORIGINAL EIA VALUES
*** SET IMPLND SLSUR=0.01; DECREASE TILL INTFW
*** DECREASE LOWER WATERSHED BASETP
START      1992/10/01      END      2001/09/30
RUN INTERP OUTPUT LEVEL      4
RESUME     0 RUN      1      UNIT SYSTEM      1
END GLOBAL
    
```

FILES

```

<File> <Un#> <-----File Name----->***
<-ID->      ***
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WDM2      28   C:\Project\Puget\KCModel\Basins\Swamp\OutputWQ.WDM
MESSU     25   C:\Project\Puget\KCModel\Basins\Swamp\SWAMPWQ.ECH
           61   C:\Project\Puget\KCModel\Basins\Swamp\SWAMPWQ1.L61
           62   C:\Project\Puget\KCModel\Basins\Swamp\SWAMPWQ1.L62
           63   C:\Project\Puget\KCModel\Basins\Swamp\SWAMPWQ1.L63
BINO      91   C:\Project\Puget\KCModel\Basins\Swamp\SWAMP.HBN
END FILES
    
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OPN SEQUENCE

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INGRP      INDELT 00:15
*** TILL FOREST LOWER WATERSHED
    PERLND      11
    PERLND      12
    PERLND      13
    PERLND      14
*** TILL PASTURE/AG
    PERLND      21
    PERLND      22
    PERLND      23
    PERLND      24
*** TILL FOREST RESIDENTIAL
    PERLND      31
    PERLND      32
    PERLND      33
    PERLND      34
*** TILL LOW DENSITY RESIDENTIAL
    PERLND      41
    PERLND      42
    PERLND      43
    PERLND      44
*** TILL HIGH DENSITY RESIDENTIAL
    PERLND      51
    PERLND      52
    PERLND      53
    PERLND      54
*** TILL COMMERCIAL/INDUSTRIAL
    PERLND      61
    PERLND      62
    PERLND      63
    
```

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    PERLND      64
*** OUTWASH
    PERLND      71
    PERLND      72
    PERLND      73
    PERLND      74
    PERLND      75
    PERLND      76
*** SATURATED
    PERLND      81
    PERLND      82
    PERLND      83
    PERLND      84
    PERLND      85
    PERLND      86
*** ROCK FOREST
    PERLND*** 111
    PERLND*** 112
    PERLND*** 113
    PERLND*** 114
*** ROCK PASTURE/AG
    PERLND*** 121
    PERLND*** 122
    PERLND*** 123
    PERLND*** 124
*** ROCK FOREST RESIDENTIAL
    PERLND*** 131
    PERLND*** 132
    PERLND*** 133
    PERLND*** 134
*** ROCK LOW DENSITY RESIDENTIAL
    PERLND*** 141
    PERLND*** 142
    PERLND*** 143
    PERLND*** 144
*** ROCK HIGH DENSITY RESIDENTIAL
    PERLND*** 151
    PERLND*** 152
    PERLND*** 153
    PERLND*** 154
*** ROCK COMMERCIAL/INDUSTRIAL
    PERLND*** 161
    PERLND*** 162
    PERLND*** 163
    PERLND*** 164
*** TILL FOREST UPPER WATERSHED
    PERLND      211
    PERLND      212
    PERLND      213
    PERLND      214
*** TILL PASTURE/AG
    PERLND      221
    PERLND      222
    PERLND      223
    PERLND      224
*** TILL FOREST RESIDENTIAL
    PERLND      231
    PERLND      232
    PERLND      233
    PERLND      234
*** TILL LOW DENSITY RESIDENTIAL
    PERLND      241
    PERLND      242
    PERLND      243
    PERLND      244
*** TILL HIGH DENSITY RESIDENTIAL
    PERLND      251
    PERLND      252
    PERLND      253
    PERLND      254
*** TILL COMMERCIAL/INDUSTRIAL
    PERLND      261
    PERLND      262
    PERLND      263
    PERLND      264
*** OUTWASH

```

```

PERLND      271
PERLND      272
PERLND      273
PERLND      274
PERLND      275
PERLND      276
*** SATURATED
PERLND      281
PERLND      282
PERLND      283
PERLND      284
PERLND      285
PERLND      286
*** EFFECTIVE IMPERVIOUS AREA LOWER WATERSHED
IMPLND      91
IMPLND      92
IMPLND      93
IMPLND      94
*** EFFECTIVE IMPERVIOUS AREA UPPER WATERSHED
IMPLND      291
IMPLND      292
IMPLND      293
IMPLND      294
*** SWAMP CREEK
*** RCHRES FOR STREAM CHANNELS
*** GOLDE CREEK
RCHRES      122
*** POPLAR CREEK
RCHRES      132
*** SCRIBER CREEK
RCHRES      142
RCHRES      152
RCHRES      162
RCHRES      172
RCHRES      182
RCHRES      192
*** MARTHA CREEK
RCHRES      272
RCHRES      282
RCHRES      292
*** SWAMP CREEK NORTH TRIB
RCHRES      362
*** SWAMP CREEK YORK TRIB
RCHRES      372
*** SWAMP CREEK
RCHRES      382
RCHRES      392
RCHRES      402
RCHRES      412
RCHRES      422
RCHRES      432
RCHRES      442
RCHRES      452
RCHRES      462
RCHRES      472
RCHRES      482
RCHRES      492
RCHRES      502
END INGRP
END OPN SEQUENCE

COPY
TIMESERIES
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END TIMESERIES
END COPY

PERLND
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12 TILL, FOREST, LOW 1 1 1 1 61 0 91 0
13 TILL, FOREST, MED 1 1 1 1 61 0 91 0

```

Swamp Creek UCI File

14	TILL, FOREST, STEEP	1	1	1	1	61	0	91	0
21	TILL, PAST/AG, FLAT	1	1	1	1	61	0	91	0
22	TILL, PAST/AG, LOW	1	1	1	1	61	0	91	0
23	TILL, PAST/AG, MED	1	1	1	1	61	0	91	0
24	TILL, PAST/AG STEEP	1	1	1	1	61	0	91	0
31	TILL, FOR RES, FLAT	1	1	1	1	61	0	91	0
32	TILL, FOR RES, LOW	1	1	1	1	61	0	91	0
33	TILL, FOR RES, MED	1	1	1	1	61	0	91	0
34	TILL, FOR RES STEEP	1	1	1	1	61	0	91	0
41	TILL, LD RES, FLAT	1	1	1	1	61	0	91	0
42	TILL, LD RES, LOW	1	1	1	1	61	0	91	0
43	TILL, LD RES, MED	1	1	1	1	61	0	91	0
44	TILL, LD RES, STEEP	1	1	1	1	61	0	91	0
51	TILL, HD RES, FLAT	1	1	1	1	61	0	91	0
52	TILL, HD RES, LOW	1	1	1	1	61	0	91	0
53	TILL, HD RES, MED	1	1	1	1	61	0	91	0
54	TILL, HD RES, STEEP	1	1	1	1	61	0	91	0
61	TILL, COMM/IND FLAT	1	1	1	1	61	0	91	0
62	TILL, COMM/IND LOW	1	1	1	1	61	0	91	0
63	TILL, COMM/IND MED	1	1	1	1	61	0	91	0
64	TILL, COMM/IND STEEP	1	1	1	1	61	0	91	0
71	OUTWASH, FOREST	1	1	1	1	61	0	91	0
72	OUTWASH, PASTURE	1	1	1	1	61	0	91	0
73	OUTWASH, FOR RES	1	1	1	1	61	0	91	0
74	OUTWASH, LD RES	1	1	1	1	61	0	91	0
75	OUTWASH, HD RES	1	1	1	1	61	0	91	0
76	OUTWASH, COMM/IND	1	1	1	1	61	0	91	0
81	SATURATED, FOREST	1	1	1	1	61	0	91	0
82	SATURATED, PAST/AG	1	1	1	1	61	0	91	0
83	SATURATED, FOR RES	1	1	1	1	61	0	91	0
84	SATURATED, LD RES	1	1	1	1	61	0	91	0
85	SATURATED, HD RES	1	1	1	1	61	0	91	0
86	SATURATED, COMM/IND	1	1	1	1	61	0	91	0
111	ROCK, FOREST, FLAT	1	1	1	1	61	0	91	0
112	ROCK, FOREST, LOW	1	1	1	1	61	0	91	0
113	ROCK, FOREST, MED	1	1	1	1	61	0	91	0
114	ROCK, FOREST, STEEP	1	1	1	1	61	0	91	0
121	ROCK, PAST/AG, FLAT	1	1	1	1	61	0	91	0
122	ROCK, PAST/AG, LOW	1	1	1	1	61	0	91	0
123	ROCK, PAST/AG, MED	1	1	1	1	61	0	91	0
124	ROCK, PAST/AG STEEP	1	1	1	1	61	0	91	0
131	ROCK, FOR RES, FLAT	1	1	1	1	61	0	91	0
132	ROCK, FOR RES, LOW	1	1	1	1	61	0	91	0
133	ROCK, FOR RES, MED	1	1	1	1	61	0	91	0
134	ROCK, FOR RES STEEP	1	1	1	1	61	0	91	0
141	ROCK, LD RES, FLAT	1	1	1	1	61	0	91	0
142	ROCK, LD RES, LOW	1	1	1	1	61	0	91	0
143	ROCK, LD RES, MED	1	1	1	1	61	0	91	0
144	ROCK, LD RES, STEEP	1	1	1	1	61	0	91	0
151	ROCK, HD RES, FLAT	1	1	1	1	61	0	91	0
152	ROCK, HD RES, LOW	1	1	1	1	61	0	91	0
153	ROCK, HD RES, MED	1	1	1	1	61	0	91	0
154	ROCK, HD RES, STEEP	1	1	1	1	61	0	91	0
161	ROCK, COMM/IND FLAT	1	1	1	1	61	0	91	0
162	ROCK, COMM/IND LOW	1	1	1	1	61	0	91	0
163	ROCK, COMM/IND MED	1	1	1	1	61	0	91	0
164	ROCK, COMM/IND STEEP	1	1	1	1	61	0	91	0
211	TILL, FOREST, FLAT	1	1	1	1	61	0	91	0
212	TILL, FOREST, LOW	1	1	1	1	61	0	91	0
213	TILL, FOREST, MED	1	1	1	1	61	0	91	0
214	TILL, FOREST, STEEP	1	1	1	1	61	0	91	0

Swamp Creek UCI File

221	TILL, PAST/AG, FLAT	1	1	1	1	61	0	91	0
222	TILL, PAST/AG, LOW	1	1	1	1	61	0	91	0
223	TILL, PAST/AG, MED	1	1	1	1	61	0	91	0
224	TILL, PAST/AG STEEP	1	1	1	1	61	0	91	0
231	TILL, FOR RES, FLAT	1	1	1	1	61	0	91	0
232	TILL, FOR RES, LOW	1	1	1	1	61	0	91	0
233	TILL, FOR RES, MED	1	1	1	1	61	0	91	0
234	TILL, FOR RES STEEP	1	1	1	1	61	0	91	0
241	TILL, LD RES, FLAT	1	1	1	1	61	0	91	0
242	TILL, LD RES, LOW	1	1	1	1	61	0	91	0
243	TILL, LD RES, MED	1	1	1	1	61	0	91	0
244	TILL, LD RES, STEEP	1	1	1	1	61	0	91	0
251	TILL, HD RES, FLAT	1	1	1	1	61	0	91	0
252	TILL, HD RES, LOW	1	1	1	1	61	0	91	0
253	TILL, HD RES, MED	1	1	1	1	61	0	91	0
254	TILL, HD RES, STEEP	1	1	1	1	61	0	91	0
261	TILL, COMM/IND FLAT	1	1	1	1	61	0	91	0
262	TILL, COMM/IND LOW	1	1	1	1	61	0	91	0
263	TILL, COMM/IND MED	1	1	1	1	61	0	91	0
264	TILL, COMM/IND STEEP	1	1	1	1	61	0	91	0
271	OUTWASH, FOREST	1	1	1	1	61	0	91	0
272	OUTWASH, PASTURE	1	1	1	1	61	0	91	0
273	OUTWASH, FOR RES	1	1	1	1	61	0	91	0
274	OUTWASH, LD RES	1	1	1	1	61	0	91	0
275	OUTWASH, HD RES	1	1	1	1	61	0	91	0
276	OUTWASH, COMM/IND	1	1	1	1	61	0	91	0
281	SATURATED, FOREST	1	1	1	1	61	0	91	0
282	SATURATED, PAST/AG	1	1	1	1	61	0	91	0
283	SATURATED, FOR RES	1	1	1	1	61	0	91	0
284	SATURATED, LD RES	1	1	1	1	61	0	91	0
285	SATURATED, HD RES	1	1	1	1	61	0	91	0
286	SATURATED, COMM/IND	1	1	1	1	61	0	91	0

END GEN-INFO

ACTIVITY

<PLS > \*\*\*\*\* Active Sections \*\*\*\*\*  
 # - # ATMP SNOW PWAT SED PST PWG PQAL MSTL PEST NITR PHOS TRAC \*\*\*  
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END ACTIVITY

PRINT-INFO

<PLS > \*\*\*\*\* Print-flags \*\*\*\*\* PIVL PYR  
 # - # ATMP SNOW PWAT SED PST PWG PQAL MSTL PEST NITR PHOS TRAC \*\*\*  
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END PRINT-INFO

BINARY-INFO

<PLS > \*\*\*\*\* Print-flags \*\*\*\*\* PIVL PYR  
 # - # ATMP SNOW PWAT SED PST PWG PQAL MSTL PEST NITR PHOS TRAC \*\*\*  
 11 286 5 5 5 5 5 5 5 1 9

END BINARY-INFO

\*\*\* Section ATEMP - Air Temperature \*\*\*

\*\*\* following elevation differences based on EVERETT (=606 ft)

ATEMP-DAT

<PLS > ELDAT AIRTEMP \*\*\*  
 # - # (ft) (deg F) \*\*\*  
 11 -137. 40.0  
 12 -173. 40.0  
 13 -210. 40.0  
 14 -272. 40.0  
 21 -148. 40.0  
 22 -193. 40.0  
 23 -200. 40.0  
 24 -257. 40.0  
 31 -137. 40.0  
 32 -173. 40.0  
 33 -210. 40.0  
 34 -272. 40.0

# Swamp Creek UCI File

41	-148.	40.0
42	-192.	40.0
43	-224.	40.0
44	-285.	40.0
51	-135.	40.0
52	-172.	40.0
53	-227.	40.0
54	-303.	40.0
61	-147.	40.0
62	-176.	40.0
63	-216.	40.0
64	-277.	40.0
71	-359.	40.0
72	-381.	40.0
73	-359.	40.0
74	-366.	40.0
75	-366.	40.0
76	-392.	40.0
81	-301.	40.0
82	-268.	40.0
83	-301.	40.0
84	-288.	40.0
85	-247.	40.0
86	-294.	40.0
111	-137.	40.0
112	-173.	40.0
113	-210.	40.0
114	-272.	40.0
121	-148.	40.0
122	-193.	40.0
123	-200.	40.0
124	-257.	40.0
131	-137.	40.0
132	-173.	40.0
133	-210.	40.0
134	-272.	40.0
141	-148.	40.0
142	-192.	40.0
143	-224.	40.0
144	-285.	40.0
151	-135.	40.0
152	-172.	40.0
153	-227.	40.0
154	-303.	40.0
161	-147.	40.0
162	-176.	40.0
163	-216.	40.0
164	-277.	40.0
211	-137.	40.0
212	-173.	40.0
213	-210.	40.0
214	-272.	40.0
221	-148.	40.0
222	-193.	40.0
223	-200.	40.0
224	-257.	40.0
231	-137.	40.0
232	-173.	40.0
233	-210.	40.0
234	-272.	40.0
241	-148.	40.0
242	-192.	40.0
243	-224.	40.0
244	-285.	40.0
251	-135.	40.0
252	-172.	40.0
253	-227.	40.0
254	-303.	40.0
261	-147.	40.0
262	-176.	40.0
263	-216.	40.0
264	-277.	40.0
271	-359.	40.0
272	-381.	40.0
273	-359.	40.0
274	-366.	40.0

275 -366. 40.0  
 276 -392. 40.0  
 281 -301. 40.0  
 282 -268. 40.0  
 283 -301. 40.0  
 284 -288. 40.0  
 285 -247. 40.0  
 286 -294. 40.0  
 END ATEMP-DAT

\*\*\* Section PWATER \*\*\*

PWAT-PARM1

<PLS > PWATER variable monthly parameter value flags \*\*\*  
 # - # CSNO RTOP UZFG VCS VUZ VNN VIFW VIRC VLE \*\*\*  
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 END PWAT-PARM1

PWAT-PARM2

<PLS > PWATER input info: Part 2 \*\*\*

#	#	***FOREST	LZSN	INFILT	LSUR	SLSUR	KVARY	AGWRC
***TILL FOREST LOWER								
11			4.0	0.080	350.	0.027	0.45	0.998
12			3.5	0.070	300.	0.073	0.45	0.998
13			3.0	0.060	250.	0.117	0.45	0.998
14			2.5	0.050	200.	0.207	0.45	0.998
***TILL PASTURE/AG								
21			4.0	0.070	350.	0.029	0.45	0.997
22			3.5	0.060	300.	0.071	0.45	0.997
23			3.0	0.050	250.	0.112	0.45	0.997
24			2.5	0.040	200.	0.176	0.45	0.997
***TILL FOREST RESIDENTIAL								
31			4.0	0.080	350.	0.027	0.45	0.998
32			3.5	0.070	300.	0.073	0.45	0.998
33			3.0	0.060	250.	0.117	0.45	0.998
34			2.5	0.050	200.	0.207	0.45	0.998
***TILL LOW DENSITY RES								
41			4.0	0.040	350.	0.028	0.45	0.996
42			3.5	0.030	300.	0.070	0.45	0.996
43			3.0	0.025	250.	0.115	0.45	0.996
44			2.5	0.020	200.	0.180	0.45	0.996
***TILL HIGH DENSITY RES								
51			4.0	0.040	350.	0.026	0.45	0.996
52			3.5	0.030	300.	0.068	0.45	0.996
53			3.0	0.025	250.	0.111	0.45	0.996
54			2.5	0.020	200.	0.170	0.45	0.996
***TILL COMMERCIAL/INDUSTRIAL								
61			4.0	0.040	350.	0.025	0.45	0.996
62			3.5	0.030	300.	0.068	0.45	0.996
63			3.0	0.025	250.	0.109	0.45	0.996
64			2.5	0.020	200.	0.166	0.45	0.996
***OUTWASH								
71			5.0	2.000	300.	0.106	0.3	0.996
72			5.0	1.400	300.	0.071	0.3	0.996
73			5.0	2.000	300.	0.106	0.3	0.996
74			5.0	0.800	300.	0.078	0.3	0.996
75			5.0	0.800	300.	0.061	0.3	0.996
76			5.0	0.800	300.	0.055	0.3	0.996
***SATURATED								
81			4.0	2.000	150.	0.031	0.5	0.998
82			4.0	1.800	150.	0.021	0.5	0.998
83			4.0	2.000	150.	0.031	0.5	0.998
84			4.0	1.000	150.	0.026	0.5	0.998
85			4.0	1.000	150.	0.027	0.5	0.998
86			4.0	1.000	150.	0.032	0.5	0.998
***ROCK FOREST								
111			4.0	0.0500	400.	0.0100	0.5000	0.9920
112			4.0	0.0500	400.	0.0500	0.5000	0.9920
113			4.0	0.0500	400.	0.1000	0.5000	0.9920
114			4.0	0.0500	400.	0.2000	0.5000	0.9920
***ROCK PASTURE/AG								
121			4.0	0.0500	400.	0.0100	0.5000	0.9920
122			4.0	0.0500	400.	0.0500	0.5000	0.9920
123			4.0	0.0500	400.	0.1000	0.5000	0.9920
124			4.0	0.0500	400.	0.2000	0.5000	0.9920
***ROCK FOREST RES								

Swamp Creek UCI File

131	4.0	0.0500	400.	0.0100	0.5000	0.9920
132	4.0	0.0500	400.	0.0500	0.5000	0.9920
133	4.0	0.0500	400.	0.1000	0.5000	0.9920
134	4.0	0.0500	400.	0.2000	0.5000	0.9920
***ROCK LOW DENSITY RES						
141	4.0	0.0300	400.	0.0100	0.5000	0.9920
142	4.0	0.0300	400.	0.0200	0.5000	0.9920
143	4.0	0.0300	400.	0.1000	0.5000	0.9920
144	4.0	0.0300	400.	0.2000	0.5000	0.9920
***ROCK HIGH DENSITY RES						
151	4.0	0.0300	400.	0.0100	0.5000	0.9920
152	4.0	0.0300	400.	0.0500	0.5000	0.9920
153	4.0	0.0300	400.	0.1000	0.5000	0.9920
154	4.0	0.0300	400.	0.2000	0.5000	0.9920
***ROCK COMMERCIAL/INDUSTRIAL						
161	4.0	0.0300	400.	0.0100	0.5000	0.9920
162	4.0	0.0300	400.	0.0500	0.5000	0.9920
163	4.0	0.0300	400.	0.1000	0.5000	0.9920
164	4.0	0.0300	400.	0.2000	0.5000	0.9920
***TILL FOREST UPPER						
211	4.0	0.080	350.	0.027	0.45	0.998
212	3.5	0.070	300.	0.073	0.45	0.998
213	3.0	0.060	250.	0.117	0.45	0.998
214	2.5	0.050	200.	0.207	0.45	0.998
***TILL PASTURE/AG						
221	4.0	0.070	350.	0.029	0.45	0.997
222	3.5	0.060	300.	0.071	0.45	0.997
223	3.0	0.050	250.	0.112	0.45	0.997
224	2.5	0.040	200.	0.176	0.45	0.997
***TILL FOREST RESIDENTIAL						
231	4.0	0.080	350.	0.027	0.45	0.998
232	3.5	0.070	300.	0.073	0.45	0.998
233	3.0	0.060	250.	0.117	0.45	0.998
234	2.5	0.050	200.	0.207	0.45	0.998
***TILL LOW DENSITY RES						
241	4.0	0.040	350.	0.028	0.45	0.996
242	3.5	0.030	300.	0.070	0.45	0.996
243	3.0	0.025	250.	0.115	0.45	0.996
244	2.5	0.020	200.	0.180	0.45	0.996
***TILL HIGH DENSITY RES						
251	4.0	0.040	350.	0.026	0.45	0.996
252	3.5	0.030	300.	0.068	0.45	0.996
253	3.0	0.025	250.	0.111	0.45	0.996
254	2.5	0.020	200.	0.170	0.45	0.996
***TILL COMMERCIAL/INDUSTRIAL						
261	4.0	0.040	350.	0.025	0.45	0.996
262	3.5	0.030	300.	0.068	0.45	0.996
263	3.0	0.025	250.	0.109	0.45	0.996
264	2.5	0.020	200.	0.166	0.45	0.996
***OUTWASH						
271	5.0	2.000	300.	0.106	0.3	0.996
272	5.0	1.400	300.	0.071	0.3	0.996
273	5.0	2.000	300.	0.106	0.3	0.996
274	5.0	0.800	300.	0.078	0.3	0.996
275	5.0	0.800	300.	0.062	0.3	0.996
276	5.0	0.800	300.	0.055	0.3	0.996
***SATURATED						
281	4.0	2.000	150.	0.031	0.5	0.998
282	4.0	1.800	150.	0.021	0.5	0.998
283	4.0	2.000	150.	0.031	0.5	0.998
284	4.0	1.000	150.	0.026	0.5	0.998
285	4.0	1.000	150.	0.027	0.5	0.998
286	4.0	1.000	150.	0.032	0.5	0.998
END PWAT-PARM2						

PWAT-PARM3

<PLS > \*\*\* PWATER input info: Part 3

#	-	#	***PETMAX	PETMIN	INFEXP	INFILD	DEEPPFR	BASETP	AGWETP
11	14				2.0	2.0	0.00	0.01	0.00
21	24				2.0	2.0	0.00	0.01	0.00
31	34				2.0	2.0	0.00	0.01	0.00
41	44				2.0	2.0	0.00	0.01	0.00
51	54				2.0	2.0	0.00	0.01	0.00
61	64				2.0	2.0	0.00	0.01	0.00
71	76				2.0	2.0	0.00	0.01	0.00

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81	86	10.0	2.0	0.00	0.02	0.70
111	114	2.5	2.0	0.00	0.	0.
121	124	2.5	2.0	0.00	0.	0.
131	134	2.5	2.0	0.00	0.	0.
141	144	2.5	2.0	0.00	0.	0.
151	154	2.5	2.0	0.00	0.	0.
161	164	2.5	2.0	0.00	0.	0.
211	214	2.0	2.0	0.85	0.02	0.00
221	224	2.0	2.0	0.85	0.02	0.00
231	234	2.0	2.0	0.85	0.02	0.00
241	244	2.0	2.0	0.85	0.02	0.00
251	254	2.0	2.0	0.85	0.02	0.00
261	264	2.0	2.0	0.85	0.02	0.00
271	276	2.0	2.0	0.20	0.02	0.00
281	286	10.0	2.0	0.00	0.03	0.70

END PWAT-PARM3

PWAT-PARM4

<PLS >		PWATER input info: Part 4					***
#	- #	CEPSC	UZSN	NSUR	INTFW	IRC	LZETP ***
11		0.20	1.00	0.35	1.0	0.500	0.70
12		0.20	0.70	0.35	0.9	0.400	0.70
13		0.20	0.50	0.35	0.8	0.300	0.70
14		0.20	0.30	0.35	0.7	0.200	0.70
21		0.15	0.70	0.30	0.9	0.500	0.40
22		0.15	0.50	0.30	0.8	0.400	0.40
23		0.15	0.30	0.30	0.7	0.300	0.40
24		0.15	0.20	0.30	0.6	0.200	0.40
31		0.20	1.00	0.35	1.0	0.500	0.70
32		0.20	0.70	0.35	0.9	0.400	0.70
33		0.20	0.50	0.35	0.8	0.300	0.70
34		0.20	0.30	0.35	0.7	0.200	0.70
41		0.10	0.50	0.25	0.8	0.400	0.25
42		0.10	0.30	0.25	0.7	0.300	0.25
43		0.10	0.20	0.25	0.6	0.250	0.25
44		0.10	0.10	0.25	0.5	0.200	0.25
51		0.10	0.50	0.25	0.8	0.400	0.25
52		0.10	0.30	0.25	0.7	0.300	0.25
53		0.10	0.20	0.25	0.6	0.250	0.25
54		0.10	0.10	0.25	0.5	0.200	0.25
61		0.10	0.50	0.25	0.8	0.400	0.25
62		0.10	0.30	0.25	0.7	0.300	0.25
63		0.10	0.20	0.25	0.6	0.250	0.25
64		0.10	0.10	0.25	0.5	0.200	0.25
71		0.20	0.50	0.35	0.0	0.700	0.70
72		0.15	0.50	0.30	0.0	0.700	0.40
73		0.20	0.50	0.35	0.0	0.700	0.70
74	76	0.10	0.50	0.25	0.0	0.700	0.25
81		0.20	3.00	0.50	1.0	0.500	0.80
82		0.15	3.00	0.50	1.0	0.500	0.80
83		0.20	3.00	0.50	1.0	0.500	0.80
84	86	0.10	3.00	0.50	1.0	0.500	0.80
111		0.2000	0.500	0.3500	15.000	0.7000	0.7000
112		0.2000	0.400	0.3500	15.000	0.4000	0.7000
113		0.2000	0.300	0.3500	15.000	0.3000	0.7000
114		0.2000	0.200	0.3500	15.000	0.2000	0.7000
121		0.1500	0.300	0.2500	15.000	0.7000	0.2500
122		0.1500	0.200	0.2500	15.000	0.4000	0.2500
123		0.1500	0.150	0.2500	15.000	0.3000	0.2500
124		0.1500	0.100	0.2500	15.000	0.2000	0.2500
131		0.2000	0.500	0.3500	15.000	0.7000	0.7000

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132		0.2000	0.400	0.3500	15.000	0.4000	0.7000
133		0.2000	0.300	0.3500	15.000	0.3000	0.7000
134		0.2000	0.200	0.3500	15.000	0.2000	0.7000
141		0.1000	0.200	0.2500	15.000	0.7000	0.2500
142		0.1000	0.150	0.2500	15.000	0.4000	0.2500
143		0.1000	0.100	0.2500	15.000	0.3000	0.2500
144		0.1000	0.050	0.2500	15.000	0.2000	0.2500
151		0.1000	0.200	0.2500	15.000	0.7000	0.2500
152		0.1000	0.150	0.2500	15.000	0.4000	0.2500
153		0.1000	0.100	0.2500	15.000	0.3000	0.2500
154		0.1000	0.050	0.2500	15.000	0.2000	0.2500
161		0.1000	0.200	0.2500	15.000	0.7000	0.2500
162		0.1000	0.150	0.2500	15.000	0.4000	0.2500
163		0.1000	0.100	0.2500	15.000	0.3000	0.2500
164		0.1000	0.050	0.2500	15.000	0.2000	0.2500
211		0.20	1.00	0.35	1.0	0.500	0.70
212		0.20	0.70	0.35	0.9	0.400	0.70
213		0.20	0.50	0.35	0.8	0.300	0.70
214		0.20	0.30	0.35	0.7	0.200	0.70
221		0.15	0.70	0.30	0.9	0.500	0.40
222		0.15	0.50	0.30	0.8	0.400	0.40
223		0.15	0.30	0.30	0.7	0.300	0.40
224		0.15	0.20	0.30	0.6	0.200	0.40
231		0.20	1.00	0.35	1.0	0.500	0.70
232		0.20	0.70	0.35	0.9	0.400	0.70
233		0.20	0.50	0.35	0.7	0.300	0.70
234		0.20	0.30	0.35	0.6	0.200	0.70
241		0.10	0.50	0.25	0.8	0.400	0.25
242		0.10	0.30	0.25	0.7	0.300	0.25
243		0.10	0.20	0.25	0.6	0.250	0.25
244		0.10	0.10	0.25	0.5	0.200	0.25
251		0.10	0.50	0.25	0.8	0.400	0.25
252		0.10	0.30	0.25	0.7	0.300	0.25
253		0.10	0.20	0.25	0.6	0.250	0.25
254		0.10	0.10	0.25	0.5	0.200	0.25
261		0.10	0.50	0.25	0.8	0.400	0.25
262		0.10	0.30	0.25	0.7	0.300	0.25
263		0.10	0.20	0.25	0.6	0.250	0.25
264		0.10	0.10	0.25	0.5	0.200	0.25
271		0.20	0.50	0.35	0.0	0.700	0.70
272		0.15	0.50	0.30	0.0	0.700	0.40
273		0.20	0.50	0.35	0.0	0.700	0.70
274	276	0.10	0.50	0.25	0.0	0.700	0.25
281		0.20	3.00	0.50	1.0	0.500	0.80
282		0.15	3.00	0.50	1.0	0.500	0.80
283		0.20	3.00	0.50	1.0	0.500	0.80
284	286	0.10	3.00	0.50	1.0	0.500	0.80

END PWAT-PARM4

MON-LZETPARM

#	#	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	***
11	14	.60	.60	.60	.60	.70	.70	.70	.70	.70	.60	.60	.60	
21	24	.20	.20	.20	.25	.30	.35	.40	.40	.40	.35	.30	.20	
31	34	.60	.60	.60	.60	.70	.70	.70	.70	.70	.60	.60	.60	
41	64	.15	.15	.20	.20	.25	.25	.25	.25	.25	.20	.20	.15	
71		.60	.60	.60	.60	.60	.70	.70	.70	.70	.60	.60	.60	
72		.20	.20	.20	.25	.30	.35	.40	.40	.40	.35	.30	.20	
73		.60	.60	.60	.60	.60	.70	.70	.70	.70	.60	.60	.60	
74	76	.15	.15	.20	.20	.25	.25	.25	.25	.25	.20	.20	.15	
81	86	.50	.50	.50	.60	.70	.75	.80	.80	.75	.70	.60	.50	
111	114	.30	.30	.30	.40	.50	.60	.70	.70	.70	.50	.30	.30	
121	124	.20	.20	.20	.25	.25	.25	.25	.25	.25	.25	.20	.20	

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131 134 .30 .30 .30 .40 .50 .60 .70 .70 .70 .50 .30 .30
141 164 .15 .15 .20 .20 .25 .25 .25 .25 .25 .20 .20 .15

211 214 .60 .60 .60 .60 .70 .70 .70 .70 .70 .60 .60 .60
221 224 .20 .20 .20 .25 .30 .35 .40 .40 .40 .35 .30 .20
231 234 .60 .60 .60 .60 .70 .70 .70 .70 .70 .60 .60 .60
241 264 .15 .15 .20 .20 .25 .25 .25 .25 .25 .20 .20 .15

271      .60 .60 .60 .60 .60 .70 .70 .70 .70 .60 .60 .60
272      .20 .20 .20 .25 .30 .35 .40 .40 .40 .35 .30 .20
273      .60 .60 .60 .60 .60 .70 .70 .70 .70 .60 .60 .60
274 276 .15 .15 .20 .20 .25 .25 .25 .25 .25 .20 .20 .15

281 286 .50 .50 .50 .60 .70 .75 .80 .80 .75 .70 .60 .50
END MON-LZETPARM

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PWAT-STATE1

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<PLS > *** Initial conditions at start of simulation
# - # *** CEPS SURS UZS IFWS LZS AGWS GWVS
11      0.00 0.0 0.50 0.0 2.5 5.00 0.03
12      0.00 0.0 0.30 0.0 2.5 5.00 0.03
13      0.00 0.0 0.20 0.0 2.5 5.00 0.03
14      0.00 0.0 0.15 0.0 2.5 5.00 0.03

21      0.00 0.0 0.40 0.0 2.5 5.00 0.03
22      0.00 0.0 0.25 0.0 2.5 5.00 0.03
23      0.00 0.0 0.15 0.0 2.5 5.00 0.03
24      0.00 0.0 0.12 0.0 2.5 5.00 0.03

31      0.00 0.0 0.50 0.0 2.5 5.00 0.03
32      0.00 0.0 0.30 0.0 2.5 5.00 0.03
33      0.00 0.0 0.20 0.0 2.5 5.00 0.03
34      0.00 0.0 0.15 0.0 2.5 5.00 0.03

41      0.00 0.0 0.25 0.0 2.5 5.00 0.03
42      0.00 0.0 0.15 0.0 2.5 5.00 0.03
43      0.00 0.0 0.10 0.0 2.5 5.00 0.03
44      0.00 0.0 0.06 0.0 2.5 5.00 0.03

51      0.00 0.0 0.25 0.0 2.5 5.00 0.03
52      0.00 0.0 0.15 0.0 2.5 5.00 0.03
53      0.00 0.0 0.10 0.0 2.5 5.00 0.03
54      0.00 0.0 0.06 0.0 2.5 5.00 0.03

61      0.00 0.0 0.25 0.0 2.5 5.00 0.03
62      0.00 0.0 0.15 0.0 2.5 5.00 0.03
63      0.00 0.0 0.10 0.0 2.5 5.00 0.03
64      0.00 0.0 0.06 0.0 2.5 5.00 0.03

71      0.00 0.0 0.25 0.0 3.0 5.00 0.05
72      0.00 0.0 0.25 0.0 3.0 5.00 0.05
73      0.00 0.0 0.25 0.0 3.0 5.00 0.05
74 76    0.00 0.0 0.25 0.0 3.0 5.00 0.05

81      0.00 0.0 0.20 0.0 3.2 5.00 0.02
82      0.00 0.0 0.20 0.0 3.2 5.00 0.02
83      0.00 0.0 0.20 0.0 3.2 5.00 0.02
84 86    0.00 0.0 0.20 0.0 3.2 5.00 0.02

111     0.    0. 0.0150 0. 1.50 2.90 .07
112     0.    0. 0.0100 0. 1.45 3.00 .06
113     0.    0. 0.0080 0. 1.40 3.10 .06
114     0.    0. 0.0060 0. 1.40 3.10 .06

121     0.    0. 0.0150 0. 1.50 2.90 .07
122     0.    0. 0.0100 0. 1.45 3.00 .06
122     0.    0. 0.0080 0. 1.40 3.10 .06
123     0.    0. 0.0060 0. 1.40 3.10 .06

131     0.    0. 0.0150 0. 1.50 2.90 .07
132     0.    0. 0.0100 0. 1.45 3.00 .06
133     0.    0. 0.0080 0. 1.40 3.10 .06
134     0.    0. 0.0060 0. 1.40 3.10 .06

141     0.    0. 0.0100 0. 3.00 2.70 .28
142     0.    0. 0.0080 0. 3.00 2.80 .23

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143	0.	0.	0.0040	0.	3.00	2.80	.23
144	0.	0.	0.0020	0.	3.00	2.90	.22
151	0.	0.	0.0100	0.	3.00	2.70	.28
152	0.	0.	0.0080	0.	3.00	2.80	.23
153	0.	0.	0.0040	0.	3.00	2.80	.23
154	0.	0.	0.0020	0.	3.00	2.90	.22
161	0.	0.	0.0100	0.	3.00	2.70	.28
162	0.	0.	0.0080	0.	3.00	2.80	.23
163	0.	0.	0.0040	0.	3.00	2.80	.23
164	0.	0.	0.0020	0.	3.00	2.90	.22
211	0.00	0.0	0.50	0.0	2.5	5.00	0.03
212	0.00	0.0	0.30	0.0	2.5	5.00	0.03
213	0.00	0.0	0.20	0.0	2.5	5.00	0.03
214	0.00	0.0	0.15	0.0	2.5	5.00	0.03
221	0.00	0.0	0.40	0.0	2.5	5.00	0.03
222	0.00	0.0	0.25	0.0	2.5	5.00	0.03
223	0.00	0.0	0.15	0.0	2.5	5.00	0.03
224	0.00	0.0	0.12	0.0	2.5	5.00	0.03
231	0.00	0.0	0.50	0.0	2.5	5.00	0.03
232	0.00	0.0	0.30	0.0	2.5	5.00	0.03
233	0.00	0.0	0.20	0.0	2.5	5.00	0.03
234	0.00	0.0	0.15	0.0	2.5	5.00	0.03
241	0.00	0.0	0.25	0.0	2.5	5.00	0.03
242	0.00	0.0	0.15	0.0	2.5	5.00	0.03
243	0.00	0.0	0.10	0.0	2.5	5.00	0.03
244	0.00	0.0	0.06	0.0	2.5	5.00	0.03
251	0.00	0.0	0.25	0.0	2.5	5.00	0.03
252	0.00	0.0	0.15	0.0	2.5	5.00	0.03
253	0.00	0.0	0.10	0.0	2.5	5.00	0.03
254	0.00	0.0	0.06	0.0	2.5	5.00	0.03
261	0.00	0.0	0.25	0.0	2.5	5.00	0.03
262	0.00	0.0	0.15	0.0	2.5	5.00	0.03
263	0.00	0.0	0.10	0.0	2.5	5.00	0.03
264	0.00	0.0	0.06	0.0	2.5	5.00	0.03
271	0.00	0.0	0.25	0.0	3.0	5.00	0.05
272	0.00	0.0	0.25	0.0	3.0	5.00	0.05
273	0.00	0.0	0.25	0.0	3.0	5.00	0.05
274 276	0.00	0.0	0.25	0.0	3.0	5.00	0.05
281	0.00	0.0	0.20	0.0	3.2	5.00	0.02
282	0.00	0.0	0.20	0.0	3.2	5.00	0.02
283	0.00	0.0	0.20	0.0	3.2	5.00	0.02
284 286	0.00	0.0	0.20	0.0	3.2	5.00	0.02

END PWAT-STATE1

\*\*\* Section PSTEMP - SOIL TEMPERATURE

PSTEMP-PARM1

#	#	SLTV	ULTV	LGTV	TSOP	***
11	286	1	1	1	1	

END PSTEMP-PARM1

PSTEMP-PARM2

#	#	ASLT	BSLT	ULTP1	ULTP2	LGTP1	LGTP2	***
11	286	48.0	0.40	51.0	0.30	52.0	25.0	

END PSTEMP-PARM2

MON-ASLT

#	#	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	***
11	286	39.0	39.0	41.0	44.0	48.0	53.0	57.0	57.0	55.0	52.0	48.0	44.0	

END MON-ASLT

MON-BSLT

#	#	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	***
11	286	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	

END MON-BSLT

Swamp Creek UCI File

MON-ULTP1  
 # # JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC \*\*\*  
 11 286 40.0 40.0 42.0 45.0 49.0 53.0 54.0 54.0 53.0 51.0 48.0 44.0  
 END MON-ULTP1

MON-ULTP2  
 # # JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC \*\*\*  
 11 286 0.30 0.30 0.30 0.30 0.30 0.30 0.30 0.30 0.30 0.30 0.30 0.30  
 END MON-ULTP2

MON-LGTP1  
 # # JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC \*\*\*  
 11 286 49.0 49.0 50.0 51.0 52.0 53.0 53.0 53.0 53.0 52.0 51.0 50.0  
 END MON-LGTP1

PSTEMP-TEMPS  
 # # AIRTC SLTMP ULTMP LGTMP \*\*\*  
 11 286 50.0 55.0 60.0 60.0  
 END PSTEMP-TEMPS

\*\*\* Section PWTGAS - Water Temperature and Dissolved Oxygen & CO2

PWT-PARM1  
 <PLS> Flags for PWTGAS \*\*\*  
 # # IDV ICV GDV GCV \*\*\*  
 11 286 1 1 1 1  
 END PWT-PARM1

PWT-PARM2  
 # # ELEV IDOXP ICO2P ADOXP ACO2P \*\*\*  
 \*\*\*TILL FOREST  
 11 469. 8.80 0.00 8.80 0.00  
 12 433. 8.80 0.00 8.80 0.00  
 13 396. 8.80 0.00 8.80 0.00  
 14 334. 8.80 0.00 8.80 0.00  
 \*\*\*TILL PASTURE/AG  
 21 458. 8.80 0.00 8.80 0.00  
 22 413. 8.80 0.00 8.80 0.00  
 23 406. 8.80 0.00 8.80 0.00  
 24 349. 8.80 0.00 8.80 0.00  
 \*\*\*TILL FOREST RESIDENTIAL  
 31 469. 8.80 0.00 8.80 0.00  
 32 433. 8.80 0.00 8.80 0.00  
 33 396. 8.80 0.00 8.80 0.00  
 34 334. 8.80 0.00 8.80 0.00  
 \*\*\*TILL LOW DENSITY RES  
 41 458. 8.80 0.00 8.80 0.00  
 42 414. 8.80 0.00 8.80 0.00  
 43 382. 8.80 0.00 8.80 0.00  
 44 321. 8.80 0.00 8.80 0.00  
 \*\*\*TILL HIGH DENSITY RES  
 51 471. 8.80 0.00 8.80 0.00  
 52 434. 8.80 0.00 8.80 0.00  
 53 379. 8.80 0.00 8.80 0.00  
 54 303. 8.80 0.00 8.80 0.00  
 \*\*\*TILL COMMERCIAL/INDUSTRIAL  
 61 459. 8.80 0.00 8.80 0.00  
 62 430. 8.80 0.00 8.80 0.00  
 63 390. 8.80 0.00 8.80 0.00  
 64 329. 8.80 0.00 8.80 0.00  
 \*\*\*OUTWASH  
 71 247. 8.80 0.00 8.80 0.00  
 72 225. 8.80 0.00 8.80 0.00  
 73 247. 8.80 0.00 8.80 0.00  
 74 240. 8.80 0.00 8.80 0.00  
 75 240. 8.80 0.00 8.80 0.00  
 76 214. 8.80 0.00 8.80 0.00  
 \*\*\*SATURATED  
 81 305. 8.80 0.00 8.80 0.00  
 82 338. 8.80 0.00 8.80 0.00  
 83 305. 8.80 0.00 8.80 0.00  
 84 318. 8.80 0.00 8.80 0.00  
 85 359. 8.80 0.00 8.80 0.00  
 86 312. 8.80 0.00 8.80 0.00  
 \*\*\*ROCK FOREST  
 111 469. 8.80 0.00 8.80 0.00

Swamp Creek UCI File

112	433.	8.80	0.00	8.80	0.00
113	396.	8.80	0.00	8.80	0.00
114	334.	8.80	0.00	8.80	0.00
***ROCK PASTURE					
121	458.	8.80	0.00	8.80	0.00
122	413.	8.80	0.00	8.80	0.00
123	406.	8.80	0.00	8.80	0.00
124	349.	8.80	0.00	8.80	0.00
***ROCK FOREST					
131	469.	8.80	0.00	8.80	0.00
132	433.	8.80	0.00	8.80	0.00
133	396.	8.80	0.00	8.80	0.00
134	334.	8.80	0.00	8.80	0.00
***ROCK LOW DENSITY RES					
141	458.	8.80	0.00	8.80	0.00
142	414.	8.80	0.00	8.80	0.00
143	382.	8.80	0.00	8.80	0.00
144	321.	8.80	0.00	8.80	0.00
***ROCK HIGH DENSITY RES					
151	471.	8.80	0.00	8.80	0.00
152	434.	8.80	0.00	8.80	0.00
153	379.	8.80	0.00	8.80	0.00
154	303.	8.80	0.00	8.80	0.00
***ROCK COMMERCIAL INDUSTRIAL					
161	459.	8.80	0.00	8.80	0.00
162	430.	8.80	0.00	8.80	0.00
163	390.	8.80	0.00	8.80	0.00
164	329.	8.80	0.00	8.80	0.00
***TILL FOREST UPPER WATERSHED					
211	469.	8.80	0.00	8.80	0.00
212	433.	8.80	0.00	8.80	0.00
213	396.	8.80	0.00	8.80	0.00
214	334.	8.80	0.00	8.80	0.00
***TILL PASTURE					
221	458.	8.80	0.00	8.80	0.00
222	413.	8.80	0.00	8.80	0.00
223	406.	8.80	0.00	8.80	0.00
224	349.	8.80	0.00	8.80	0.00
***TILL FOREST RESIDENTIAL					
231	469.	8.80	0.00	8.80	0.00
232	433.	8.80	0.00	8.80	0.00
233	396.	8.80	0.00	8.80	0.00
234	334.	8.80	0.00	8.80	0.00
***TILL LOW DENSITY RESIDENTIAL					
241	458.	8.80	0.00	8.80	0.00
242	414.	8.80	0.00	8.80	0.00
243	382.	8.80	0.00	8.80	0.00
244	321.	8.80	0.00	8.80	0.00
***TILL HIGH DENSITY RESIDENTIAL					
251	471.	8.80	0.00	8.80	0.00
252	434.	8.80	0.00	8.80	0.00
253	379.	8.80	0.00	8.80	0.00
254	303.	8.80	0.00	8.80	0.00
***TILL COMMERCIAL/INDUSTRIAL					
261	459.	8.80	0.00	8.80	0.00
262	430.	8.80	0.00	8.80	0.00
263	390.	8.80	0.00	8.80	0.00
264	329.	8.80	0.00	8.80	0.00
***OUTWASH					
271	247.	8.80	0.00	8.80	0.00
272	225.	8.80	0.00	8.80	0.00
273	247.	8.80	0.00	8.80	0.00
274	240.	8.80	0.00	8.80	0.00
275	240.	8.80	0.00	8.80	0.00
276	214.	8.80	0.00	8.80	0.00
***SATURATED					
281	305.	8.80	0.00	8.80	0.00
282	338.	8.80	0.00	8.80	0.00
283	305.	8.80	0.00	8.80	0.00
284	318.	8.80	0.00	8.80	0.00
285	359.	8.80	0.00	8.80	0.00
286	312.	8.80	0.00	8.80	0.00
END PWT-PARM2					

MON-IFWDOX

# # JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC \*\*\*

# Swamp Creek UCI File

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11 86 11.0 11.0 10.0 9.5 9.0 9.0 9.0 9.0 9.0 9.0 9.0 10.0
211 286 10.0 10.0 9.5 8.5 8.0 7.5 7.5 7.5 7.5 7.5 8.0 9.0
END MON-IFWDOX

MON-GRNDDOX
# # JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC ***
11 86 10.0 10.0 9.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 9.0
211 286 9.0 9.0 8.5 7.5 7.0 7.0 7.0 7.0 7.0 7.0 7.0 8.0
END MON-GRNDDOX

MON-IFWCO2
# # JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC ***
11 86 0.30 0.30 0.30 0.30 0.35 0.35 0.35 0.35 0.35 0.35 0.35 0.30
211 286 0.30 0.30 0.30 0.30 0.38 0.38 0.38 0.38 0.38 0.38 0.38 0.30
END MON-IFWCO2

MON-GRNDCO2
# # JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC ***
11 86 0.40 0.40 0.40 0.40 0.45 0.45 0.50 0.50 0.50 0.50 0.50 0.40
211 286 0.55 0.55 0.55 0.55 0.62 0.62 0.66 0.66 0.66 0.66 0.66 0.55
END MON-GRNDCO2

PWT-GASES
*** <PLS> Initial Concentrations ***
# # SODOX SOCO2 IODOX IOCO2 AODOX AOCO2 ***
11 286 9.0 0.5 9.0 0.5 9.0 0.6
END PWT-GASES

*** Section SEDMNT - Sediment

SED-PARM1
*** <PLS > Sediment parameters 1
*** x - x CRV VSIV SDOP
11 286 1 0 1
END SED-PARM1

SED-PARM2
*** <PLS > SMPF KRER JRER AFFIX COVER NVSI
*** x - x (/day) lb/ac-day

***TILL FOREST
11 14 1.0 0.500 2.0 0.003 0.0 10.0
***TILL PASTURE/AG
21 24 1.0 0.500 2.0 0.003 0.0 30.0
***TILL FOREST RESIDENTIAL
31 34 1.0 0.500 2.0 0.003 0.0 15.0
***TILL LOW DENSITY RES
41 44 1.0 0.500 2.0 0.003 0.0 40.0
***TILL HIGH DENSITY RES
51 54 1.0 0.500 2.0 0.003 0.0 50.0
***TILL COMMERCIAL/INDUSTRIAL
61 64 1.0 0.500 2.0 0.003 0.0 100.0
***OUTWASH
71 72 1.0 0.550 2.0 0.003 0.0 10.0
73 74 1.0 0.550 2.0 0.003 0.0 15.0
75 76 1.0 0.550 2.0 0.003 0.0 30.0
77 78 1.0 0.550 2.0 0.003 0.0 50.0
79 80 1.0 0.550 2.0 0.003 0.0 100.0
***SATURATED
81 82 1.0 0.650 2.0 0.010 0.0 10.0
83 84 1.0 0.650 2.0 0.010 0.0 20.0
85 86 1.0 0.650 2.0 0.010 0.0 15.0
87 88 1.0 0.650 2.0 0.010 0.0 30.0
89 90 1.0 0.650 2.0 0.010 0.0 50.0
91 92 1.0 0.650 2.0 0.010 0.0 100.0
***ROCK FOREST
111 112 1.0 0.400 2.0 0.001 0.0 10.0
113 114 1.0 0.400 2.0 0.001 0.0 10.0
115 116 1.0 0.400 2.0 0.001 0.0 10.0
117 118 1.0 0.400 2.0 0.001 0.0 10.0
***ROCK PASTURE/AG
121 122 1.0 0.400 2.0 0.001 0.0 40.0
123 124 1.0 0.400 2.0 0.001 0.0 40.0

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***ROCK FOREST RES
 131      1.0    0.400    2.0    0.001    0.0    15.0
 132      1.0    0.400    2.0    0.001    0.0    15.0
 133      1.0    0.400    2.0    0.001    0.0    15.0
 134      1.0    0.400    2.0    0.001    0.0    15.0
***ROCK LOW DENSITY RES
 141      1.0    0.400    2.0    0.001    0.0    40.0
 142      1.0    0.400    2.0    0.001    0.0    40.0
 143      1.0    0.400    2.0    0.001    0.0    40.0
 144      1.0    0.400    2.0    0.001    0.0    40.0
***ROCK HIGH DENSITY RES
 151      1.0    0.500    2.0    0.001    0.0    60.0
 152      1.0    0.500    2.0    0.001    0.0    60.0
 153      1.0    0.500    2.0    0.001    0.0    60.0
 154      1.0    0.500    2.0    0.001    0.0    60.0
***ROCK COMMERCIAL/INDUSTRIAL
 161      1.0    0.600    2.0    0.001    0.0    100.0
 162      1.0    0.600    2.0    0.001    0.0    100.0
 163      1.0    0.600    2.0    0.001    0.0    100.0
 164      1.0    0.600    2.0    0.001    0.0    100.0
***TILL FOREST
 211 214    1.0    0.500    2.0    0.003    0.0    10.0
***TILL PASTURE/AG
 221 224    1.0    0.500    2.0    0.003    0.0    30.0
***TILL FOREST RESIDENTIAL
 231 234    1.0    0.500    2.0    0.003    0.0    15.0
***TILL LOW DENSITY RES
 241 244    1.0    0.500    2.0    0.003    0.0    40.0
***TILL HIGH DENSITY RES
 251 254    1.0    0.500    2.0    0.003    0.0    50.0
***TILL COMMERCIAL/INDUSTRIAL
 261 264    1.0    0.500    2.0    0.003    0.0    100.0
***OUTWASH
 271      1.0    0.550    2.0    0.003    0.0    10.0
 272      1.0    0.550    2.0    0.003    0.0    20.0
 273      1.0    0.550    2.0    0.003    0.0    15.0
 274      1.0    0.550    2.0    0.003    0.0    30.0
 275      1.0    0.550    2.0    0.003    0.0    50.0
 276      1.0    0.550    2.0    0.003    0.0    100.0
***SATURATED
 281      1.0    0.650    2.0    0.010    0.0    10.0
 282      1.0    0.650    2.0    0.010    0.0    20.0
 283      1.0    0.650    2.0    0.010    0.0    15.0
 284      1.0    0.650    2.0    0.010    0.0    30.0
 285      1.0    0.650    2.0    0.010    0.0    50.0
 286      1.0    0.650    2.0    0.010    0.0    100.0
END SED-PARM2

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SED-PARM3
*** <PLS > Sediment parameter 3
*** x - x      KSER      JSER      KGER      JGER
***TILL FOREST
 11 14      0.20      2.      0.      2.
***TILL PASTURE/AG
 21 24      0.20      2.      0.      2.
***TILL FOREST RESIDENTIAL
 31 34      0.30      2.      0.      2.
***TILL LOW DENSITY RES
 41 44      0.09      2.      0.      2.
***TILL HIGH DENSITY RES
 51 54      0.09      2.      0.      2.
***TILL COMMERCIAL/INDUSTRIAL
 61 64      0.15      2.      0.      2.
***OUTWASH
 71      0.20      2.      0.      2.
 72      0.20      2.      0.      2.
 73      0.30      2.      0.      2.
 74      0.09      2.      0.      2.
 75      0.09      2.      0.      2.
 76      0.15      2.      0.      2.
***SATURATED
 81      0.10      2.      0.      2.
 82      0.10      2.      0.      2.
 83      0.15      2.      0.      2.
 84      0.09      2.      0.      2.
 85      0.09      2.      0.      2.

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      86          0.15          2.          0.          2.
***TILL FOREST UPPER WATERSHED
      211 214          0.20          2.          0.          2.
***TILL PASTURE/AG
      221 224          0.20          2.          0.          2.
***TILL FOREST RESIDENTIAL
      231 234          0.30          2.          0.          2.
***TILL LOW DENSITY RES
      241 244          0.09          2.          0.          2.
***TILL HIGH DENSITY RES
      251 254          0.09          2.          0.          2.
***TILL COMMERCIAL/INDUSTRIAL
      261 264          0.15          2.          0.          2.
***OUTWASH
      271          0.20          2.          0.          2.
      272          0.20          2.          0.          2.
      273          0.30          2.          0.          2.
      274          0.09          2.          0.          2.
      275          0.09          2.          0.          2.
      276          0.15          2.          0.          2.
***SATURATED
      281          0.10          2.          0.          2.
      282          0.10          2.          0.          2.
      283          0.15          2.          0.          2.
      284          0.09          2.          0.          2.
      285          0.09          2.          0.          2.
      286          0.15          2.          0.          2.
END SED-PARM3

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MON-COVER

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*** <PLS > Monthly values for erosion related cover
*** x - x JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC
***TILL FOREST
      11 14 0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97
***TILL PASTURE/AG
      21 24 0.65 0.60 0.55 0.50 0.55 0.65 0.75 0.85 0.85 0.80 0.80 0.70
***TILL FOREST RESIDENTIAL
      31 34 0.93 0.93 0.93 0.94 0.96 0.96 0.96 0.96 0.96 0.94 0.93 0.93
***TILL LOW DENSITY RES
      41 44 0.90 0.90 0.90 0.91 0.93 0.93 0.93 0.93 0.93 0.91 0.90 0.90
***TILL HIGH DENSITY RES
      51 54 0.70 0.70 0.70 0.73 0.75 0.75 0.75 0.75 0.75 0.73 0.70 0.70
***TILL COMMERCIAL/INDUSTRIAL
      61 64 0.60 0.60 0.60 0.65 0.67 0.69 0.69 0.69 0.67 0.65 0.60 0.60
***OUTWASH
      71          0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97
      72          0.65 0.60 0.55 0.50 0.55 0.65 0.75 0.85 0.85 0.80 0.80 0.70
      73          0.93 0.93 0.93 0.94 0.96 0.96 0.96 0.96 0.96 0.94 0.93 0.93
      74          0.90 0.90 0.90 0.91 0.93 0.93 0.93 0.93 0.93 0.91 0.90 0.90
      75          0.70 0.70 0.70 0.73 0.75 0.75 0.75 0.75 0.75 0.73 0.70 0.70
      76          0.60 0.60 0.60 0.65 0.67 0.69 0.69 0.69 0.67 0.65 0.60 0.60
***SATURATED
      81          0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97
      82          0.65 0.60 0.55 0.50 0.55 0.65 0.75 0.85 0.85 0.80 0.80 0.70
      83          0.93 0.93 0.93 0.94 0.96 0.96 0.96 0.96 0.96 0.94 0.93 0.93
      84          0.90 0.90 0.90 0.91 0.93 0.93 0.93 0.93 0.93 0.91 0.90 0.90
      85          0.70 0.70 0.70 0.73 0.75 0.75 0.75 0.75 0.75 0.73 0.70 0.70
      86          0.60 0.60 0.60 0.65 0.67 0.69 0.69 0.69 0.67 0.65 0.60 0.60
***ROCK FOREST
      111 114 0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97
***ROCK PASTURE/AG
      121 124 0.65 0.60 0.55 0.50 0.55 0.65 0.75 0.85 0.85 0.80 0.80 0.70
***ROCK FOREST RES
      131 134 0.93 0.93 0.93 0.94 0.96 0.96 0.96 0.96 0.96 0.94 0.93 0.93
***ROCK LOW DENSITY RES
      141 144 0.90 0.90 0.90 0.91 0.93 0.93 0.93 0.93 0.93 0.91 0.90 0.90
***ROCK HIGH DENSITY RES
      151 154 0.70 0.70 0.70 0.73 0.75 0.75 0.75 0.75 0.75 0.73 0.70 0.70
***ROCK COMMERCIAL/INDUSTRIAL
      161 164 0.60 0.60 0.60 0.65 0.67 0.69 0.69 0.69 0.67 0.65 0.60 0.60
***TILL FOREST UPPER WATERSHED
      211 214 0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97
***TILL PASTURE/AG
      221 224 0.65 0.60 0.55 0.50 0.55 0.65 0.75 0.93 0.93 0.90 0.80 0.70
***TILL FOREST RESIDENTIAL
      231 234 0.93 0.93 0.93 0.94 0.96 0.96 0.96 0.96 0.96 0.94 0.93 0.93

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***TILL LOW DENSITY RES
 241 244 0.90 0.90 0.90 0.91 0.93 0.93 0.93 0.93 0.93 0.91 0.90 0.90
***TILL HIGH DENSITY RES
 251 254 0.70 0.70 0.70 0.73 0.75 0.75 0.75 0.75 0.75 0.73 0.70 0.70
***TILL COMMERCIAL/INDUSTRIAL
 261 264 0.60 0.60 0.60 0.65 0.67 0.69 0.69 0.69 0.67 0.65 0.60 0.60
***OUTWASH
 271      0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97
 272      0.65 0.60 0.55 0.50 0.55 0.65 0.75 0.85 0.85 0.80 0.80 0.70
 273      0.93 0.93 0.93 0.94 0.96 0.96 0.96 0.96 0.96 0.94 0.93 0.93
 274      0.90 0.90 0.90 0.91 0.93 0.93 0.93 0.93 0.93 0.91 0.90 0.90
 275      0.70 0.70 0.70 0.73 0.75 0.75 0.75 0.75 0.75 0.73 0.70 0.70
 276      0.60 0.60 0.60 0.65 0.67 0.69 0.69 0.69 0.67 0.65 0.60 0.60
***SATURATED
 281      0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97
 282      0.65 0.60 0.55 0.50 0.55 0.65 0.75 0.85 0.85 0.80 0.80 0.70
 283      0.93 0.93 0.93 0.94 0.96 0.96 0.96 0.96 0.96 0.94 0.93 0.93
 284      0.90 0.90 0.90 0.91 0.93 0.93 0.93 0.93 0.93 0.91 0.90 0.90
 285      0.70 0.70 0.70 0.73 0.75 0.75 0.75 0.75 0.75 0.73 0.70 0.70
 286      0.60 0.60 0.60 0.65 0.67 0.69 0.69 0.69 0.67 0.65 0.60 0.60
END MON-COVER

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SED-STOR
*** <PLS >
*** x - x Detached sediment storage (tons/acre)
***TILL FOREST
 11 14 0.05
***TILL PASTURE/AG
 21 24 0.12
***TILL FOREST RESIDENTIAL
 31 34 0.06
***TILL LOW DENSITY RES
 41 44 0.06
***TILL HIGH DENSITY RES
 51 54 0.05
***TILL COMMERCIAL/INDUSTRIAL
 61 64 0.07
***OUTWASH
 71      0.07
 72      0.12
 73      0.06
 74      0.06
 75      0.05
 76      0.12
***SATURATED
 81      0.05
 82      0.12
 83      0.06
 84      0.06
 85      0.05
 86      0.12
***ROCK FOREST
 111     0.03
 112     0.03
 113     0.03
 114     0.03
***ROCK PASTURE/AG
 121     0.03
 122     0.03
 123     0.03
 124     0.03
***ROCK FOREST RES
 131     0.03
 132     0.03
 133     0.03
 134     0.03
***ROCK LOW DENSITY RES
 141     0.03
 142     0.03
 143     0.03
 144     0.03
***ROCK HIGH DENSITY RES
 151     0.03
 152     0.03
 153     0.03
 154     0.03

```

```

***ROCK COMMERCIAL/INDUSTRIAL
161      0.03
162      0.03
163      0.03
164      0.03
***TILL FOREST UPPER WATERSHED
211 214  0.05
***TILL PASTURE/AG
221 224  0.12
***TILL FOREST RESIDENTIAL
231 234  0.06
***TILL LOW DENSITY RES
241 244  0.06
***TILL HIGH DENSITY RES
251 254  0.05
***TILL COMMERCIAL/INDUSTRIAL
261 264  0.07
***OUTWASH
271      0.07
272      0.12
273      0.06
274      0.06
275      0.05
276      0.12
***SATURATED
281      0.05
282      0.12
283      0.06
284      0.06
285      0.05
286      0.12
END SED-STOR

```

\*\*\* Section PQUAL - Water Quality Constituents \*\*\*

```

NQUALS
# # NQUAL *** (1=NO3, 2=NH3, 3=PO4, 4=BOD, 5=ALK, 6=Silica, 7=E-Coli)
11 286 7
END NQUALS

```

```

PQL-AD-FLAGS
      Atmospheric Deposition Flags ***
<PLS > QUAL1 QUAL2 ***
# - # F C F C ***
11 286 0 -1 0 -1
END PQL-AD-FLAGS

```

```

      QUAL #1 NO3 ***
QUAL-PROPS
*** <PLS > Identifiers and Flags
*** x - x QUALID QTID QSD VPFW VPFS QSO VQO QIFW VIQC QAGW VAQC
11 286NO2+NO3 LBS 0 0 0 2 1 1 3 1 3
END QUAL-PROPS

```

```

QUAL-INPUT
*** Storage on surface and nonseasonal parameters
*** SQO POTFW POTFS ACQOP SQOLIM WSQOP IOQC AOQC
*** <PLS > qty/ac qty/ton qty/ton qty/ qty/ in/hr qty/ft3 qty/ft3
*** x - x ac.day
11 14 0. 0. 0. 0. 1.e-6 1.5 0. 0.
21 24 0. 0. 0. 0. 1.e-6 0.5 0. 0.
31 34 0. 0. 0. 0. 1.e-6 0.9 0. 0.
41 64 0. 0. 0. 0. 1.e-6 0.5 0. 0.
71 0. 0. 0. 0. 1.e-6 1.5 0. 0.
72 0. 0. 0. 0. 1.e-6 0.5 0. 0.
73 0. 0. 0. 0. 1.e-6 0.9 0. 0.
74 76 0. 0. 0. 0. 1.e-6 0.5 0. 0.
81 0. 0. 0. 0. 1.e-6 1.5 0. 0.
82 0. 0. 0. 0. 1.e-6 0.5 0. 0.
83 0. 0. 0. 0. 1.e-6 0.9 0. 0.
84 86 0. 0. 0. 0. 1.e-6 0.5 0. 0.
211 214 0. 0. 0. 0. 1.e-6 1.5 0. 0.
221 224 0. 0. 0. 0. 1.e-6 0.5 0. 0.
231 234 0. 0. 0. 0. 1.e-6 0.9 0. 0.
241 264 0. 0. 0. 0. 1.e-6 0.5 0. 0.
271 0. 0. 0. 0. 1.e-6 1.5 0. 0.

```

```

272      0.      0.      0.      0.      1.e-6      0.5      0.      0.
273      0.      0.      0.      0.      1.e-6      0.9      0.      0.
274  276      0.      0.      0.      0.      1.e-6      0.5      0.      0.
281      0.      0.      0.      0.      1.e-6      1.5      0.      0.
282      0.      0.      0.      0.      1.e-6      0.5      0.      0.
283      0.      0.      0.      0.      1.e-6      0.9      0.      0.
284  286      0.      0.      0.      0.      1.e-6      0.5      0.      0.
END QUAL-INPUT

```

MON-ACCUM

\*\*\* <PLS > Value at start of each month for accum rate of QUALOF (lb/ac.day)

```

*** x - x JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC
11  14.0002.0002.0002.0002.0006.0006.0006.0006.0006.0006.0002.0002
21  240.0020.0020.0020.0020.0040.0090.0090.0090.0090.0090.0080.005
31  54.0009.0009.0009.0006.0006.0006.0006.0006.0006.0006.0006.0009
61  64.0006.0006.0006.0004.0004.0004.0004.0004.0004.0004.0004.0006
71      .0002.0002.0002.0002.0006.0006.0006.0006.0006.0006.0002.0002
72      0.0020.0020.0020.0020.0040.0090.0090.0090.0090.0090.0080.005
73  75.0009.0009.0009.0006.0006.0006.0006.0006.0006.0006.0006.0009
76      .0006.0006.0006.0004.0004.0004.0004.0004.0004.0004.0004.0006
81      .0002.0002.0002.0002.0006.0006.0006.0006.0006.0006.0002.0002
82      0.0020.0020.0020.0020.0040.0090.0090.0090.0090.0090.0080.005
83  85.0009.0009.0009.0006.0006.0006.0006.0006.0006.0006.0006.0009
86      .0006.0006.0006.0004.0004.0004.0004.0004.0004.0004.0004.0006
211 214.0002.0002.0002.0002.0006.0006.0006.0006.0006.0006.0002.0002
221 2240.0020.0020.0020.0020.0040.0090.0090.0090.0090.0090.0080.005
231 234.0009.0009.0009.0006.0006.0006.0006.0006.0006.0006.0006.0009
241 244.0018.0018.00180.003.0033.0033.0033.0033.0033.0033.00330.003.0018
251 254.0021.0021.00210.003.0036.0036.0036.0036.0036.0036.00360.003.0021
261 264.0016.0016.0016.0022.0026.0026.0026.0026.0026.0026.0022.0016
271      .0002.0002.0002.0002.0006.0006.0006.0006.0006.0006.0002.0002
272      0.0020.0020.0020.0020.0040.0090.0090.0090.0090.0090.0080.005
273      .0009.0009.0009.0006.0006.0006.0006.0006.0006.0006.0006.0009
274      .0018.0018.00180.003.0033.0033.0033.0033.0033.0033.00330.003.0018
275      .0021.0021.00210.003.0036.0036.0036.0036.0036.0036.00360.003.0021
276      .0016.0016.0016.0022.0026.0026.0026.0026.0026.0026.0022.0016
281      .0002.0002.0002.0002.0006.0006.0006.0006.0006.0006.0002.0002
282      0.0020.0020.0020.0020.0040.0090.0090.0090.0090.0090.0080.005
283      .0009.0009.0009.0006.0006.0006.0006.0006.0006.0006.0006.0009
284      .0018.0018.00180.003.0033.0033.0033.0033.0033.0033.00330.003.0018
285      .0021.0021.00210.003.0036.0036.0036.0036.0036.0036.00360.003.0021
286      .0016.0016.0016.0022.0026.0026.0026.0026.0026.0026.0022.0016
END MON-ACCUM

```

MON-SQOLIM

\*\*\* <PLS > Value at start of month for limiting storage of QUALOF (lb/ac)

```

*** x - x JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC
11  140.0020.0020.0020.0020.0040.0040.0040.0040.0040.0040.0020.002
21  24 0.01 0.01 0.01 0.010.0150.0250.0250.0250.0250.0250.0190.012
31  34.0036.0036.0036.0024.0024.0024.0024.0024.0024.0024.0024.0036
41  540.0090.0090.0120.0120.0150.0150.0150.0150.0150.0150.0120.012
61  64.0084.0084.0102.0102.0123.0123.0123.0123.0123.0123.0102.0102
71      0.0020.0020.0020.0020.0040.0040.0040.0040.0040.0040.0020.002
72      0.01 0.01 0.01 0.010.0150.0250.0250.0250.0250.0250.0190.012
73      .0036.0036.0036.0024.0024.0024.0024.0024.0024.0024.0024.0036
74  750.0090.0090.0120.0120.0150.0150.0150.0150.0150.0150.0120.012
76      .0084.0084.0102.0102.0123.0123.0123.0123.0123.0123.0102.0102
81      0.0020.0020.0020.0020.0040.0040.0040.0040.0040.0040.0020.002
82      0.01 0.01 0.01 0.010.0150.0250.0250.0250.0250.0250.0190.012
83      .0036.0036.0036.0024.0024.0024.0024.0024.0024.0024.0024.0036
84  850.0090.0090.0120.0120.0150.0150.0150.0150.0150.0150.0120.012
86      .0084.0084.0102.0102.0123.0123.0123.0123.0123.0123.0102.0102
211 2140.0020.0020.0020.0020.0040.0040.0040.0040.0040.0040.0020.002
221 224 0.01 0.01 0.01 0.010.0150.0250.0250.0250.0250.0250.0190.012
231 234.0036.0036.0036.0024.0024.0024.0024.0024.0024.0024.0024.0036
241 2540.0090.0090.0120.0120.0150.0150.0150.0150.0150.0150.0120.012
261 264.0084.0084.0102.0102.0123.0123.0123.0123.0123.0123.0102.0102
271      0.0020.0020.0020.0020.0040.0040.0040.0040.0040.0040.0020.002
272      0.01 0.01 0.01 0.010.0150.0250.0250.0250.0250.0250.0190.012
273      .0036.0036.0036.0024.0024.0024.0024.0024.0024.0024.0024.0036
274 2750.0090.0090.0120.0120.0150.0150.0150.0150.0150.0150.0120.012
276      .0084.0084.0102.0102.0123.0123.0123.0123.0123.0123.0102.0102
281      0.0020.0020.0020.0020.0040.0040.0040.0040.0040.0040.0020.002
282      0.01 0.01 0.01 0.010.0150.0250.0250.0250.0250.0250.0190.012
283      .0036.0036.0036.0024.0024.0024.0024.0024.0024.0024.0024.0036
284 2850.0090.0090.0120.0120.0150.0150.0150.0150.0150.0150.0120.012

```

286 .0084.0084.0102.0102.0123.0123.0123.0123.0123.0123.0102.0102  
 END MON-SQOLIM

MON-IFLW-CONC

```

*** <PLS > Conc of QUAL in interflow outflow for each month (qty/ft3)
*** x - x JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC
11 14 0.9 0.9 0.75 0.65 0.4 0.35 0.35 0.35 0.35 0.35 0.54 0.78
21 24 12.25 12.95 4.95 4.5 3.75 3 3 3 3 3.15 9.45 10.5
31 34 1.12 1.12 0.8 0.7 0.5 0.35 0.35 0.35 0.35 0.4 0.77 0.98
41 44 1.36 1.36 1.02 0.9 0.66 0.42 0.42 0.42 0.42 0.48 0.96 1.2
51 54 1.44 1.44 1.26 1.12 0.84 0.7 0.7 0.7 0.7 0.7 0.96 1.28
61 64 2.64 2.64 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 2.64 2.64
71 0.9 0.9 0.75 0.65 0.4 0.35 0.35 0.35 0.35 0.35 0.54 0.78
72 12.25 12.95 4.95 4.5 3.75 3 3 3 3 3.15 9.45 10.5
73 1.12 1.12 0.8 0.7 0.5 0.35 0.35 0.35 0.35 0.4 0.77 0.98
74 1.36 1.36 1.02 0.9 0.66 0.42 0.42 0.42 0.42 0.48 0.96 1.2
75 1.44 1.44 1.26 1.12 0.84 0.7 0.7 0.7 0.7 0.7 0.96 1.28
76 2.64 2.64 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 2.64 2.64
81 0.9 0.9 0.75 0.65 0.4 0.35 0.35 0.35 0.35 0.35 0.54 0.78
82 12.25 12.95 4.95 4.5 3.75 3 3 3 3 3.15 9.45 10.5
83 1.12 1.12 0.8 0.7 0.5 0.35 0.35 0.35 0.35 0.4 0.77 0.98
84 1.36 1.36 1.02 0.9 0.66 0.42 0.42 0.42 0.42 0.48 0.96 1.2
85 1.44 1.44 1.26 1.12 0.84 0.7 0.7 0.7 0.7 0.7 0.96 1.28
86 2.64 2.64 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 2.64 2.64
211 214 0.9 0.9 0.75 0.65 0.4 0.35 0.35 0.35 0.35 0.35 0.54 0.78
221 224 12.25 12.95 4.95 4.5 3.75 3 3 3 3 3.15 9.45 10.5
231 234 1.12 1.12 0.8 0.7 0.5 0.35 0.35 0.35 0.35 0.4 0.77 0.98
241 244 1.36 1.36 1.02 0.9 0.66 0.42 0.42 0.42 0.42 0.48 0.96 1.2
251 254 1.44 1.44 1.26 1.12 0.84 0.7 0.7 0.7 0.7 0.7 0.96 1.28
261 264 2.64 2.64 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 2.64 2.64
271 0.9 0.9 0.75 0.65 0.4 0.35 0.35 0.35 0.35 0.35 0.54 0.78
272 12.25 12.95 4.95 4.5 3.75 3 3 3 3 3.15 9.45 10.5
273 1.12 1.12 0.8 0.7 0.5 0.35 0.35 0.35 0.35 0.4 0.77 0.98
274 1.36 1.36 1.02 0.9 0.66 0.42 0.42 0.42 0.42 0.48 0.96 1.2
275 1.44 1.44 1.26 1.12 0.84 0.7 0.7 0.7 0.7 0.7 0.96 1.28
276 2.64 2.64 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 2.64 2.64
281 0.9 0.9 0.75 0.65 0.4 0.35 0.35 0.35 0.35 0.35 0.54 0.78
282 12.25 12.95 4.95 4.5 3.75 3 3 3 3 3.15 9.45 10.5
283 1.12 1.12 0.8 0.7 0.5 0.35 0.35 0.35 0.35 0.4 0.77 0.98
284 1.36 1.36 1.02 0.9 0.66 0.42 0.42 0.42 0.42 0.48 0.96 1.2
285 1.44 1.44 1.26 1.12 0.84 0.7 0.7 0.7 0.7 0.7 0.96 1.28
286 2.64 2.64 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 2.64 2.64
END MON-IFLW-CONC
  
```

MON-GRND-CONC

```

*** <PLS > Value at start of month for conc of QUAL in groundwater (qty/ft3)
*** x - x JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC
11 14 0.44 0.440.275 0.250.225 0.15 0.15 0.15 0.15 0.15 0.32 0.4
21 24 22.4 22.4 8.7 7.5 6.3 5.4 5.4 5.4 5.4 14 17.5
31 34 0.84 0.84 0.6 0.55 0.4 0.35 0.35 0.35 0.35 0.35 0.56 0.77
41 44 1.04 1.04 0.78 0.72 0.54 0.48 0.48 0.48 0.48 0.48 0.72 0.96
51 54 1.04 1.04 0.91 0.84 0.63 0.56 0.56 0.56 0.56 0.56 0.72 0.96
61 64 2.64 2.64 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 2.64 2.64
71 0.44 0.440.275 0.250.225 0.15 0.15 0.15 0.15 0.15 0.32 0.4
72 22.4 22.4 8.7 7.5 6.3 5.4 5.4 5.4 5.4 5.4 14 17.5
73 0.84 0.84 0.6 0.55 0.4 0.35 0.35 0.35 0.35 0.35 0.56 0.77
74 1.04 1.04 0.78 0.72 0.54 0.48 0.48 0.48 0.48 0.48 0.72 0.96
75 1.04 1.04 0.91 0.84 0.63 0.56 0.56 0.56 0.56 0.56 0.72 0.96
76 2.64 2.64 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 2.64 2.64
81 0.44 0.440.275 0.250.225 0.15 0.15 0.15 0.15 0.15 0.32 0.4
82 22.4 22.4 8.7 7.5 6.3 5.4 5.4 5.4 5.4 5.4 14 17.5
83 0.84 0.84 0.6 0.55 0.4 0.35 0.35 0.35 0.35 0.35 0.56 0.77
84 1.04 1.04 0.78 0.72 0.54 0.48 0.48 0.48 0.48 0.48 0.72 0.96
85 1.04 1.04 0.91 0.84 0.63 0.56 0.56 0.56 0.56 0.56 0.72 0.96
86 2.64 2.64 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 2.64 2.64
211 214 0.44 0.440.275 0.250.225 0.15 0.15 0.15 0.15 0.15 0.32 0.4
221 224 22.4 22.4 8.7 7.5 6.3 5.4 5.4 5.4 5.4 14 17.5
231 234 0.84 0.84 0.6 0.55 0.4 0.35 0.35 0.35 0.35 0.35 0.56 0.77
241 244 1.04 1.04 0.78 0.72 0.54 0.48 0.48 0.48 0.48 0.48 0.72 0.96
251 254 1.04 1.04 0.91 0.84 0.63 0.56 0.56 0.56 0.56 0.56 0.72 0.96
261 264 2.64 2.64 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 2.64 2.64
271 0.44 0.440.275 0.250.225 0.15 0.15 0.15 0.15 0.15 0.32 0.4
272 22.4 22.4 8.7 7.5 6.3 5.4 5.4 5.4 5.4 5.4 14 17.5
273 0.84 0.84 0.6 0.55 0.4 0.35 0.35 0.35 0.35 0.35 0.56 0.77
274 1.04 1.04 0.78 0.72 0.54 0.48 0.48 0.48 0.48 0.48 0.72 0.96
275 1.04 1.04 0.91 0.84 0.63 0.56 0.56 0.56 0.56 0.56 0.72 0.96
  
```

```

276      2.64 2.64 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 2.64 2.64
281      0.44 0.440.275 0.250.225 0.15 0.15 0.15 0.15 0.15 0.32 0.4
282      22.4 22.4 8.7 7.5 6.3 5.4 5.4 5.4 5.4 5.4 14 17.5
283      0.84 0.84 0.6 0.55 0.4 0.35 0.35 0.35 0.35 0.35 0.56 0.77
284      1.04 1.04 0.78 0.72 0.54 0.48 0.48 0.48 0.48 0.48 0.72 0.96
285      1.04 1.04 0.91 0.84 0.63 0.56 0.56 0.56 0.56 0.56 0.72 0.96
286      2.64 2.64 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 2.64 2.64
END MON-GRND-CONC

```

QUAL-PROPS

\*\*\* <PLS > Identifiers and Flags

```

*** x - x   QUALID      QTID  QSD  VPFW  VPFS  QSO  VQO  QIFW  VIQC  QAGW  VAQC
11  286NH3          LBS    0    0    0    2    1    1    3    1    3
END QUAL-PROPS

```

QUAL-INPUT

\*\*\* Storage on surface and nonseasonal parameters

```

***          SQO  POTFW  POTFS  ACQOP  SQOLIM  WSQOP  IOQC  AOQC
*** <PLS >  qty/ac qty/ton qty/ton  qty/   qty/ac   in/hr  qty/ft3  qty/ft3
*** x - x
11  14      0.    0.    0.    0.  1.e-6   1.5    0.    0.
21  24      0.    0.    0.    0.  1.e-6   0.5    0.    0.
31  34      0.    0.    0.    0.  1.e-6   0.9    0.    0.
41  64      0.    0.    0.    0.  1.e-6   0.5    0.    0.
71      0.    0.    0.    0.  1.e-6   1.5    0.    0.
72      0.    0.    0.    0.  1.e-6   0.5    0.    0.
73      0.    0.    0.    0.  1.e-6   0.9    0.    0.
74  76      0.    0.    0.    0.  1.e-6   0.5    0.    0.
81      0.    0.    0.    0.  1.e-6   1.5    0.    0.
82      0.    0.    0.    0.  1.e-6   0.5    0.    0.
83      0.    0.    0.    0.  1.e-6   0.9    0.    0.
84  86      0.    0.    0.    0.  1.e-6   0.5    0.    0.
211 214     0.    0.    0.    0.  1.e-6   1.5    0.    0.
221 224     0.    0.    0.    0.  1.e-6   0.5    0.    0.
231 234     0.    0.    0.    0.  1.e-6   0.9    0.    0.
241 264     0.    0.    0.    0.  1.e-6   0.5    0.    0.
271      0.    0.    0.    0.  1.e-6   1.5    0.    0.
272      0.    0.    0.    0.  1.e-6   0.5    0.    0.
273      0.    0.    0.    0.  1.e-6   0.9    0.    0.
274 276     0.    0.    0.    0.  1.e-6   0.5    0.    0.
281      0.    0.    0.    0.  1.e-6   1.5    0.    0.
282      0.    0.    0.    0.  1.e-6   0.5    0.    0.
283      0.    0.    0.    0.  1.e-6   0.9    0.    0.
284 286     0.    0.    0.    0.  1.e-6   0.5    0.    0.
END QUAL-INPUT

```

MON-ACCUM

\*\*\* <PLS > Value at start of each month for accum rate of QUALOF (lb/ac.day)

```

*** x - x   JAN  FEB  MAR  APR  MAY  JUN  JUL  AUG  SEP  OCT  NOV  DEC
11  142.e-52.e-58.e-68.e-68.e-68.e-68.e-68.e-68.e-68.e-62.e-52.e-5
21  24.0006.00066.e-59.e-5.0001.0001.0001.0001.0001.0001.0001.0006.0006
31  34.0001.00013.e-53.e-54.e-54.e-54.e-54.e-54.e-54.e-5.0001.0001
41  44.0002.00025.e-55.e-56.e-56.e-56.e-56.e-56.e-56.e-56.e-5.0001.0001
51  54.0003.00038.e-58.e-5.0002.0002.0002.0002.0002.0002.0002.0003.0003
61  64.0006.0006.0002.0002.0002.0002.0002.0002.0002.0002.0006.0006
71  2.e-52.e-58.e-68.e-68.e-68.e-68.e-68.e-68.e-68.e-62.e-52.e-5
72  .0006.00066.e-59.e-5.0001.0001.0001.0001.0001.0001.0001.0006.0006
73  .0001.00013.e-53.e-54.e-54.e-54.e-54.e-54.e-54.e-5.0001.0001
74  .0002.00025.e-55.e-56.e-56.e-56.e-56.e-56.e-56.e-5.0001.0001
75  .0003.00038.e-58.e-5.0002.0002.0002.0002.0002.0002.0002.0003.0003
76  .0006.0006.0002.0002.0002.0002.0002.0002.0002.0002.0006.0006
81  2.e-52.e-58.e-68.e-68.e-68.e-68.e-68.e-68.e-68.e-62.e-52.e-5
82  .0006.00066.e-59.e-5.0001.0001.0001.0001.0001.0001.0001.0006.0006
83  .0001.00013.e-53.e-54.e-54.e-54.e-54.e-54.e-54.e-5.0001.0001
84  .0002.00025.e-55.e-56.e-56.e-56.e-56.e-56.e-56.e-5.0001.0001
85  .0003.00038.e-58.e-5.0002.0002.0002.0002.0002.0002.0002.0003.0003
86  .0006.0006.0002.0002.0002.0002.0002.0002.0002.0002.0006.0006
211 2142.e-52.e-58.e-68.e-68.e-68.e-68.e-68.e-68.e-68.e-62.e-52.e-5
221 224.0006.00066.e-59.e-5.0001.0001.0001.0001.0001.0001.0001.0006.0006
231 234.0001.00013.e-53.e-54.e-54.e-54.e-54.e-54.e-54.e-5.0001.0001
241 244.0002.00025.e-55.e-56.e-56.e-56.e-56.e-56.e-56.e-5.0001.0001
251 254.0003.00038.e-58.e-5.0002.0002.0002.0002.0002.0002.0002.0003.0003
261 264.0006.0006.0002.0002.0002.0002.0002.0002.0002.0002.0006.0006
271 2.e-52.e-58.e-68.e-68.e-68.e-68.e-68.e-68.e-68.e-62.e-52.e-5
272  .0006.00066.e-59.e-5.0001.0001.0001.0001.0001.0001.0001.0006.0006
273  .0001.00013.e-53.e-54.e-54.e-54.e-54.e-54.e-54.e-5.0001.0001

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274 .0002.00025.e-55.e-56.e-56.e-56.e-56.e-56.e-56.e-56.e-5.0001.0001
275 .0003.00038.e-58.e-5.0002.0002.0002.0002.0002.0002.0002.0003.0003
276 .0006.0006.0002.0002.0002.0002.0002.0002.0002.0002.0002.0006.0006
281 2.e-52.e-58.e-68.e-68.e-68.e-68.e-68.e-68.e-68.e-62.e-52.e-5
282 .0006.00066.e-59.e-5.0001.0001.0001.0001.0001.0001.0001.0006.0006
283 .0001.00013.e-53.e-54.e-54.e-54.e-54.e-54.e-54.e-54.e-5.0001.0001
284 .0002.00025.e-55.e-56.e-56.e-56.e-56.e-56.e-56.e-5.0001.0001
285 .0003.00038.e-58.e-5.0002.0002.0002.0002.0002.0002.0002.0003.0003
286 .0006.0006.0002.0002.0002.0002.0002.0002.0002.0002.0006.0006
END MON-ACCUM

```

MON-SQOLIM

\*\*\* <PLS > Value at start of month for limiting storage of QUALOF (lb/ac)

```

*** x - x JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC
11 146.e-56.e-54.e-54.e-54.e-54.e-54.e-54.e-54.e-54.e-56.e-56.e-5
21 240.0060.006.0006.0006.0006.0006.0006.0006.0006.0006.0006.0060.0060.006
31 34.0006.0006.0002.0002.0002.0002.0002.0002.0002.0002.0002.0006.0006
41 44.0012.0012.0003.0003.0003.0003.0003.0003.0003.0003.0003.0012.0012
51 540.0030.003.0008.00080.0010.0010.0010.0010.0010.0010.0010.0030.003
61 64.0054.0054.0014.0014.0016.0016.0016.0016.0016.0016.0016.0054.0054
71 6.e-56.e-54.e-54.e-54.e-54.e-54.e-54.e-54.e-54.e-54.e-56.e-56.e-5
72 0.0060.006.0006.0006.0006.0006.0006.0006.0006.0006.0006.0060.0060.006
73 .0006.0006.0002.0002.0002.0002.0002.0002.0002.0002.0002.0006.0006
74 .0012.0012.0003.0003.0003.0003.0003.0003.0003.0003.0003.0012.0012
75 0.0030.003.0008.00080.0010.0010.0010.0010.0010.0010.0010.0030.003
76 .0054.0054.0014.0014.0016.0016.0016.0016.0016.0016.0016.0054.0054
81 6.e-56.e-54.e-54.e-54.e-54.e-54.e-54.e-54.e-54.e-54.e-56.e-56.e-5
82 0.0060.006.0006.0006.0006.0006.0006.0006.0006.0006.0006.0060.0060.006
83 .0006.0006.0002.0002.0002.0002.0002.0002.0002.0002.0002.0006.0006
84 .0012.0012.0003.0003.0003.0003.0003.0003.0003.0003.0003.0012.0012
85 0.0030.003.0008.00080.0010.0010.0010.0010.0010.0010.0010.0030.003
86 .0054.0054.0014.0014.0016.0016.0016.0016.0016.0016.0016.0054.0054
211 2146.e-56.e-54.e-54.e-54.e-54.e-54.e-54.e-54.e-54.e-54.e-56.e-56.e-5
221 2240.0060.006.0006.0006.0006.0006.0006.0006.0006.0006.0006.0060.0060.006
231 234.0006.0006.0002.0002.0002.0002.0002.0002.0002.0002.0002.0006.0006
241 244.0012.0012.0003.0003.0003.0003.0003.0003.0003.0003.0003.0012.0012
251 2540.0030.003.0008.00080.0010.0010.0010.0010.0010.0010.0010.0030.003
261 264.0054.0054.0014.0014.0016.0016.0016.0016.0016.0016.0016.0054.0054
271 6.e-56.e-54.e-54.e-54.e-54.e-54.e-54.e-54.e-54.e-54.e-56.e-56.e-5
272 0.0060.006.0006.0006.0006.0006.0006.0006.0006.0006.0006.0060.0060.006
273 .0006.0006.0002.0002.0002.0002.0002.0002.0002.0002.0002.0006.0006
274 .0012.0012.0003.0003.0003.0003.0003.0003.0003.0003.0003.0012.0012
275 0.0030.003.0008.00080.0010.0010.0010.0010.0010.0010.0010.0030.003
276 .0054.0054.0014.0014.0016.0016.0016.0016.0016.0016.0016.0054.0054
281 6.e-56.e-54.e-54.e-54.e-54.e-54.e-54.e-54.e-54.e-54.e-56.e-56.e-5
282 0.0060.006.0006.0006.0006.0006.0006.0006.0006.0006.0006.0060.0060.006
283 .0006.0006.0002.0002.0002.0002.0002.0002.0002.0002.0002.0006.0006
284 .0012.0012.0003.0003.0003.0003.0003.0003.0003.0003.0003.0012.0012
285 0.0030.003.0008.00080.0010.0010.0010.0010.0010.0010.0010.0030.003
286 .0054.0054.0014.0014.0016.0016.0016.0016.0016.0016.0016.0054.0054
END MON-SQOLIM

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MON-IFLW-CONC

\*\*\* <PLS > Conc of QUAL in interflow outflow for each month (qty/ft3)

```

*** x - x JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC
11 14.0015.0015.0006.0006.0006.0006.0006.0006.0006.0006.0012.0012.0015
21 24.0048.0048.0039.0039.0039.0039.0039.0039.0039.0039.0039.0039.0048
31 34.0008.0008.0007.0007.0007.0007.0007.0007.0007.0007.0007.0007.0008
41 44.0008.0007.0006.0006.0006.0006.0006.0006.0006.0006.0006.0008.0008
51 54.0008.0008.0006.0006.0006.0006.0006.0006.0006.0006.0009.0008.0008
61 64.0017.0017.0015.0015.0015.0015.0015.0015.0015.0015.0015.0015.0017
71 .0015.0015.0006.0006.0006.0006.0006.0006.0006.0006.0012.0012.0015
72 .0048.0048.0039.0039.0039.0039.0039.0039.0039.0039.0039.0039.0048
73 .0008.0008.0007.0007.0007.0007.0007.0007.0007.0007.0007.0007.0008
74 .0008.0007.0006.0006.0006.0006.0006.0006.0006.0006.0006.0008.0008
75 .0008.0008.0006.0006.0006.0006.0006.0006.0006.0006.0009.0008.0008
76 .0017.0017.0015.0015.0015.0015.0015.0015.0015.0015.0015.0015.0017
81 .0015.0015.0006.0006.0006.0006.0006.0006.0006.0006.0012.0012.0015
82 .0048.0048.0039.0039.0039.0039.0039.0039.0039.0039.0039.0039.0048
83 .0008.0008.0007.0007.0007.0007.0007.0007.0007.0007.0007.0007.0008
84 .0008.0007.0006.0006.0006.0006.0006.0006.0006.0006.0006.0008.0008
85 .0008.0008.0006.0006.0006.0006.0006.0006.0006.0006.0009.0008.0008
86 .0017.0017.0015.0015.0015.0015.0015.0015.0015.0015.0015.0015.0017
211 214.0015.0015.0006.0006.0006.0006.0006.0006.0006.0006.0012.0012.0015
221 224.0048.0048.0039.0039.0039.0039.0039.0039.0039.0039.0039.0039.0048
231 234.0008.0008.0007.0007.0007.0007.0007.0007.0007.0007.0007.0007.0008

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241 244.0008.0007.0006.0006.0006.0006.0006.0006.0006.0006.0008.0008
251 254.0008.0008.0006.0006.0006.0006.0006.0006.0006.0009.0008.0008
261 264.0017.0017.0015.0015.0015.0015.0015.0015.0015.0015.0015.0017
271 .0015.0015.0006.0006.0006.0006.0006.0006.0006.0012.0012.0015
272 .0048.0048.0039.0039.0039.0039.0039.0039.0039.0039.0048
273 .0008.0008.0007.0007.0007.0007.0007.0007.0007.0007.0008
274 .0008.0007.0006.0006.0006.0006.0006.0006.0006.0008.0008
275 .0008.0008.0006.0006.0006.0006.0006.0006.0006.0009.0008.0008
276 .0017.0017.0015.0015.0015.0015.0015.0015.0015.0015.0017
281 .0015.0015.0006.0006.0006.0006.0006.0006.0006.0012.0012.0015
282 .0048.0048.0039.0039.0039.0039.0039.0039.0039.0039.0048
283 .0008.0008.0007.0007.0007.0007.0007.0007.0007.0007.0008
284 .0008.0007.0006.0006.0006.0006.0006.0006.0006.0008.0008
285 .0008.0008.0006.0006.0006.0006.0006.0006.0006.0009.0008.0008
286 .0017.0017.0015.0015.0015.0015.0015.0015.0015.0015.0017
END MON-IFLW-CONC

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MON-GRND-CONC

\*\*\* <PLS > Value at start of month for conc of QUAL in groundwater (qty/ft3)

```

*** x - x JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC
11 14 0.010.0050.0040.0040.0040.0040.0040.0040.0040.0040.004 0.01
21 240.0240.0240.0140.0140.0140.0140.0140.0140.0140.0140.024
31 340.0050.0050.0020.0020.0020.0020.0020.002.0022.0025.00250.005
41 440.0060.0060.0020.0020.0020.0020.0020.0020.004.00420.004.0072
51 540.0060.0060.0040.0040.0040.0040.0040.0040.0040.0040.008
61 640.0120.0120.0070.0070.0070.0070.0070.0070.0070.0070.012
71 0.010.0050.0040.0040.0040.0040.0040.0040.0040.004 0.01
72 0.0240.0240.0140.0140.0140.0140.0140.0140.0140.0140.024
73 0.0050.0050.0020.0020.0020.0020.002.0022.0025.00250.005
74 0.0060.0060.0020.0020.0020.0020.0020.004.00420.004.0072
75 0.0060.0060.0040.0040.0040.0040.0040.0040.0040.0040.008
76 0.0120.0120.0070.0070.0070.0070.0070.0070.0070.0070.012
81 0.010.0050.0040.0040.0040.0040.0040.0040.0040.004 0.01
82 0.0240.0240.0140.0140.0140.0140.0140.0140.0140.0140.024
83 0.0050.0050.0020.0020.0020.0020.002.0022.0025.00250.005
84 0.0060.0060.0020.0020.0020.0020.0020.004.00420.004.0072
85 0.0060.0060.0040.0040.0040.0040.0040.0040.0040.0040.008
86 0.0120.0120.0070.0070.0070.0070.0070.0070.0070.0070.012
211 214 0.010.0050.0040.0040.0040.0040.0040.0040.0040.004 0.01
221 2240.0240.0240.0140.0140.0140.0140.0140.0140.0140.0140.024
231 2340.0050.0050.0020.0020.0020.0020.0020.002.0022.0025.00250.005
241 2440.0060.0060.0020.0020.0020.0020.0020.004.00420.004.0072
251 2540.0060.0060.0040.0040.0040.0040.0040.0040.0040.0040.008
261 2640.0120.0120.0070.0070.0070.0070.0070.0070.0070.0070.012
271 0.010.0050.0040.0040.0040.0040.0040.0040.0040.004 0.01
272 0.0240.0240.0140.0140.0140.0140.0140.0140.0140.0140.024
273 0.0050.0050.0020.0020.0020.0020.002.0022.0025.00250.005
274 0.0060.0060.0020.0020.0020.0020.0020.004.00420.004.0072
275 0.0060.0060.0040.0040.0040.0040.0040.0040.0040.0040.008
276 0.0120.0120.0070.0070.0070.0070.0070.0070.0070.0070.012
281 0.010.0050.0040.0040.0040.0040.0040.0040.0040.004 0.01
282 0.0240.0240.0140.0140.0140.0140.0140.0140.0140.0140.024
283 0.0050.0050.0020.0020.0020.0020.002.0022.0025.00250.005
284 0.0060.0060.0020.0020.0020.0020.0020.004.00420.004.0072
285 0.0060.0060.0040.0040.0040.0040.0040.0040.0040.0040.008
286 0.0120.0120.0070.0070.0070.0070.0070.0070.0070.0070.012
END MON-GRND-CONC

```

QUAL-PROPS

\*\*\* <PLS > Identifiers and Flags

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*** x - x QUALID QTID QSD VPFW VPFS QSO VQO QIFW VIQC QAGW VAQC
11 286PO4 LBS 1 1 0 0 0 1 3 1 3
END QUAL-PROPS

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QUAL-INPUT

\*\*\* Storage on surface and nonseasonal parameters

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*** SQO POTFW POTFS ACQOP SQOLIM WSQOP IOQC AOQC
*** <PLS > qty/ac qty/ton qty/ton qty/ ac.day
*** x - x
11 286 0. 0. 0. 0. 1.e-6 1.64 0. 0.
END QUAL-INPUT

```

MON-POTFW

\*\*\* <PLS > Value at start of each month for washoff potency factor (lb/ton)

```

*** x - x JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC
11 140.0060.0060.0060.0060.0120.0120.0120.0120.0120.0120.006

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21 24 6.4 6.4 1.9 1.9 2.3 2.6 2.6 2.6 2.6 1.9 7.6 6.4  
 31 34 0.09 0.09 0.09 0.090.1350.1350.1350.1350.1350.1350.135 0.09  
 41 44 0.36 0.36 0.36 0.360.4950.5850.5850.5850.5850.5850.585 0.36  
 51 54 0.45 0.45 0.45 0.45 0.540.6750.6750.6750.6750.6750.675 0.45  
 61 64 0.36 0.36 0.36 0.36 0.42 0.45 0.45 0.45 0.45 0.45 0.45 0.36  
 71 0.0060.0060.0060.0060.0120.0120.0120.0120.0120.0120.0120.006  
 72 6.4 6.4 1.9 1.9 2.3 2.6 2.6 2.6 2.6 1.9 7.6 6.4  
 73 0.09 0.09 0.09 0.090.1350.1350.1350.1350.1350.1350.135 0.09  
 74 0.36 0.36 0.36 0.360.4950.5850.5850.5850.5850.5850.585 0.36  
 75 0.45 0.45 0.45 0.45 0.540.6750.6750.6750.6750.6750.675 0.45  
 76 0.36 0.36 0.36 0.36 0.42 0.45 0.45 0.45 0.45 0.45 0.45 0.36  
 81 0.0060.0060.0060.0060.0120.0120.0120.0120.0120.0120.0120.006  
 82 6.4 6.4 1.9 1.9 2.3 2.6 2.6 2.6 2.6 1.9 7.6 6.4  
 83 0.09 0.09 0.09 0.090.1350.1350.1350.1350.1350.1350.135 0.09  
 84 0.36 0.36 0.36 0.360.4950.5850.5850.5850.5850.5850.585 0.36  
 85 0.45 0.45 0.45 0.45 0.540.6750.6750.6750.6750.6750.675 0.45  
 86 0.36 0.36 0.36 0.36 0.42 0.45 0.45 0.45 0.45 0.45 0.45 0.36  
 211 2140.0060.0060.0060.0060.0120.0120.0120.0120.0120.0120.0120.006  
 221 224 6.4 6.4 1.9 1.9 2.3 2.6 2.6 2.6 2.6 1.9 7.6 6.4  
 231 234 0.09 0.09 0.09 0.090.1350.1350.1350.1350.1350.1350.135 0.09  
 241 2440.1080.1080.1080.108.1485.1755.1755.1755.1755.1755.17550.108  
 251 2540.1350.1350.1350.1350.162.2025.2025.2025.2025.2025.20250.135  
 261 264 0.36 0.36 0.36 0.36 0.42 0.45 0.45 0.45 0.45 0.45 0.45 0.36  
 271 0.0060.0060.0060.0060.0120.0120.0120.0120.0120.0120.0120.006  
 272 6.4 6.4 1.9 1.9 2.3 2.6 2.6 2.6 2.6 1.9 7.6 6.4  
 273 0.09 0.09 0.09 0.090.1350.1350.1350.1350.1350.1350.135 0.09  
 274 0.36 0.36 0.36 0.360.4950.5850.5850.5850.5850.5850.585 0.36  
 275 0.45 0.45 0.45 0.45 0.540.6750.6750.6750.6750.6750.675 0.45  
 276 0.36 0.36 0.36 0.36 0.42 0.45 0.45 0.45 0.45 0.45 0.45 0.36  
 281 0.0060.0060.0060.0060.0120.0120.0120.0120.0120.0120.0120.006  
 282 6.4 6.4 1.9 1.9 2.3 2.6 2.6 2.6 2.6 1.9 7.6 6.4  
 283 0.09 0.09 0.09 0.090.1350.1350.1350.1350.1350.1350.135 0.09  
 284 0.36 0.36 0.36 0.360.4950.5850.5850.5850.5850.5850.585 0.36  
 285 0.45 0.45 0.45 0.45 0.540.6750.6750.6750.6750.6750.675 0.45  
 286 0.36 0.36 0.36 0.36 0.42 0.45 0.45 0.45 0.45 0.45 0.45 0.36  
 END MON-POTFW

MON-IFLW-CONC

\*\*\* <PLS > Conc of QUAL in interflow outflow for each month (qty/ft3)  
 \*\*\* x - x JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC  
 11 14.0035.0035.0035.00350.004.0165.0195.0225.0225.0225.01950.005  
 21 240.1950.1950.1950.1950.225 0.85 0.95 1.05 1.05 1.05 0.950.225  
 31 34.0065.0065.0065.0065.00750.0360.0420.0450.0450.045.0405 0.01  
 41 44.0095.0095.0095.0095.01050.045.05250.0570.0570.0570.051.0125  
 51 54.0115.0115.0115.0115.0125.0525.05850.0630.0630.0630.0630.016  
 61 640.0360.0360.0360.036 0.04 0.180.195 0.21 0.21 0.21 0.21 0.05  
 71 .0035.0035.0035.00350.004.0165.0195.0225.0225.0225.01950.005  
 72 0.1950.1950.1950.1950.225 0.85 0.95 1.05 1.05 1.05 0.950.225  
 73 .0065.0065.0065.0065.00750.0360.0420.0450.0450.045.0405 0.01  
 74 .0095.0095.0095.0095.01050.045.05250.0570.0570.0570.051.0125  
 75 .0115.0115.0115.0115.0125.0525.05850.0630.0630.0630.0630.016  
 76 0.0360.0360.0360.036 0.04 0.180.195 0.21 0.21 0.21 0.21 0.05  
 81 .0035.0035.0035.00350.004.0165.0195.0225.0225.0225.01950.005  
 82 0.1950.1950.1950.1950.225 0.85 0.95 1.05 1.05 1.05 0.950.225  
 83 .0065.0065.0065.0065.00750.0360.0420.0450.0450.045.0405 0.01  
 84 .0095.0095.0095.0095.01050.045.05250.0570.0570.0570.051.0125  
 85 .0115.0115.0115.0115.0125.0525.05850.0630.0630.0630.0630.016  
 86 0.0360.0360.0360.036 0.04 0.180.195 0.21 0.21 0.21 0.21 0.05  
 211 214.0035.0035.0035.00350.004.0165.0195.0225.0225.0225.01950.005  
 221 2240.1950.1950.1950.1950.225 0.85 0.95 1.05 1.05 1.05 0.950.225  
 231 234.0065.0065.0065.0065.00750.0360.0420.0450.0450.045.0405 0.01  
 241 244.0095.0095.0095.0095.01050.045.05250.0570.0570.0570.051.0125  
 251 254.0115.0115.0115.0115.0125.0525.05850.0630.0630.0630.0630.016  
 261 2640.0360.0360.0360.036 0.04 0.180.195 0.21 0.21 0.21 0.21 0.05  
 271 .0035.0035.0035.00350.004.0165.0195.0225.0225.0225.01950.005  
 272 0.1950.1950.1950.1950.225 0.85 0.95 1.05 1.05 1.05 0.950.225  
 273 .0065.0065.0065.0065.00750.0360.0420.0450.0450.045.0405 0.01  
 274 .0095.0095.0095.0095.01050.045.05250.0570.0570.0570.051.0125  
 275 .0115.0115.0115.0115.0125.0525.05850.0630.0630.0630.0630.016  
 276 0.0360.0360.0360.036 0.04 0.180.195 0.21 0.21 0.21 0.21 0.05  
 281 .0035.0035.0035.00350.004.0165.0195.0225.0225.0225.01950.005  
 282 0.1950.1950.1950.1950.225 0.85 0.95 1.05 1.05 1.05 0.950.225  
 283 .0065.0065.0065.0065.00750.0360.0420.0450.0450.045.0405 0.01  
 284 .0095.0095.0095.0095.01050.045.05250.0570.0570.0570.051.0125  
 285 .0115.0115.0115.0115.0125.0525.05850.0630.0630.0630.0630.016  
 286 0.0360.0360.0360.036 0.04 0.180.195 0.21 0.21 0.21 0.21 0.05

END MON-IFLW-CONC

MON-GRND-CONC

```

*** <PLS > Value at start of month for conc of QUAL in groundwater (qty/ft3)
*** x - x JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC
11 14.0035.0035.0035.0035.00350.012.0135.0165.0165.0165.0165.0055
21 24 0.09 0.09 0.09 0.09 0.090.3750.475 0.55 0.55 0.55 0.55 0.15
31 340.0040.0040.0040.0040.0040.0150.0210.0240.0240.0240.0240.006
41 440.0050.0050.0050.0050.0050.0180.024 0.03 0.03 0.03 0.03.0075
51 540.0110.0110.0110.0110.0110.0330.0330.0420.0420.0420.042.0125
61 640.0350.0350.0350.0350.0350.1050.1050.1260.1260.1260.1260.038
71 .0035.0035.0035.0035.00350.012.0135.0165.0165.0165.0165.0055
72 0.09 0.09 0.09 0.09 0.090.3750.475 0.55 0.55 0.55 0.55 0.15
73 0.0040.0040.0040.0040.0040.0150.0210.0240.0240.0240.0240.006
74 0.0050.0050.0050.0050.0050.0180.024 0.03 0.03 0.03 0.03.0075
75 0.0110.0110.0110.0110.0110.0330.0330.0420.0420.0420.042.0125
76 0.0350.0350.0350.0350.0350.1050.1050.1260.1260.1260.1260.038
81 .0035.0035.0035.0035.00350.012.0135.0165.0165.0165.0165.0055
82 0.09 0.09 0.09 0.09 0.090.3750.475 0.55 0.55 0.55 0.55 0.15
83 0.0040.0040.0040.0040.0040.0150.0210.0240.0240.0240.0240.006
84 0.0050.0050.0050.0050.0050.0180.024 0.03 0.03 0.03 0.03.0075
85 0.0110.0110.0110.0110.0110.0330.0330.0420.0420.0420.042.0125
86 0.0350.0350.0350.0350.0350.1050.1050.1260.1260.1260.1260.038
211 214.0035.0035.0035.0035.00350.012.0135.0165.0165.0165.0165.0055
221 224 0.09 0.09 0.09 0.09 0.090.3750.475 0.55 0.55 0.55 0.55 0.15
231 2340.0040.0040.0040.0040.0040.0150.0210.0240.0240.0240.0240.006
241 2440.0050.0050.0050.0050.0050.0180.024 0.03 0.03 0.03 0.03.0075
251 2540.0110.0110.0110.0110.0110.0330.0330.0420.0420.0420.042.0125
261 2640.0350.0350.0350.0350.0350.1050.1050.1260.1260.1260.1260.038
271 .0035.0035.0035.0035.00350.012.0135.0165.0165.0165.0165.0055
272 0.09 0.09 0.09 0.09 0.090.3750.475 0.55 0.55 0.55 0.55 0.15
273 0.0040.0040.0040.0040.0040.0150.0210.0240.0240.0240.0240.006
274 0.0050.0050.0050.0050.0050.0180.024 0.03 0.03 0.03 0.03.0075
275 0.0110.0110.0110.0110.0110.0330.0330.0420.0420.0420.042.0125
276 0.0350.0350.0350.0350.0350.1050.1050.1260.1260.1260.1260.038
281 .0035.0035.0035.0035.00350.012.0135.0165.0165.0165.0165.0055
282 0.09 0.09 0.09 0.09 0.090.3750.475 0.55 0.55 0.55 0.55 0.15
283 0.0040.0040.0040.0040.0040.0150.0210.0240.0240.0240.0240.006
284 0.0050.0050.0050.0050.0050.0180.024 0.03 0.03 0.03 0.03.0075
285 0.0110.0110.0110.0110.0110.0330.0330.0420.0420.0420.042.0125
286 0.0350.0350.0350.0350.0350.1050.1050.1260.1260.1260.1260.038
END MON-GRND-CONC

```

QUAL-PROPS

```

*** <PLS > Identifiers and Flags
*** x - x QUALID QTID QSD VPFW VPFS QSO VQO QIFW VIQC QAGW VAQC
11 286BOD/Organics LBS 0 0 0 2 1 1 3 1 3
END QUAL-PROPS

```

QUAL-INPUT

```

*** Storage on surface and nonseasonal parameters
*** SQO POTFW POTFS ACQOP SQOLIM WSQOP IOQC AOQC
*** <PLS > qty/ac qty/ton qty/ton qty/ ac.day qty/ac in/hr qty/ft3 qty/ft3
*** x - x
11 14 0. 0. 0. 0. 1.e-6 0.7 0. 0.
21 24 0. 0. 0. 0. 1.e-6 0.5 0. 0.
31 34 0. 0. 0. 0. 1.e-6 0.6 0. 0.
41 64 0. 0. 0. 0. 1.e-6 0.5 0. 0.
71 0. 0. 0. 0. 1.e-6 0.7 0. 0.
72 0. 0. 0. 0. 1.e-6 0.5 0. 0.
73 0. 0. 0. 0. 1.e-6 0.6 0. 0.
74 76 0. 0. 0. 0. 1.e-6 0.5 0. 0.
81 0. 0. 0. 0. 1.e-6 0.7 0. 0.
82 0. 0. 0. 0. 1.e-6 0.5 0. 0.
83 0. 0. 0. 0. 1.e-6 0.6 0. 0.
84 86 0. 0. 0. 0. 1.e-6 0.5 0. 0.
211 214 0. 0. 0. 0. 1.e-6 0.7 0. 0.
221 224 0. 0. 0. 0. 1.e-6 0.5 0. 0.
231 234 0. 0. 0. 0. 1.e-6 0.6 0. 0.
241 264 0. 0. 0. 0. 1.e-6 0.5 0. 0.
271 0. 0. 0. 0. 1.e-6 0.7 0. 0.
272 0. 0. 0. 0. 1.e-6 0.5 0. 0.
273 0. 0. 0. 0. 1.e-6 0.6 0. 0.
274 276 0. 0. 0. 0. 1.e-6 0.5 0. 0.
281 0. 0. 0. 0. 1.e-6 0.7 0. 0.
282 0. 0. 0. 0. 1.e-6 0.5 0. 0.

```

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283 0. 0. 0. 0. 1.e-6 0.6 0. 0.  
 284 286 0. 0. 0. 0. 1.e-6 0.5 0. 0.  
 END QUAL-INPUT

MON-ACCUM

\*\*\* <PLS > Value at start of each month for accum rate of QUALOF (lb/ac.day)  
 \*\*\* x - x JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC  
 11 14 1.5 1.5 1.5 2.1 2.1 2.8 2.8 2.8 4 4 2.1 1.5  
 21 24 2.1 2.1 2.1 3 3 4.5 4.5 4.5 4.95 4.95 2.1 2.1  
 31 34 1.68 1.68 1.68 2.16 2.16 3.24 3.24 3.24 3.24 2.52 1.68 1.68  
 41 44 0.34 0.34 0.34 0.46 0.46 0.69 0.69 0.69 0.69 0.51 0.34 0.34  
 51 54 0.42 0.42 0.42 0.56 0.56 0.84 0.84 0.84 0.84 0.63 0.42 0.42  
 61 64 0.36 0.36 0.36 0.46 0.46 0.69 0.69 0.69 0.69 0.54 0.36 0.36  
 71 1.5 1.5 1.5 2.1 2.1 2.8 2.8 2.8 4 4 2.1 1.5  
 72 2.1 2.1 2.1 3 3 4.5 4.5 4.5 4.95 4.95 2.1 2.1  
 73 1.68 1.68 1.68 2.16 2.16 3.24 3.24 3.24 3.24 2.52 1.68 1.68  
 74 0.34 0.34 0.34 0.46 0.46 0.69 0.69 0.69 0.69 0.51 0.34 0.34  
 75 0.42 0.42 0.42 0.56 0.56 0.84 0.84 0.84 0.84 0.63 0.42 0.42  
 76 0.36 0.36 0.36 0.46 0.46 0.69 0.69 0.69 0.69 0.54 0.36 0.36  
 81 1.5 1.5 1.5 2.1 2.1 2.8 2.8 2.8 4 4 2.1 1.5  
 82 2.1 2.1 2.1 3 3 4.5 4.5 4.5 4.95 4.95 2.1 2.1  
 83 1.68 1.68 1.68 2.16 2.16 3.24 3.24 3.24 3.24 2.52 1.68 1.68  
 84 0.34 0.34 0.34 0.46 0.46 0.69 0.69 0.69 0.69 0.51 0.34 0.34  
 85 0.42 0.42 0.42 0.56 0.56 0.84 0.84 0.84 0.84 0.63 0.42 0.42  
 86 0.36 0.36 0.36 0.46 0.46 0.69 0.69 0.69 0.69 0.54 0.36 0.36  
 211 214 1.5 1.5 1.5 2.1 2.1 2.8 2.8 2.8 4 4 2.1 1.5  
 221 224 2.1 2.1 2.1 3 3 4.5 4.5 4.5 4.95 4.95 2.1 2.1  
 231 234 1.68 1.68 1.68 2.16 2.16 3.24 3.24 3.24 3.24 2.52 1.68 1.68  
 241 244 0.34 0.34 0.34 0.46 0.46 0.69 0.69 0.69 0.69 0.51 0.34 0.34  
 251 254 0.42 0.42 0.42 0.56 0.56 0.84 0.84 0.84 0.84 0.63 0.42 0.42  
 261 264 0.36 0.36 0.36 0.46 0.46 0.69 0.69 0.69 0.69 0.54 0.36 0.36  
 271 1.5 1.5 1.5 2.1 2.1 2.8 2.8 2.8 4 4 2.1 1.5  
 272 2.1 2.1 2.1 3 3 4.5 4.5 4.5 4.95 4.95 2.1 2.1  
 273 1.68 1.68 1.68 2.16 2.16 3.24 3.24 3.24 3.24 2.52 1.68 1.68  
 274 0.34 0.34 0.34 0.46 0.46 0.69 0.69 0.69 0.69 0.51 0.34 0.34  
 275 0.42 0.42 0.42 0.56 0.56 0.84 0.84 0.84 0.84 0.63 0.42 0.42  
 276 0.36 0.36 0.36 0.46 0.46 0.69 0.69 0.69 0.69 0.54 0.36 0.36  
 281 1.5 1.5 1.5 2.1 2.1 2.8 2.8 2.8 4 4 2.1 1.5  
 282 2.1 2.1 2.1 3 3 4.5 4.5 4.5 4.95 4.95 2.1 2.1  
 283 1.68 1.68 1.68 2.16 2.16 3.24 3.24 3.24 3.24 2.52 1.68 1.68  
 284 0.34 0.34 0.34 0.46 0.46 0.69 0.69 0.69 0.69 0.51 0.34 0.34  
 285 0.42 0.42 0.42 0.56 0.56 0.84 0.84 0.84 0.84 0.63 0.42 0.42  
 286 0.36 0.36 0.36 0.46 0.46 0.69 0.69 0.69 0.69 0.54 0.36 0.36  
 END MON-ACCUM

MON-SQOLIM

\*\*\* <PLS > Value at start of month for limiting storage of QUALOF (lb/ac)  
 \*\*\* x - x JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC  
 11 14 18 18 18 24 24 32 32 32 48 48 18 18  
 21 24 60 60 84 108 108 162 162 162 180 180 60 60  
 31 34 24 24 24 31.2 31.2 46.8 46.8 46.8 61.2 61.2 24 24  
 41 44 6 6 6 7.6 7.6 11.4 11.4 11.4 13.2 13.2 6 6  
 51 54 9.6 9.6 9.6 12.8 12.8 19.2 19.2 19.2 24 24 9.6 9.6  
 61 64 8 8 8 10 10 15 15 15 18 18 8 8  
 71 18 18 18 24 24 32 32 32 48 48 18 18  
 72 60 60 84 108 108 162 162 162 180 180 60 60  
 73 24 24 24 31.2 31.2 46.8 46.8 46.8 61.2 61.2 24 24  
 74 6 6 6 7.6 7.6 11.4 11.4 11.4 13.2 13.2 6 6  
 75 9.6 9.6 9.6 12.8 12.8 19.2 19.2 19.2 24 24 9.6 9.6  
 76 8 8 8 10 10 15 15 15 18 18 8 8  
 81 18 18 18 24 24 32 32 32 48 48 18 18  
 82 60 60 84 108 108 162 162 162 180 180 60 60  
 83 24 24 24 31.2 31.2 46.8 46.8 46.8 61.2 61.2 24 24  
 84 6 6 6 7.6 7.6 11.4 11.4 11.4 13.2 13.2 6 6  
 85 9.6 9.6 9.6 12.8 12.8 19.2 19.2 19.2 24 24 9.6 9.6  
 86 8 8 8 10 10 15 15 15 18 18 8 8  
 211 214 18 18 18 24 24 32 32 32 48 48 18 18  
 221 224 60 60 84 108 108 162 162 162 180 180 60 60  
 231 234 24 24 24 31.2 31.2 46.8 46.8 46.8 61.2 61.2 24 24  
 241 244 6 6 6 7.6 7.6 11.4 11.4 11.4 13.2 13.2 6 6  
 251 254 9.6 9.6 9.6 12.8 12.8 19.2 19.2 19.2 24 24 9.6 9.6  
 261 264 8 8 8 10 10 15 15 15 18 18 8 8  
 271 18 18 18 24 24 32 32 32 48 48 18 18  
 272 60 60 84 108 108 162 162 162 180 180 60 60  
 273 24 24 24 31.2 31.2 46.8 46.8 46.8 61.2 61.2 24 24  
 274 6 6 6 7.6 7.6 11.4 11.4 11.4 13.2 13.2 6 6

275	9.6	9.6	9.6	12.8	12.8	19.2	19.2	19.2	24	24	9.6	9.6
276	8	8	8	10	10	15	15	15	18	18	8	8
281	18	18	18	24	24	32	32	32	48	48	18	18
282	60	60	84	108	108	162	162	162	180	180	60	60
283	24	24	24	31.2	31.2	46.8	46.8	46.8	61.2	61.2	24	24
284	6	6	6	7.6	7.6	11.4	11.4	11.4	13.2	13.2	6	6
285	9.6	9.6	9.6	12.8	12.8	19.2	19.2	19.2	24	24	9.6	9.6
286	8	8	8	10	10	15	15	15	18	18	8	8

END MON-SQOLIM

MON-IFLW-CONC

\*\*\* <PLS > Conc of QUAL in interflow outflow for each month (qty/ft3)

\*\*\* x - x

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
11	14	1.2	1.2	1.2	3	3	4.5	4.5	4.5	4.5	6.3	3.6	1.2
21	24	24	24	24	32	32	80	80	80	100	100	24	24
31	34	2.4	2.4	2.4	3.6	3.6	5.4	5.4	5.4	7.2	7.2	2.4	2.4
41	44	10	10	10	15	15	18	18	18	21	21	10	10
51	54	4	4	4	6.4	6.4	9.6	9.6	9.6	10.8	10.8	4	4
61	64	4.8	4.8	4.8	7.2	7.2	10.8	10.8	10.8	12	12	4.8	4.8
71		1.2	1.2	1.2	3	3	4.5	4.5	4.5	4.5	6.3	3.6	1.2
72		24	24	24	32	32	80	80	80	100	100	24	24
73		2.4	2.4	2.4	3.6	3.6	5.4	5.4	5.4	7.2	7.2	2.4	2.4
74		10	10	10	15	15	18	18	18	21	21	10	10
75		4	4	4	6.4	6.4	9.6	9.6	9.6	10.8	10.8	4	4
76		4.8	4.8	4.8	7.2	7.2	10.8	10.8	10.8	12	12	4.8	4.8
81		1.2	1.2	1.2	3	3	4.5	4.5	4.5	4.5	6.3	3.6	1.2
82		24	24	24	32	32	80	80	80	100	100	24	24
83		2.4	2.4	2.4	3.6	3.6	5.4	5.4	5.4	7.2	7.2	2.4	2.4
84		10	10	10	15	15	18	18	18	21	21	10	10
85		4	4	4	6.4	6.4	9.6	9.6	9.6	10.8	10.8	4	4
86		4.8	4.8	4.8	7.2	7.2	10.8	10.8	10.8	12	12	4.8	4.8
211	214	1.2	1.2	1.2	3	3	4.5	4.5	4.5	4.5	6.3	3.6	1.2
221	224	24	24	24	32	32	80	80	80	100	100	24	24
231	234	2.4	2.4	2.4	3.6	3.6	5.4	5.4	5.4	7.2	7.2	2.4	2.4
241	244	10	10	10	15	15	18	18	18	21	21	10	10
251	254	4	4	4	6.4	6.4	9.6	9.6	9.6	10.8	10.8	4	4
261	264	4.8	4.8	4.8	7.2	7.2	10.8	10.8	10.8	12	12	4.8	4.8
271		1.2	1.2	1.2	3	3	4.5	4.5	4.5	4.5	6.3	3.6	1.2
272		24	24	24	32	32	80	80	80	100	100	24	24
273		2.4	2.4	2.4	3.6	3.6	5.4	5.4	5.4	7.2	7.2	2.4	2.4
274		10	10	10	15	15	18	18	18	21	21	10	10
275		4	4	4	6.4	6.4	9.6	9.6	9.6	10.8	10.8	4	4
276		4.8	4.8	4.8	7.2	7.2	10.8	10.8	10.8	12	12	4.8	4.8
281		1.2	1.2	1.2	3	3	4.5	4.5	4.5	4.5	6.3	3.6	1.2
282		24	24	24	32	32	80	80	80	100	100	24	24
283		2.4	2.4	2.4	3.6	3.6	5.4	5.4	5.4	7.2	7.2	2.4	2.4
284		10	10	10	15	15	18	18	18	21	21	10	10
285		4	4	4	6.4	6.4	9.6	9.6	9.6	10.8	10.8	4	4
286		4.8	4.8	4.8	7.2	7.2	10.8	10.8	10.8	12	12	4.8	4.8

END MON-IFLW-CONC

MON-GRND-CONC

\*\*\* <PLS > Value at start of month for conc of QUAL in groundwater (qty/ft3)

\*\*\* x - x

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
11	14	3	3	3	3.75	4.5	4.5	4.5	4.5	4.5	3.75	3	3
21	24	70	70	70	80	90	90	90	90	100	100	70	70
31	34	4	4	4	6	7	7	7	7	7	6	4	4
41	44	11	11	11	13.75	16.5	16.5	16.5	16.5	16.5	11	11	11
51	54	4.5	4.5	4.5	7	8	8	8	8	8	4.5	4.5	4.5
61	64	5	5	5	8	9	9	9	9	9	5	5	5
71		3	3	3	3.75	4.5	4.5	4.5	4.5	4.5	3.75	3	3
72		70	70	70	80	90	90	90	90	100	100	70	70
73		4	4	4	6	7	7	7	7	7	6	4	4
74		11	11	11	13.75	16.5	16.5	16.5	16.5	16.5	11	11	11
75		4.5	4.5	4.5	7	8	8	8	8	8	4.5	4.5	4.5
76		5	5	5	8	9	9	9	9	9	5	5	5
81		3	3	3	3.75	4.5	4.5	4.5	4.5	4.5	3.75	3	3
82		70	70	70	80	90	90	90	90	100	100	70	70
83		4	4	4	6	7	7	7	7	7	6	4	4
84		11	11	11	13.75	16.5	16.5	16.5	16.5	16.5	11	11	11
86		5	5	5	8	9	9	9	9	9	5	5	5
211	214	3	3	3	3.75	4.5	4.5	4.5	4.5	4.5	3.75	3	3
221	224	70	70	70	80	90	90	90	90	100	100	70	70
231	234	4	4	4	6	7	7	7	7	7	6	4	4
241	244	11	11	11	13.75	16.5	16.5	16.5	16.5	16.5	11	11	11
251	254	4.5	4.5	4.5	7	8	8	8	8	8	4.5	4.5	4.5

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261 264 5 5 5 8 9 9 9 9 9 5 5
271 3 3 3 3.75 4.5 4.5 4.5 4.5 4.5 3.75 3 3
272 70 70 70 80 90 90 90 100 100 70 70
273 4 4 4 6 7 7 7 7 7 6 4 4
274 11 11 1113.75 16.5 16.5 16.5 16.5 16.5 16.5 11 11
275 4.5 4.5 4.5 7 8 8 8 8 8 4.5 4.5
276 5 5 5 8 9 9 9 9 9 5 5
281 3 3 3 3.75 4.5 4.5 4.5 4.5 4.5 3.75 3 3
282 70 70 70 80 90 90 90 100 100 70 70
283 4 4 4 6 7 7 7 7 7 6 4 4
284 11 11 1113.75 16.5 16.5 16.5 16.5 16.5 16.5 11 11
286 5 5 5 8 9 9 9 9 9 5 5
END MON-GRND-CONC

```

QUAL-PROPS

```

*** <PLS > Identifiers and Flags
*** x - x QUALID QTID QSD VPFW VPFS QSO VQO QIFW VIQC QAGW VAQC
11 286Alkalinity LBS 0 0 0 2 1 1 3 1 3
END QUAL-PROPS

```

QUAL-INPUT

```

*** Storage on surface and nonseasonal parameters
*** SQO POTFW POTFS ACQOP SQOLIM WSQOP IOQC AOQC
*** <PLS > qty/ac qty/ton qty/ton qty/ ac.day qty/ac in/hr qty/ft3 qty/ft3
*** x - x
11 14 2. 0. 0. 0. 1.e-6 0.7 0. 0.
21 24 2. 0. 0. 0. 1.e-6 0.5 0. 0.
31 34 2. 0. 0. 0. 1.e-6 0.6 0. 0.
41 64 2. 0. 0. 0. 1.e-6 0.5 0. 0.
71 2. 0. 0. 0. 1.e-6 0.7 0. 0.
72 2. 0. 0. 0. 1.e-6 0.5 0. 0.
73 2. 0. 0. 0. 1.e-6 0.6 0. 0.
74 76 2. 0. 0. 0. 1.e-6 0.5 0. 0.
81 2. 0. 0. 0. 1.e-6 0.7 0. 0.
82 2. 0. 0. 0. 1.e-6 0.5 0. 0.
83 2. 0. 0. 0. 1.e-6 0.6 0. 0.
84 86 2. 0. 0. 0. 1.e-6 0.5 0. 0.
211 214 2. 0. 0. 0. 1.e-6 0.7 0. 0.
221 224 2. 0. 0. 0. 1.e-6 0.5 0. 0.
231 234 2. 0. 0. 0. 1.e-6 0.6 0. 0.
241 264 2. 0. 0. 0. 1.e-6 0.5 0. 0.
271 2. 0. 0. 0. 1.e-6 0.7 0. 0.
272 2. 0. 0. 0. 1.e-6 0.5 0. 0.
273 2. 0. 0. 0. 1.e-6 0.6 0. 0.
274 276 2. 0. 0. 0. 1.e-6 0.5 0. 0.
281 2. 0. 0. 0. 1.e-6 0.7 0. 0.
282 2. 0. 0. 0. 1.e-6 0.5 0. 0.
283 2. 0. 0. 0. 1.e-6 0.6 0. 0.
284 286 2. 0. 0. 0. 1.e-6 0.5 0. 0.
END QUAL-INPUT

```

MON-ACCUM

```

*** <PLS > Value at start of each month for accum rate of QUALOF (lb/ac.day)
*** x - x JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC
11 14 0.1 0.1 0.12 0.12 0.14 0.14 0.14 0.14 0.12 0.1 0.1 0.1
21 24 0.4 0.4 0.42 0.42 0.44 0.44 0.44 0.44 0.42 0.4 0.4 0.4
31 34 0.08 0.080 0.0960 0.0960 0.1120 0.1120 0.1120 0.1120 0.096 0.08 0.08 0.08
41 44 0.03 0.030 0.0320 0.0320 0.0340 0.0340 0.0340 0.0340 0.032 0.03 0.03 0.03
51 64 0.04 0.040 0.0420 0.0420 0.0440 0.0440 0.0440 0.0440 0.042 0.04 0.04 0.04
71 0.1 0.1 0.12 0.12 0.14 0.14 0.14 0.14 0.12 0.1 0.1 0.1
72 0.4 0.4 0.42 0.42 0.44 0.44 0.44 0.44 0.42 0.4 0.4 0.4
73 0.08 0.080 0.0960 0.0960 0.1120 0.1120 0.1120 0.1120 0.096 0.08 0.08 0.08
74 0.03 0.030 0.0320 0.0320 0.0340 0.0340 0.0340 0.0340 0.032 0.03 0.03 0.03
75 76 0.04 0.040 0.0420 0.0420 0.0440 0.0440 0.0440 0.0440 0.042 0.04 0.04 0.04
81 0.1 0.1 0.12 0.12 0.14 0.14 0.14 0.14 0.12 0.1 0.1 0.1
82 0.4 0.4 0.42 0.42 0.44 0.44 0.44 0.44 0.42 0.4 0.4 0.4
83 0.08 0.080 0.0960 0.0960 0.1120 0.1120 0.1120 0.1120 0.096 0.08 0.08 0.08
84 0.03 0.030 0.0320 0.0320 0.0340 0.0340 0.0340 0.0340 0.032 0.03 0.03 0.03
85 86 0.04 0.040 0.0420 0.0420 0.0440 0.0440 0.0440 0.0440 0.042 0.04 0.04 0.04
211 214 0.1 0.1 0.12 0.12 0.14 0.14 0.14 0.14 0.12 0.1 0.1 0.1
221 224 0.4 0.4 0.42 0.42 0.44 0.44 0.44 0.44 0.42 0.4 0.4 0.4
231 234 0.08 0.080 0.0960 0.0960 0.1120 0.1120 0.1120 0.1120 0.096 0.08 0.08 0.08
241 244 0.03 0.030 0.0320 0.0320 0.0340 0.0340 0.0340 0.0340 0.032 0.03 0.03 0.03
251 264 0.04 0.040 0.0420 0.0420 0.0440 0.0440 0.0440 0.0440 0.042 0.04 0.04 0.04
271 0.1 0.1 0.12 0.12 0.14 0.14 0.14 0.14 0.12 0.1 0.1 0.1
272 0.4 0.4 0.42 0.42 0.44 0.44 0.44 0.44 0.42 0.4 0.4 0.4

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273      0.08 0.080.0960.0960.1120.1120.1120.1120.096 0.08 0.08 0.08
274      0.03 0.030.0320.0320.0340.0340.0340.0340.032 0.03 0.03 0.03
275 276 0.04 0.040.0420.0420.0440.0440.0440.0440.042 0.04 0.04 0.04
281      0.1 0.1 0.12 0.12 0.14 0.14 0.14 0.14 0.12 0.1 0.1 0.1
282      0.4 0.4 0.42 0.42 0.44 0.44 0.44 0.44 0.42 0.4 0.4 0.4
283      0.08 0.080.0960.0960.1120.1120.1120.1120.096 0.08 0.08 0.08
284      0.03 0.030.0320.0320.0340.0340.0340.0340.032 0.03 0.03 0.03
285 286 0.04 0.040.0420.0420.0440.0440.0440.0440.042 0.04 0.04 0.04
END MON-ACCUM

```

MON-SQOLIM

```

*** <PLS > Value at start of month for limiting storage of QUALOF (lb/ac)
*** x - x JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC
11 14 0.6 0.6 0.6 0.8 0.8 0.8 0.8 0.8 1.2 1.2 0.6 0.6
21 24 1.6 1.6 1.6 2 2 2.2 2.2 2.2 2 2 1.6 1.6
31 34 0.48 0.48 0.48 0.64 0.64 0.64 0.64 0.64 0.96 0.96 0.48 0.48
41 44 0.12 0.12 0.12 0.13 0.13 0.14 0.14 0.14 0.13 0.13 0.12 0.12
51 54 0.16 0.16 0.16 0.17 0.17 0.18 0.18 0.18 0.17 0.17 0.16 0.16
61 64 0.16 0.16 0.16 0.2 0.2 0.22 0.22 0.22 0.2 0.2 0.16 0.16
71      0.6 0.6 0.6 0.8 0.8 0.8 0.8 0.8 1.2 1.2 0.6 0.6
72      1.6 1.6 1.6 2 2 2.2 2.2 2.2 2 2 1.6 1.6
73      0.48 0.48 0.48 0.64 0.64 0.64 0.64 0.64 0.96 0.96 0.48 0.48
74      0.12 0.12 0.12 0.13 0.13 0.14 0.14 0.14 0.13 0.13 0.12 0.12
75      0.16 0.16 0.16 0.17 0.17 0.18 0.18 0.18 0.17 0.17 0.16 0.16
76      0.16 0.16 0.16 0.2 0.2 0.22 0.22 0.22 0.2 0.2 0.16 0.16
81      0.6 0.6 0.6 0.8 0.8 0.8 0.8 0.8 1.2 1.2 0.6 0.6
82      1.6 1.6 1.6 2 2 2.2 2.2 2.2 2 2 1.6 1.6
83      0.48 0.48 0.48 0.64 0.64 0.64 0.64 0.64 0.96 0.96 0.48 0.48
84      0.12 0.12 0.12 0.13 0.13 0.14 0.14 0.14 0.13 0.13 0.12 0.12
85      0.16 0.16 0.16 0.17 0.17 0.18 0.18 0.18 0.17 0.17 0.16 0.16
86      0.16 0.16 0.16 0.2 0.2 0.22 0.22 0.22 0.2 0.2 0.16 0.16
211 214 0.6 0.6 0.6 0.8 0.8 0.8 0.8 0.8 1.2 1.2 0.6 0.6
221 224 1.6 1.6 1.6 2 2 2.2 2.2 2.2 2 2 1.6 1.6
231 234 0.48 0.48 0.48 0.64 0.64 0.64 0.64 0.64 0.96 0.96 0.48 0.48
241 244 0.12 0.12 0.12 0.13 0.13 0.14 0.14 0.14 0.13 0.13 0.12 0.12
251 254 0.16 0.16 0.16 0.17 0.17 0.18 0.18 0.18 0.17 0.17 0.16 0.16
261 264 0.16 0.16 0.16 0.2 0.2 0.22 0.22 0.22 0.2 0.2 0.16 0.16
271      0.6 0.6 0.6 0.8 0.8 0.8 0.8 0.8 1.2 1.2 0.6 0.6
272      1.6 1.6 1.6 2 2 2.2 2.2 2.2 2 2 1.6 1.6
273      0.48 0.48 0.48 0.64 0.64 0.64 0.64 0.64 0.96 0.96 0.48 0.48
274      0.12 0.12 0.12 0.13 0.13 0.14 0.14 0.14 0.13 0.13 0.12 0.12
275      0.16 0.16 0.16 0.17 0.17 0.18 0.18 0.18 0.17 0.17 0.16 0.16
276      0.16 0.16 0.16 0.2 0.2 0.22 0.22 0.22 0.2 0.2 0.16 0.16
281      0.6 0.6 0.6 0.8 0.8 0.8 0.8 0.8 1.2 1.2 0.6 0.6
282      1.6 1.6 1.6 2 2 2.2 2.2 2.2 2 2 1.6 1.6
283      0.48 0.48 0.48 0.64 0.64 0.64 0.64 0.64 0.96 0.96 0.48 0.48
284      0.12 0.12 0.12 0.13 0.13 0.14 0.14 0.14 0.13 0.13 0.12 0.12
285      0.16 0.16 0.16 0.17 0.17 0.18 0.18 0.18 0.17 0.17 0.16 0.16
286      0.16 0.16 0.16 0.2 0.2 0.22 0.22 0.22 0.2 0.2 0.16 0.16
END MON-SQOLIM

```

MON-IFLW-CONC

```

*** <PLS > Conc of QUAL in interflow outflow for each month (qty/ft3)
*** x - x JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC
11 14 3 5 10 14.4 14.4 14.4 14.4 12 12 7.2 4 3
21 24 32 32 36 45.6 45.6 45.6 45.6 45.6 43.2 34 32
31 34 6 6 16 24.2 24.2 24.2 24.2 24.2 24.2 13.2 8 6
41 44 12.5 12.5 19 22.5 22.5 22.5 22.5 22.5 17.5 15 12.5
51 54 25 26 37.5 37.5 37.5 37.5 37.5 37.5 32.5 28.5 25
61 64 22.5 22.5 28.5 32.5 32.5 32.5 32.5 32.5 27.5 25 22.5
71      3 5 10 14.4 14.4 14.4 14.4 12 12 7.2 4 3
72      32 32 36 45.6 45.6 45.6 45.6 45.6 43.2 34 32
73      6 6 16 24.2 24.2 24.2 24.2 24.2 13.2 8 6
74      12.5 12.5 19 22.5 22.5 22.5 22.5 22.5 17.5 15 12.5
75      25 26 37.5 37.5 37.5 37.5 37.5 37.5 32.5 28.5 25
76      22.5 22.5 28.5 32.5 32.5 32.5 32.5 32.5 27.5 25 22.5
81      3 5 10 14.4 14.4 14.4 14.4 12 12 7.2 4 3
82      32 32 36 45.6 45.6 45.6 45.6 45.6 43.2 34 32
83      6 6 16 24.2 24.2 24.2 24.2 24.2 13.2 8 6
84      12.5 12.5 19 22.5 22.5 22.5 22.5 22.5 17.5 15 12.5
85      25 26 37.5 37.5 37.5 37.5 37.5 37.5 32.5 28.5 25
86      22.5 22.5 28.5 32.5 32.5 32.5 32.5 32.5 27.5 25 22.5
211 214 3 5 10 14.4 14.4 14.4 14.4 12 12 7.2 4 3
221 224 32 32 36 45.6 45.6 45.6 45.6 45.6 43.2 34 32
231 234 6 6 16 24.2 24.2 24.2 24.2 24.2 13.2 8 6
241 244 12.5 12.5 19 22.5 22.5 22.5 22.5 22.5 17.5 15 12.5

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251 254 25 26 37.5 37.5 37.5 37.5 37.5 37.5 37.5 32.5 28.5 25
261 264 22.5 22.5 28.5 32.5 32.5 32.5 32.5 32.5 32.5 27.5 25 22.5
271 3 5 10 14.4 14.4 14.4 14.4 12 12 7.2 4 3
272 32 32 36 45.6 45.6 45.6 45.6 45.6 45.6 43.2 34 32
273 6 6 16 24.2 24.2 24.2 24.2 24.2 24.2 13.2 8 6
274 12.5 12.5 19 22.5 22.5 22.5 22.5 22.5 22.5 17.5 15 12.5
275 25 26 37.5 37.5 37.5 37.5 37.5 37.5 37.5 32.5 28.5 25
276 22.5 22.5 28.5 32.5 32.5 32.5 32.5 32.5 32.5 27.5 25 22.5
281 3 5 10 14.4 14.4 14.4 14.4 12 12 7.2 4 3
282 32 32 36 45.6 45.6 45.6 45.6 45.6 45.6 43.2 34 32
283 6 6 16 24.2 24.2 24.2 24.2 24.2 24.2 13.2 8 6
284 12.5 12.5 19 22.5 22.5 22.5 22.5 22.5 22.5 17.5 15 12.5
285 25 26 37.5 37.5 37.5 37.5 37.5 37.5 37.5 32.5 28.5 25
286 22.5 22.5 28.5 32.5 32.5 32.5 32.5 32.5 32.5 27.5 25 22.5
END MON-IFLW-CONC

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MON-GRND-CONC

```

*** <PLS > Value at start of month for conc of QUAL in groundwater (qty/ft3)
*** x - x JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC
11 14 17 20 25 42 45 45 45 48 49.5 48 25 18
21 24 70 70 73 148 152 152 156 158 158 158 78 73
31 34 35 35 39 60.2 65.8 65.8 65.8 70 70 68.6 47 38
41 44 58 58 63 66 68 72 76 80 81 80 77 60
51 54 90 92 104 107 108 108 115 119 119 118 110 94
61 64 18 18 18.6 18.8 19.2 19.2 19.6 19.6 19.6 19.6 19.4 18.4
71 17 20 25 42 45 45 45 48 49.5 48 25 18
72 70 70 73 148 152 152 156 158 158 158 78 73
73 35 35 39 60.2 65.8 65.8 65.8 70 70 68.6 47 38
74 58 58 63 66 68 72 76 80 81 80 77 60
75 90 92 104 107 108 108 115 119 119 118 110 94
76 18 18 18.6 18.8 19.2 19.2 19.6 19.6 19.6 19.6 19.4 18.4
81 17 20 25 42 45 45 45 48 49.5 48 25 18
82 70 70 73 148 152 152 156 158 158 158 78 73
83 35 35 39 60.2 65.8 65.8 65.8 70 70 68.6 47 38
84 58 58 63 66 68 72 76 80 81 80 77 60
86 18 18 18.6 18.8 19.2 19.2 19.6 19.6 19.6 19.6 19.4 18.4
211 214 20 24 30 49.5 54 54 54 57 60 57 30 21
221 224 84 84 88 178 182 182 186 190 190 190 94 88
231 234 42 42 47 71.4 75.6 75.6 78.4 84 84 82.6 56 45
241 244 69 69 74 77 80 85 91 96 97 96 92 72
251 254 108 110 125 128 130 130 138 143 143 142 132 113
261 264 21.6 21.6 22.4 22.6 23 23 23.4 23.4 23.4 23.4 23.2 22
271 20 24 30 49.5 54 54 54 57 60 57 30 21
272 84 84 88 178 182 182 186 190 190 190 94 88
273 42 42 47 71.4 75.6 75.6 78.4 84 84 82.6 56 45
274 69 69 74 77 80 85 91 96 97 96 92 72
275 108 110 125 128 130 130 138 143 143 142 132 113
276 21.6 21.6 22.4 22.6 23 23 23.4 23.4 23.4 23.4 23.2 22
281 20 24 30 49.5 54 54 54 57 60 57 30 21
282 84 84 88 178 182 182 186 190 190 190 94 88
283 42 42 47 71.4 75.6 75.6 78.4 84 84 82.6 56 45
284 69 69 74 77 80 85 91 96 97 96 92 72
286 21.6 21.6 22.4 22.6 23 23 23.4 23.4 23.4 23.4 23.2 22
END MON-GRND-CONC

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QUAL-PROPS

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*** <PLS > Identifiers and Flags
*** x - x QUALID QTID QSD VPFW VPFS QSO VQO QIFW VIQC QAGW VAQC
11 286Silica LBS 0 0 0 2 1 1 3 1 3
END QUAL-PROPS

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QUAL-INPUT

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*** Storage on surface and nonseasonal parameters
*** SQO POTFW POTFS ACQOP SQOLIM WSQOP IOQC AOQC
*** <PLS > qty/ac qty/ton qty/ton qty/ ac.day qty/ac in/hr qty/ft3 qty/ft3
*** x - x
11 14 0. 0. 0. 0. 1.e-6 0.7 0. 0.
21 24 0. 0. 0. 0. 1.e-6 0.5 0. 0.
31 34 0. 0. 0. 0. 1.e-6 0.6 0. 0.
41 64 0. 0. 0. 0. 1.e-6 0.5 0. 0.
71 0. 0. 0. 0. 1.e-6 0.7 0. 0.
72 0. 0. 0. 0. 1.e-6 0.5 0. 0.
73 0. 0. 0. 0. 1.e-6 0.6 0. 0.
74 76 0. 0. 0. 0. 1.e-6 0.5 0. 0.
81 0. 0. 0. 0. 1.e-6 0.7 0. 0.
82 0. 0. 0. 0. 1.e-6 0.5 0. 0.

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83      0.      0.      0.      0.      1.e-6      0.6      0.      0.
84      86      0.      0.      0.      0.      1.e-6      0.5      0.      0.
211    214      0.      0.      0.      0.      1.e-6      0.7      0.      0.
221    224      0.      0.      0.      0.      1.e-6      0.5      0.      0.
231    234      0.      0.      0.      0.      1.e-6      0.6      0.      0.
241    264      0.      0.      0.      0.      1.e-6      0.5      0.      0.
271      0.      0.      0.      0.      1.e-6      0.7      0.      0.
272      0.      0.      0.      0.      1.e-6      0.5      0.      0.
273      0.      0.      0.      0.      1.e-6      0.6      0.      0.
274    276      0.      0.      0.      0.      1.e-6      0.5      0.      0.
281      0.      0.      0.      0.      1.e-6      0.7      0.      0.
282      0.      0.      0.      0.      1.e-6      0.5      0.      0.
283      0.      0.      0.      0.      1.e-6      0.6      0.      0.
284    286      0.      0.      0.      0.      1.e-6      0.5      0.      0.
END QUAL-INPUT

MON-ACCUM
*** <PLS > Value at start of each month for accum rate of QUALOF (lb/ac.day)
*** x - x JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC
11 286 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01
END MON-ACCUM

MON-SQOLIM
*** <PLS > Value at start of month for limiting storage of QUALOF (lb/ac)
*** x - x JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC
11 286 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1
END MON-SQOLIM

MON-IFLW-CONC
*** <PLS > Conc of QUAL in interflow outflow for each month (qty/ft3)
*** x - x JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC
11 286 8. 8. 10. 10. 12. 14. 14. 14. 14. 14. 12. 10.
END MON-IFLW-CONC

MON-GRND-CONC
*** <PLS > Value at start of month for conc of QUAL in groundwater (qty/ft3)
*** x - x JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC
11 234 12. 12. 14. 16. 18. 20. 20. 20. 20. 20. 18. 14.
251 286 12. 12. 14. 16. 18. 20. 20. 20. 20. 20. 18. 14.
END MON-GRND-CONC

QUAL-PROPS
*** <PLS > Identifiers and Flags
*** x - x QUALID QTID QSD VPFW VPFS QSO VQO QIFW VIQC QAGW VAQC
11 286E-Coli 10^9 0 0 0 2 1 1 1 1 1
END QUAL-PROPS

QUAL-INPUT
*** Storage on surface and nonseasonal parameters
*** SQO POTFW POTFS ACQOP SQOLIM WSQOP IOQC AOQC
*** <PLS > qty/ac qty/ton qty/ton qty/ qty/ ac day in/hr qty/ft3 qty/ft3
*** x - x
11 286 0. 0. 0. 0. 1.e-6 2. 0. 0.
END QUAL-INPUT

MON-ACCUM
*** <PLS > Value at start of each month for accum rate of QUALOF (lb/ac.day)
*** x - x JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC
11 140.0080.0080.0080.008 1 1 1 1 1 10.0080.008
21 24 0.74 0.74 0.74 0.74 92.5 92.5 92.5 92.5 92.5 0.74 0.74
31 34 0.08 0.08 0.08 0.08 2 2 2 2 2 2 0.08 0.08
41 44 0.4 0.4 0.4 0.4 6 6 6 6 6 6 0.4 0.4
51 54 0.6 0.6 0.6 0.6 9 9 9 9 9 9 0.6 0.6
61 64 0.44 0.44 0.44 0.44 6.6 6.6 6.6 6.6 6.6 0.44 0.44
71 0.0080.0080.0080.008 1 1 1 1 1 10.0080.008
72 0.74 0.74 0.74 0.74 92.5 92.5 92.5 92.5 92.5 0.74 0.74
73 0.08 0.08 0.08 0.08 2 2 2 2 2 2 0.08 0.08
74 0.4 0.4 0.4 0.4 6 6 6 6 6 6 0.4 0.4
75 0.6 0.6 0.6 0.6 9 9 9 9 9 9 0.6 0.6
76 0.44 0.44 0.44 0.44 6.6 6.6 6.6 6.6 6.6 0.44 0.44
81 0.0080.0080.0080.008 1 1 1 1 1 10.0080.008
82 0.74 0.74 0.74 0.74 92.5 92.5 92.5 92.5 92.5 0.74 0.74
83 0.08 0.08 0.08 0.08 2 2 2 2 2 2 0.08 0.08
84 0.4 0.4 0.4 0.4 6 6 6 6 6 6 0.4 0.4
85 0.6 0.6 0.6 0.6 9 9 9 9 9 9 0.6 0.6
86 0.44 0.44 0.44 0.44 6.6 6.6 6.6 6.6 6.6 0.44 0.44

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81 1.e-61.e-61.e-61.e-61.e-6.0002.0002.0002.0002.00021.e-61.e-6
82 5.e-65.e-65.e-65.e-65.e-60.0010.0010.0010.0010.0015.e-65.e-6
83 8.e-78.e-78.e-78.e-78.e-7.0001.0001.0001.0001.00018.e-78.e-7
84 1.e-61.e-61.e-61.e-61.e-6.0002.0002.0002.0002.00021.e-61.e-6
85 3.e-63.e-63.e-63.e-63.e-6.0006.0006.0006.0006.00063.e-63.e-6
86 7.e-77.e-77.e-77.e-77.e-7.0001.0001.0001.0001.00017.e-77.e-7
211 2141.e-61.e-61.e-61.e-61.e-6.0002.0002.0002.0002.00021.e-61.e-6
221 2245.e-65.e-65.e-65.e-65.e-60.0010.0010.0010.0010.0015.e-65.e-6
231 2348.e-78.e-78.e-78.e-78.e-7.0001.0001.0001.0001.00018.e-78.e-7
241 2441.e-61.e-61.e-61.e-61.e-6.0002.0002.0002.0002.00021.e-61.e-6
251 2543.e-63.e-63.e-63.e-63.e-6.0006.0006.0006.0006.00063.e-63.e-6
261 2647.e-77.e-77.e-77.e-77.e-7.0001.0001.0001.0001.00017.e-77.e-7
271 1.e-61.e-61.e-61.e-61.e-6.0002.0002.0002.0002.00021.e-61.e-6
272 5.e-65.e-65.e-65.e-65.e-60.0010.0010.0010.0010.0015.e-65.e-6
273 8.e-78.e-78.e-78.e-78.e-7.0001.0001.0001.0001.00018.e-78.e-7
274 1.e-61.e-61.e-61.e-61.e-6.0002.0002.0002.0002.00021.e-61.e-6
275 3.e-63.e-63.e-63.e-63.e-6.0006.0006.0006.0006.00063.e-63.e-6
276 7.e-77.e-77.e-77.e-77.e-7.0001.0001.0001.0001.00017.e-77.e-7
281 1.e-61.e-61.e-61.e-61.e-6.0002.0002.0002.0002.00021.e-61.e-6
282 5.e-65.e-65.e-65.e-65.e-60.0010.0010.0010.0010.0015.e-65.e-6
283 8.e-78.e-78.e-78.e-78.e-7.0001.0001.0001.0001.00018.e-78.e-7
284 1.e-61.e-61.e-61.e-61.e-6.0002.0002.0002.0002.00021.e-61.e-6
285 3.e-63.e-63.e-63.e-63.e-6.0006.0006.0006.0006.00063.e-63.e-6
286 7.e-77.e-77.e-77.e-77.e-7.0001.0001.0001.0001.00017.e-77.e-7
END MON-IFLW-CONC

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MON-GRND-CONC

\*\*\* <PLS > Value at start of month for conc of QUAL in groundwater (qty/ft3)

```

*** x - x JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC
11 145.e-75.e-75.e-75.e-75.e-73.e-63.e-63.e-62.e-62.e-65.e-75.e-7
21 242.e-62.e-62.e-62.e-62.e-62.e-52.e-52.e-51.e-51.e-52.e-62.e-6
31 341.e-61.e-61.e-61.e-61.e-61.e-51.e-51.e-51.e-58.e-68.e-61.e-61.e-6
41 443.e-63.e-63.e-63.e-63.e-63.e-69.e-59.e-59.e-56.e-56.e-53.e-63.e-6
51 545.e-65.e-65.e-65.e-65.e-6.0001.0001.0001.0001.00015.e-65.e-6
61 643.e-63.e-63.e-63.e-63.e-63.e-69.e-59.e-59.e-56.e-56.e-53.e-63.e-6
71 5.e-75.e-75.e-75.e-75.e-73.e-63.e-63.e-62.e-62.e-65.e-75.e-7
72 2.e-62.e-62.e-62.e-62.e-62.e-52.e-52.e-51.e-51.e-52.e-62.e-6
73 1.e-61.e-61.e-61.e-61.e-61.e-51.e-51.e-51.e-58.e-68.e-61.e-61.e-6
74 3.e-63.e-63.e-63.e-63.e-63.e-69.e-59.e-59.e-56.e-56.e-53.e-63.e-6
75 5.e-65.e-65.e-65.e-65.e-6.0001.0001.0001.0001.00015.e-65.e-6
76 3.e-63.e-63.e-63.e-63.e-63.e-69.e-59.e-59.e-56.e-56.e-53.e-63.e-6
81 5.e-75.e-75.e-75.e-75.e-73.e-63.e-63.e-62.e-62.e-65.e-75.e-7
82 2.e-62.e-62.e-62.e-62.e-62.e-52.e-52.e-51.e-51.e-52.e-62.e-6
83 1.e-61.e-61.e-61.e-61.e-61.e-51.e-51.e-51.e-58.e-68.e-61.e-61.e-6
84 3.e-63.e-63.e-63.e-63.e-63.e-69.e-59.e-59.e-56.e-56.e-53.e-63.e-6
85 5.e-65.e-65.e-65.e-65.e-6.0001.0001.0001.0001.00015.e-65.e-6
86 3.e-63.e-63.e-63.e-63.e-63.e-69.e-59.e-59.e-56.e-56.e-53.e-63.e-6
211 2145.e-75.e-75.e-75.e-75.e-73.e-63.e-63.e-62.e-62.e-65.e-75.e-7
221 2242.e-62.e-62.e-62.e-62.e-62.e-52.e-52.e-51.e-51.e-52.e-62.e-6
231 2341.e-61.e-61.e-61.e-61.e-61.e-51.e-51.e-51.e-58.e-68.e-61.e-61.e-6
241 2443.e-63.e-63.e-63.e-63.e-63.e-69.e-59.e-59.e-56.e-56.e-53.e-63.e-6
251 2545.e-65.e-65.e-65.e-65.e-6.0001.0001.0001.0001.00015.e-65.e-6
261 2643.e-63.e-63.e-63.e-63.e-63.e-69.e-59.e-59.e-56.e-56.e-53.e-63.e-6
271 5.e-75.e-75.e-75.e-75.e-73.e-63.e-63.e-62.e-62.e-65.e-75.e-7
272 2.e-62.e-62.e-62.e-62.e-62.e-52.e-52.e-51.e-51.e-52.e-62.e-6
273 1.e-61.e-61.e-61.e-61.e-61.e-51.e-51.e-51.e-58.e-68.e-61.e-61.e-6
274 3.e-63.e-63.e-63.e-63.e-63.e-69.e-59.e-59.e-56.e-56.e-53.e-63.e-6
275 5.e-65.e-65.e-65.e-65.e-6.0001.0001.0001.0001.00015.e-65.e-6
276 3.e-63.e-63.e-63.e-63.e-63.e-69.e-59.e-59.e-56.e-56.e-53.e-63.e-6
281 5.e-75.e-75.e-75.e-75.e-73.e-63.e-63.e-62.e-62.e-65.e-75.e-7
282 2.e-62.e-62.e-62.e-62.e-62.e-52.e-52.e-51.e-51.e-52.e-62.e-6
283 1.e-61.e-61.e-61.e-61.e-61.e-51.e-51.e-51.e-58.e-68.e-61.e-61.e-6
284 3.e-63.e-63.e-63.e-63.e-63.e-69.e-59.e-59.e-56.e-56.e-53.e-63.e-6
285 5.e-65.e-65.e-65.e-65.e-6.0001.0001.0001.0001.00015.e-65.e-6
286 3.e-63.e-63.e-63.e-63.e-63.e-69.e-59.e-59.e-56.e-56.e-53.e-63.e-6
END MON-GRND-CONC

```

END PERLND

IMPLND

GEN-INFO

```

*** <ILS ><-----Name-----> Unit-systems Printer
*** # - # User t-series Engr Metr BinaryOut
*** in out Engr Metr
***LOWER WATERSHED
91 LD RESIDENTIAL EIA 1 1 1 63 0 91 0

```

```

92      HD RESIDENTIAL EIA      1  1  1  63  0  91  0
93      COMMERCIAL/INDUSTR      1  1  1  63  0  91  0
94      ROAD EIA                1  1  1  63  0  91  0
***UPPER WATERSHED
291     LD RESIDENTIAL EIA      1  1  1  63  0  91  0
292     HD RESIDENTIAL EIA      1  1  1  63  0  91  0
293     COMMERCIAL/INDUSTR      1  1  1  63  0  91  0
294     ROAD EIA                1  1  1  63  0  91  0
END GEN-INFO

```

```

ACTIVITY
<ILS > ***** Active Sections ****
# - # ATMP SNOW IWAT SLDS IWTG IQAL ***
1 999 1 0 1 1 1 1
END ACTIVITY

```

```

PRINT-INFO
<ILS > ***** Print-flags ***** PIVL PYR
# - # ATMP SNOW IWAT SLDS IWTG IQAL *****
1 999 5 0 5 5 5 5 1 9
END PRINT-INFO

```

```

BINARY-INFO
<ILS > ***** Print-flags ***** PIVL PYR
# - # ATMP SNOW IWAT SLDS IWTG IQAL *****
1 999 5 0 5 5 5 5 1 9
END BINARY-INFO

```

\*\*\* following elevation differences based on EVERETT (=606 ft)

```

ATEMP-DAT
<ILS >      ELDAT      AIRTEMP ***
# - #          (ft)      (deg F) ***
91      -141.      40.0
92      -182.      40.0
93      -225.      40.0
94      -289.      40.0
291     -141.      40.0
292     -182.      40.0
293     -225.      40.0
294     -289.      40.0
END ATEMP-DAT

```

```

IWAT-PARM1
<ILS >      Flags      ***
# - # CSNO RTOP  VRS  VNN  RTLI  ***
1 999 0 0 0 0 0
END IWAT-PARM1

```

```

IWAT-PARM2
<ILS >      ***
# - #      LSUR      SLSUR      NSUR      RETSC      ***
91      150.00  0.0100  0.1000  0.1000
92      150.00  0.0100  0.1000  0.1000
93      150.00  0.0100  0.1000  0.1000
94      150.00  0.0100  0.1000  0.1000
291     150.00  0.0100  0.1000  0.1000
292     150.00  0.0100  0.1000  0.1000
293     150.00  0.0100  0.1000  0.1000
294     150.00  0.0100  0.1000  0.1000
END IWAT-PARM2

```

```

IWAT-PARM3
<ILS >      ***
# - #      PETMAX  PETMIN  ***
1 999
END IWAT-PARM3

```

```

IWAT-STATE1
<ILS > IWATER state variables ***
# - #      RETS      SURS      ***
1 999 0.0000  0.0000
END IWAT-STATE1

```

```

IWT-PARM1
# # WTFV CSNO ***
1 999 1 0

```

END IWT-PARM1

IWT-PARM2

#	#	ELEV	AWTF	BWTF	***
91		465.	34.0	0.3	
92		424.	34.0	0.3	
93		381.	34.0	0.3	
94		317.	34.0	0.3	
291		465.	34.0	0.3	
292		424.	34.0	0.3	
293		381.	34.0	0.3	
294		317.	34.0	0.3	

END IWT-PARM2

MON-AWTF

<ILS > Values of AWTF at start of each month (degF) \*\*\*  
 # - # JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC \*\*\*  
 1 999 28.0 30.0 32.0 32.0 37.0 42.0 42.0 42.0 39.0 33.0 30.0 28.0  
 END MON-AWTF

MON-BWTF

<ILS > Values of BWTF at start of each month (degF/degF) \*\*\*  
 # - # JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC \*\*\*  
 1 999 .55 .55 .60 .60 .60 .60 .60 .60 .60 .55 .55 .55  
 END MON-BWTF

\*\*\* Section SOLIDS - Sediment

SLD-PARM1

<ILS > Flags \*\*\*  
 # - # VASD VRSD SDOP \*\*\*  
 1 999 0 0 1  
 END SLD-PARM1

SLD-PARM2

#	#	***	KEIM	JEIM	ACCSDP	REMSDP
		<ILS > ***			tons/	/day
		# - # ***			ac.day	
91			0.010	2.	0.003	0.020
92			0.010	2.	0.004	0.020
93			0.010	2.	0.005	0.020
94			0.010	2.	0.003	0.020
291			0.010	2.	0.002	0.025
292			0.010	2.	0.003	0.025
293			0.010	2.	0.004	0.025
294			0.010	2.	0.002	0.025

END SLD-PARM2

SLD-STOR

<ILS > Solids storage (tons/acre) \*\*\*  
 # - # \*\*\*  
 91 0.03  
 92 0.04  
 93 0.04  
 94 0.02  
 291 0.02  
 292 0.03  
 293 0.03  
 294 0.02  
 END SLD-STOR

\*\*\* Section IQUAL - Water Quality Constituents

NQUALS

# # NQUAL \*\*\* (1=NO3, 2=NH3, 3=PO4, 4=BOD, 5=ALK, 6=Silica, 7=E-Coli)  
 1 999 7  
 END NQUALS

IQL-AD-FLAGS

Atmospheric Deposition Flags \*\*\*  
 <PLS > QUAL1 QUAL2 \*\*\*  
 # - # F C F C \*\*\*  
 1 999 0 -1 0 -1  
 END IQL-AD-FLAGS

QUAL-PROPS

```

*** <ILS >   Identifiers and Flags
*** x - x     QUALID   QTID   QSD   VPFW   QSO   VQO
    91  294NO2+NO3     LBS     0     0     2     0
END QUAL-PROPS

```

```

QUAL-INPUT
***          Storage on surface and nonseasonal parameters
***          SQO   POTFW   ACQOP   SQOLIM   WSQOP
*** <ILS >  qty/ac qty/ton   qty/   qty/ac   in/hr
*** x - x          ac.day
    91          0.06     0.   0.003   0.018   0.5
    92          0.09     0.   0.006   0.036   0.5
    93          0.2      0.   0.012   0.072   0.5
    94          0.09     0.   0.006   0.036   0.5
   291          0.06     0.   0.003   0.018   0.5
   292          0.09     0.   0.006   0.036   0.5
   293          0.2      0.   0.012   0.072   0.5
   294          0.09     0.   0.006   0.036   0.5
END QUAL-INPUT

```

```

QUAL-PROPS
*** <ILS >   Identifiers and Flags
*** x - x     QUALID   QTID   QSD   VPFW   QSO   VQO
    91  294NH3         LBS     0     0     2     0
END QUAL-PROPS

```

```

QUAL-INPUT
***          Storage on surface and nonseasonal parameters
***          SQO   POTFW   ACQOP   SQOLIM   WSQOP
*** <ILS >  qty/ac qty/ton   qty/   qty/ac   in/hr
*** x - x          ac.day
    91          0.003     0. 0.0001 0.0008   0.5
    92          0.005     0. 0.0002 0.0012   0.5
    93          0.009     0. 0.0004 0.0023   0.5
    94          0.004     0. 0.0001 0.0008   0.5
   291          0.003     0. 0.0001 0.0008   0.5
   292          0.005     0. 0.0002 0.0012   0.5
   293          0.009     0. 0.0004 0.0023   0.5
   294          0.004     0. 0.0001 0.0008   0.5
END QUAL-INPUT

```

```

QUAL-PROPS
*** <ILS >   Identifiers and Flags
*** x - x     QUALID   QTID   QSD   VPFW   QSO   VQO
    91  294PO4         LBS     1     0     2     0
END QUAL-PROPS

```

```

QUAL-INPUT
***          Storage on surface and nonseasonal parameters
***          SQO   POTFW   ACQOP   SQOLIM   WSQOP
*** <ILS >  qty/ac qty/ton   qty/   qty/ac   in/hr
*** x - x          ac.day
    91          0.003     0.5 0.0002 0.0016   0.5
    92          0.006     0.5 0.0004 0.0024   0.5
    93          0.009     0.5 0.0006 0.004    0.5
    94          0.006     0.5 0.0004 0.0024   0.5
   291          0.003     0.5 0.0002 0.0016   0.5
   292          0.006     0.5 0.0004 0.0024   0.5
   293          0.009     0.5 0.0006 0.004    0.5
   294          0.006     0.5 0.0004 0.0024   0.5
END QUAL-INPUT

```

```

QUAL-PROPS
*** <ILS >   Identifiers and Flags
*** x - x     QUALID   QTID   QSD   VPFW   QSO   VQO
    91  294BOD/Organics LBS     0     0     2     0
END QUAL-PROPS

```

```

QUAL-INPUT
***          Storage on surface and nonseasonal parameters
***          SQO   POTFW   ACQOP   SQOLIM   WSQOP
*** <ILS >  qty/ac qty/ton   qty/   qty/ac   in/hr
*** x - x          ac.day
    91  294          1.     0. 0.022   0.3    0.5
END QUAL-INPUT

```

```

QUAL-PROPS
*** <ILS > Identifiers and Flags
*** x - x QUALID QTID QSD VPFW QSO VQO
91 294Alkalinity LBS 0 0 2 0
END QUAL-PROPS

```

```

QUAL-INPUT
*** Storage on surface and nonseasonal parameters
*** SQO POTFW ACQOP SQOLIM WSQOP
*** <ILS > qty/ac qty/ton qty/ qty/ac in/hr
*** x - x ac.day
91 2.03 0. 0.022 0.092 0.5
92 2.03 0. 0.023 0.095 0.5
93 2.03 0. 0.024 0.092 0.5
94 2.03 0. 0.021 0.096 0.5
291 2.03 0. 0.022 0.092 0.5
292 2.03 0. 0.023 0.095 0.5
293 2.03 0. 0.024 0.092 0.5
294 2.03 0. 0.021 0.096 0.5
END QUAL-INPUT

```

```

QUAL-PROPS
*** <ILS > Identifiers and Flags
*** x - x QUALID QTID QSD VPFW QSO VQO
91 294Silica LBS 0 0 2 0
END QUAL-PROPS

```

```

QUAL-INPUT
*** Storage on surface and nonseasonal parameters
*** SQO POTFW ACQOP SQOLIM WSQOP
*** <ILS > qty/ac qty/ton qty/ qty/ac in/hr
*** x - x ac.day
91 294 0.003 0. 0.003 0.024 0.5
END QUAL-INPUT

```

```

QUAL-PROPS
*** <ILS > Identifiers and Flags
*** x - x QUALID QTID QSD VPFW QSO VQO
91 294E-Coli 10^9 0 0 2 0
END QUAL-PROPS

```

```

QUAL-INPUT
*** Storage on surface and nonseasonal parameters
*** SQO POTFW ACQOP SQOLIM WSQOP
*** <ILS > qty/ac qty/ton qty/ qty/ac in/hr
*** x - x ac.day
91 0.2 0. 0.07 0.45 0.5
92 0.3 0. 0.12 0.7 0.5
93 0.4 0. 0.15 0.9 0.5
94 0.1 0. 0.05 0.25 0.5
291 0.2 0. 0.07 0.45 0.5
292 0.3 0. 0.12 0.7 0.5
293 0.4 0. 0.15 0.9 0.5
294 0.1 0. 0.05 0.25 0.5
END QUAL-INPUT

```

END IMPLND

EXT SOURCES

```

***PREC 113 IS EVERETT/ALDERWOOD (OCT 1948 - DEC 2002)
***RCHRES 162 IS SCRIBER LAKE
***RCHRES 272 IS MARTHA LAKE
***RCHRES 412 IS LAKE STICKNEY

```

```

<-Volume-> <Member> SsysSgap<--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name> # <Name> # tem strg<-factor->strg <Name> # # <Name> # # ***
**** ATM DEPOSITION

```

\*\*\* The conversion factor for (mg/l) to (lb/cf) = 6.245E-5.

\*\*\* We are dividing this by 2 to take the average from 2 stations.

```

WDM1 2001 NO3D ENGL 3.122E-5SAME PERLND 1 999 EXTNL PQADCN 1 1
WDM1 2001 NO3D ENGL 3.122E-5SAME IMPLND 1 999 EXTNL IQADCN 1
WDM1 2002 NO3D ENGL 3.122E-5SAME PERLND 1 999 EXTNL PQADCN 1 1
WDM1 2002 NO3D ENGL 3.122E-5SAME IMPLND 1 999 EXTNL IQADCN 1
WDM1 2011 NH3D ENGL 3.122E-5SAME PERLND 1 999 EXTNL PQADCN 2 1
WDM1 2011 NH3D ENGL 3.122E-5SAME IMPLND 1 999 EXTNL IQADCN 2
WDM1 2012 NH3D ENGL 3.122E-5SAME PERLND 1 999 EXTNL PQADCN 2 1
WDM1 2012 NH3D ENGL 3.122E-5SAME IMPLND 1 999 EXTNL IQADCN 2

```

```

WDM1 1006 PREC ENGL 1.10 PERLND 1 199 EXTNL PREC
WDM1 1006 PREC ENGL 1.10 IMPLND 1 199 EXTNL PREC
WDM1 1006 PREC ENGL 1.15 PERLND 200 299 EXTNL PREC
WDM1 1006 PREC ENGL 1.15 IMPLND 200 299 EXTNL PREC
WDM1 1002 EVAP ENGL 0.80 PERLND 1 999 EXTNL PETINP
WDM1 1002 EVAP ENGL 0.80 IMPLND 1 999 EXTNL PETINP
WDM1 1006 PREC ENGL 1.15 RCHRES 162 EXTNL PREC
WDM1 1002 EVAP ENGL 0.80 RCHRES 162 EXTNL POTEV
WDM1 1006 PREC ENGL 1.15 RCHRES 272 EXTNL PREC
WDM1 1002 EVAP ENGL 0.80 RCHRES 272 EXTNL POTEV
WDM1 1006 PREC ENGL 1.15 RCHRES 412 EXTNL PREC
WDM1 1002 EVAP ENGL 0.80 RCHRES 412 EXTNL POTEV
WDM1 80 ATEM ENGL 1. SAME PERLND 1 999 EXTNL GATMP
WDM1 80 ATEM ENGL 1. SAME IMPLND 1 999 EXTNL GATMP
WDM1 80 ATEM ENGL 1. SAME RCHRES 1 999 EXTNL GATMP
WDM1 82 DEWP ENGL 1. SAME RCHRES 1 999 EXTNL DEWTMP
WDM1 83 AWND ENGL 1. DIV RCHRES 1 999 EXTNL WIND
WDM1 52 SOLR ENGL 1. DIV RCHRES 1 999 EXTNL SOLRAD
WDM1 84 CLOU ENGL 1. SAME RCHRES 1 999 EXTNL CLOUD
END EXT SOURCES

```

EXT TARGETS

```

<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Volume-> <Member> Tsys Tgap Amd ***
<Name> # <Name> # <-factor->strg <Name> # <Name> tem strg strg***

```

\*\*\* RCHRES 502 (Catchment Outlet) results -

```

RCHRES 492 HYDR RO 1 1 WDM2 1300 FLOW ENGL REPL
RCHRES 502 CONS CON 1 WDM2 1301 ALKN ENGL AGGR REPL
RCHRES 502 HTRCH TW 1 WDM2 1302 WTEM METR AGGR REPL
RCHRES 502 SEDTRN SSED 1 WDM2 1303 SAND ENGL AGGR REPL
RCHRES 502 SEDTRN SSED 2 WDM2 1304 SILT ENGL AGGR REPL
RCHRES 502 SEDTRN SSED 3 WDM2 1305 CLAY ENGL AGGR REPL
RCHRES 502 SEDTRN SSED 4 WDM2 1306 SSED ENGL AGGR REPL
RCHRES 502 GQUAL DQAL 1 WDM2 1307 SLCA ENGL AGGR REPL

```

\*\*\* following factor of 0.1 converts from #cfu/1 to #cfu/100ml

```

RCHRES 502 GQUAL DQAL 2 0.1 WDM2 1308 ECOL ENGL AGGR REPL
RCHRES 502 OXRX DOX WDM2 1309 DOXX ENGL AGGR REPL
RCHRES 502 OXRX BOD WDM2 1310 BODX ENGL AGGR REPL
RCHRES 502 NUTRX DNUST 1 WDM2 1311 NO3X ENGL AGGR REPL
RCHRES 502 NUTRX DNUST 2 WDM2 1312 NH3X ENGL AGGR REPL
RCHRES 502 NUTRX DNUST 4 WDM2 1313 PO4X ENGL AGGR REPL
RCHRES 502 PLANK BALCLA 1 WDM2 1314 BALG ENGL AGGR REPL
RCHRES 502 PLANK PKST3 4 WDM2 1315 ORGN ENGL AGGR REPL
RCHRES 502 PLANK PKST3 5 WDM2 1316 ORGP ENGL AGGR REPL
RCHRES 502 PLANK PKST3 6 WDM2 1317 ORGC ENGL AGGR REPL
RCHRES 502 PLANK PKST4 1 WDM2 1318 TNXX ENGL AGGR REPL
RCHRES 502 PLANK PKST4 2 WDM2 1319 TPXX ENGL AGGR REPL
RCHRES 502 PHCARB PHST 1 WDM2 1320 TICX ENGL AGGR REPL
RCHRES 502 PHCARB PHST 3 WDM2 1321 PHXX ENGL AGGR REPL

```

\*\*\* RCHRES 272 results -

```

RCHRES 272 HYDR RO 1 1 WDM2 1400 FLOW ENGL REPL
RCHRES 272 HTRCH TW 1 WDM2 1402 WTEM METR AGGR REPL
RCHRES 272 OXRX DOX WDM2 1409 DOXX ENGL AGGR REPL
RCHRES 272 PLANK PKST4 2 WDM2 1419 TPXX ENGL AGGR REPL
RCHRES 272 PHCARB PHST 3 WDM2 1421 PHXX ENGL AGGR REPL

```

\*\*\* RCHRES 362 results -

```

RCHRES 362 HYDR RO 1 1 WDM2 1500 FLOW ENGL REPL
RCHRES 362 HTRCH TW 1 WDM2 1502 WTEM METR AGGR REPL
RCHRES 362 SEDTRN SSED 4 WDM2 1506 SSED ENGL AGGR REPL
RCHRES 362 OXRX DOX WDM2 1509 DOXX ENGL AGGR REPL
RCHRES 362 NUTRX DNUST 1 WDM2 1511 NO3X ENGL AGGR REPL
RCHRES 362 PLANK BALCLA 1 WDM2 1514 BALG ENGL AGGR REPL
RCHRES 362 PLANK PKST4 2 WDM2 1519 TPXX ENGL AGGR REPL
RCHRES 362 PHCARB PHST 3 WDM2 1521 PHXX ENGL AGGR REPL

```

\*\*\* RCHRES 412 results -

```

RCHRES 412 HYDR RO 1 1 WDM2 1600 FLOW ENGL REPL
RCHRES 412 HTRCH TW 1 WDM2 1602 WTEM METR AGGR REPL
RCHRES 412 OXRX DOX WDM2 1609 DOXX ENGL AGGR REPL
RCHRES 412 PLANK PKST4 2 WDM2 1619 TPXX ENGL AGGR REPL
RCHRES 412 PHCARB PHST 3 WDM2 1621 PHXX ENGL AGGR REPL

```

\*\*\* RCHRES 432 results -

Swamp Creek UCI File

RCHRES	432	HYDR	RO	1	1	WDM2	1700	FLOW	ENGL	REPL	
RCHRES	432	HTRCH	TW	1		WDM2	1702	WTEM	METR	AGGR	REPL
RCHRES	432	SEDTRN	SSED	4		WDM2	1706	SSED	ENGL	AGGR	REPL
RCHRES	432	OXRX	DOX			WDM2	1709	DOXX	ENGL	AGGR	REPL
RCHRES	432	NUTRX	DNUST	1		WDM2	1711	NO3X	ENGL	AGGR	REPL
RCHRES	432	PLANK	BALCLA	1		WDM2	1714	BALG	ENGL	AGGR	REPL
RCHRES	432	PLANK	PKST4	2		WDM2	1719	TPXX	ENGL	AGGR	REPL
RCHRES	432	PHCARB	PHST	3		WDM2	1721	PHXX	ENGL	AGGR	REPL

\*\*\* RCHRES 482 results -

RCHRES	482	HYDR	RO	1	1	WDM2	1800	FLOW	ENGL	REPL	
RCHRES	482	HTRCH	TW	1		WDM2	1802	WTEM	METR	AGGR	REPL
RCHRES	482	SEDTRN	SSED	4		WDM2	1806	SSED	ENGL	AGGR	REPL
RCHRES	482	OXRX	DOX			WDM2	1809	DOXX	ENGL	AGGR	REPL
RCHRES	482	NUTRX	DNUST	1		WDM2	1811	NO3X	ENGL	AGGR	REPL
RCHRES	482	PLANK	BALCLA	1		WDM2	1814	BALG	ENGL	AGGR	REPL
RCHRES	482	PLANK	PKST4	2		WDM2	1819	TPXX	ENGL	AGGR	REPL
RCHRES	482	PHCARB	PHST	3		WDM2	1821	PHXX	ENGL	AGGR	REPL

RCHRES	122	HYDR	TAU	***		WDM2	2010	TAUX	ENGL	AGGR	REPL
RCHRES	132	HYDR	TAU	***		WDM2	2020	TAUX	ENGL	AGGR	REPL
RCHRES	142	HYDR	TAU	***		WDM2	2030	TAUX	ENGL	AGGR	REPL
RCHRES	152	HYDR	TAU	***		WDM2	2040	TAUX	ENGL	AGGR	REPL
RCHRES	162	HYDR	TAU	***		WDM2	2050	TAUX	ENGL	AGGR	REPL
RCHRES	172	HYDR	TAU	***		WDM2	2060	TAUX	ENGL	AGGR	REPL
RCHRES	182	HYDR	TAU	***		WDM2	2070	TAUX	ENGL	AGGR	REPL
RCHRES	192	HYDR	TAU	***		WDM2	2080	TAUX	ENGL	AGGR	REPL
RCHRES	272	HYDR	TAU	***		WDM2	2090	TAUX	ENGL	AGGR	REPL
RCHRES	282	HYDR	TAU	***		WDM2	2100	TAUX	ENGL	AGGR	REPL
RCHRES	292	HYDR	TAU	***		WDM2	2110	TAUX	ENGL	AGGR	REPL
RCHRES	362	HYDR	TAU	***		WDM2	2120	TAUX	ENGL	AGGR	REPL
RCHRES	372	HYDR	TAU	***		WDM2	2130	TAUX	ENGL	AGGR	REPL
RCHRES	382	HYDR	TAU	***		WDM2	2140	TAUX	ENGL	AGGR	REPL
RCHRES	392	HYDR	TAU	***		WDM2	2150	TAUX	ENGL	AGGR	REPL
RCHRES	402	HYDR	TAU	***		WDM2	2160	TAUX	ENGL	AGGR	REPL
RCHRES	412	HYDR	TAU	***		WDM2	2170	TAUX	ENGL	AGGR	REPL
RCHRES	422	HYDR	TAU	***		WDM2	2180	TAUX	ENGL	AGGR	REPL
RCHRES	432	HYDR	TAU	***		WDM2	2190	TAUX	ENGL	AGGR	REPL
RCHRES	442	HYDR	TAU	***		WDM2	2200	TAUX	ENGL	AGGR	REPL
RCHRES	452	HYDR	TAU	***		WDM2	2210	TAUX	ENGL	AGGR	REPL
RCHRES	462	HYDR	TAU	***		WDM2	2220	TAUX	ENGL	AGGR	REPL
RCHRES	472	HYDR	TAU	***		WDM2	2230	TAUX	ENGL	AGGR	REPL
RCHRES	482	HYDR	TAU	***		WDM2	2240	TAUX	ENGL	AGGR	REPL
RCHRES	492	HYDR	TAU	***		WDM2	2250	TAUX	ENGL	AGGR	REPL
RCHRES	502	HYDR	TAU	***		WDM2	2260	TAUX	ENGL	AGGR	REPL

END EXT TARGETS

NETWORK

```

<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name> # <Name> # <-factor->strg <Name> # # <Name> # # ***
END NETWORK

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SCHEMATIC

Sub Basin	122	***									
<-Source->			<--Area-->		<-Target->	MBLK	***				
<Name>	#		<-factor->		<Name>	#	Tbl#	***			
PERLND	11		48.773		RCHRES	122	1				
PERLND	41		125.892		RCHRES	122	1				
PERLND	51		124.613		RCHRES	122	1				
PERLND	52		70.795		RCHRES	122	1				
PERLND	61		43.854		RCHRES	122	1				
PERLND	74		68.289		RCHRES	122	1				
PERLND	75		55.108		RCHRES	122	1				
IMPLND	91		7.562		RCHRES	122	4				
IMPLND	92		134.597		RCHRES	122	4				
IMPLND	93		36.477		RCHRES	122	4				
IMPLND	94		26.993		RCHRES	122	4				

Sub Basin	132	***									
<-Source->			<--Area-->		<-Target->	MBLK	***				
<Name>	#		<-factor->		<Name>	#	Tbl#	***			
PERLND	11		12.618		RCHRES	132	1				
PERLND	41		15.836		RCHRES	132	1				
PERLND	42		19.922		RCHRES	132	1				
PERLND	51		42.645		RCHRES	132	1				
PERLND	52		44.458		RCHRES	132	1				

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PERLND	31	17.059	RCHRES	132	1
PERLND	75	19.051	RCHRES	132	1
IMPLND	91	2.782	RCHRES	132	4
IMPLND	92	39.783	RCHRES	132	4
IMPLND	93	8.760	RCHRES	132	4
IMPLND	94	7.355	RCHRES	132	4
Sub Basin	142	***			
<-Source->		<--Area-->	<-Target->	MBLK	***
<Name> #		<-factor->	<Name> #	Tbl#	***
PERLND	211	41.466	RCHRES	142	1
PERLND	241	74.355	RCHRES	142	1
PERLND	242	40.030	RCHRES	142	1
PERLND	251	192.157	RCHRES	142	1
PERLND	252	106.874	RCHRES	142	1
PERLND	231	58.733	RCHRES	142	1
IMPLND	291	8.390	RCHRES	142	4
IMPLND	292	126.694	RCHRES	142	4
IMPLND	293	21.570	RCHRES	142	4
IMPLND	294	14.255	RCHRES	142	4
Sub Basin	152	***			
<-Source->		<--Area-->	<-Target->	MBLK	***
<Name> #		<-factor->	<Name> #	Tbl#	***
PERLND	241	52.292	RCHRES	152	1
PERLND	242	29.708	RCHRES	152	1
PERLND	251	79.989	RCHRES	152	1
PERLND	252	37.028	RCHRES	152	1
PERLND	231	53.765	RCHRES	152	1
IMPLND	291	5.949	RCHRES	152	4
IMPLND	292	52.361	RCHRES	152	4
IMPLND	293	11.725	RCHRES	152	4
IMPLND	294	11.893	RCHRES	152	4
Sub Basin	162	***			
<-Source->		<--Area-->	<-Target->	MBLK	***
<Name> #		<-factor->	<Name> #	Tbl#	***
PERLND	241	65.546	RCHRES	162	1
PERLND	251	111.751	RCHRES	162	1
PERLND	261	22.399	RCHRES	162	1
PERLND	231	45.371	RCHRES	162	1
IMPLND	291	5.198	RCHRES	162	4
IMPLND	292	53.642	RCHRES	162	4
IMPLND	293	18.802	RCHRES	162	4
IMPLND	294	11.155	RCHRES	162	4
Sub Basin	172	***			
<-Source->		<--Area-->	<-Target->	MBLK	***
<Name> #		<-factor->	<Name> #	Tbl#	***
PERLND	211	47.712	RCHRES	172	1
PERLND	241	117.726	RCHRES	172	1
PERLND	251	210.449	RCHRES	172	1
PERLND	252	81.152	RCHRES	172	1
PERLND	261	54.440	RCHRES	172	1
PERLND	231	60.614	RCHRES	172	1
PERLND	275	53.401	RCHRES	172	1
IMPLND	291	9.474	RCHRES	172	4
IMPLND	292	149.892	RCHRES	172	4
IMPLND	293	48.471	RCHRES	172	4
IMPLND	294	25.905	RCHRES	172	4
Sub Basin	182	***			
<-Source->		<--Area-->	<-Target->	MBLK	***
<Name> #		<-factor->	<Name> #	Tbl#	***
PERLND	11	20.568	RCHRES	182	1
PERLND	12	49.251	RCHRES	182	1
PERLND	41	35.366	RCHRES	182	1
PERLND	42	48.038	RCHRES	182	1
PERLND	51	39.930	RCHRES	182	1
PERLND	52	36.194	RCHRES	182	1
PERLND	31	33.192	RCHRES	182	1
PERLND	71	22.235	RCHRES	182	1
PERLND	74	24.476	RCHRES	182	1
PERLND	81	29.096	RCHRES	182	1
IMPLND	91	5.932	RCHRES	182	4
IMPLND	92	32.975	RCHRES	182	4

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IMPLND	93	4.194	RCHRES	182	4
IMPLND	94	7.023	RCHRES	182	4
Sub Basin 192 ***					
<-Source->		<--Area-->	<-Target->		MBLK ***
<Name>	#	<-factor->	<Name>	#	Tbl# ***
PERLND	42	67.511	RCHRES	192	1
PERLND	71	28.858	RCHRES	192	1
PERLND	72	39.283	RCHRES	192	1
PERLND	74	70.459	RCHRES	192	1
PERLND	75	96.441	RCHRES	192	1
PERLND	73	39.896	RCHRES	192	1
PERLND	81	47.486	RCHRES	192	1
IMPLND	91	8.280	RCHRES	192	4
IMPLND	92	43.275	RCHRES	192	4
IMPLND	93	2.862	RCHRES	192	4
IMPLND	94	0.403	RCHRES	192	4
Sub Basin 272 ***					
<-Source->		<--Area-->	<-Target->		MBLK ***
<Name>	#	<-factor->	<Name>	#	Tbl# ***
PERLND	211	60.645	RCHRES	272	1
PERLND	221	22.206	RCHRES	272	1
PERLND	241	81.793	RCHRES	272	1
PERLND	242	45.979	RCHRES	272	1
PERLND	251	91.694	RCHRES	272	1
PERLND	231	72.473	RCHRES	272	1
IMPLND	291	10.353	RCHRES	272	4
IMPLND	292	38.967	RCHRES	272	4
IMPLND	293	4.618	RCHRES	272	4
IMPLND	294	9.990	RCHRES	272	4
Sub Basin 282 ***					
<-Source->		<--Area-->	<-Target->		MBLK ***
<Name>	#	<-factor->	<Name>	#	Tbl# ***
PERLND	211	53.633	RCHRES	282	1
PERLND	241	70.760	RCHRES	282	1
PERLND	242	28.070	RCHRES	282	1
PERLND	251	74.241	RCHRES	282	1
PERLND	252	26.983	RCHRES	282	1
PERLND	231	44.849	RCHRES	282	1
IMPLND	291	6.407	RCHRES	282	4
IMPLND	292	42.309	RCHRES	282	4
IMPLND	293	5.424	RCHRES	282	4
IMPLND	294	0.258	RCHRES	282	4
Sub Basin 292 ***					
<-Source->		<--Area-->	<-Target->		MBLK ***
<Name>	#	<-factor->	<Name>	#	Tbl# ***
PERLND	211	100.867	RCHRES	292	1
PERLND	241	68.678	RCHRES	292	1
PERLND	242	61.170	RCHRES	292	1
PERLND	251	36.426	RCHRES	292	1
PERLND	231	54.387	RCHRES	292	1
PERLND	271	47.993	RCHRES	292	1
PERLND	274	50.999	RCHRES	292	1
IMPLND	291	9.574	RCHRES	292	4
IMPLND	292	15.925	RCHRES	292	4
IMPLND	293	0.630	RCHRES	292	4
IMPLND	294	10.004	RCHRES	292	4
Sub Basin 362 ***					
<-Source->		<--Area-->	<-Target->		MBLK ***
<Name>	#	<-factor->	<Name>	#	Tbl# ***
PERLND	211	56.963	RCHRES	362	1
PERLND	241	108.045	RCHRES	362	1
PERLND	251	183.518	RCHRES	362	1
PERLND	261	28.993	RCHRES	362	1
PERLND	231	50.106	RCHRES	362	1
IMPLND	291	7.158	RCHRES	362	4
IMPLND	292	92.288	RCHRES	362	4
IMPLND	293	23.740	RCHRES	362	4
IMPLND	294	12.557	RCHRES	362	4
Sub Basin 372 ***					
<-Source->		<--Area-->	<-Target->		MBLK ***

<Name> #	<-factor->	<Name> #	Tbl#	***
PERLND 211	166.826	RCHRES 372	1	
PERLND 241	152.319	RCHRES 372	1	
PERLND 251	111.937	RCHRES 372	1	
PERLND 252	50.854	RCHRES 372	1	
PERLND 231	66.283	RCHRES 372	1	
IMPLND 291	9.469	RCHRES 372	4	
IMPLND 292	79.452	RCHRES 372	4	
IMPLND 293	22.169	RCHRES 372	4	
IMPLND 294	22.633	RCHRES 372	4	

Sub Basin 382 \*\*\*

<-Source->	<--Area-->	<-Target->	MBLK	***
<Name> #	<-factor->	<Name> #	Tbl#	***
PERLND 211	173.532	RCHRES 382	1	
PERLND 221	98.291	RCHRES 382	1	
PERLND 241	113.537	RCHRES 382	1	
PERLND 251	150.723	RCHRES 382	1	
PERLND 231	46.006	RCHRES 382	1	
IMPLND 291	6.572	RCHRES 382	4	
IMPLND 292	164.246	RCHRES 382	4	
IMPLND 293	39.153	RCHRES 382	4	
IMPLND 294	25.940	RCHRES 382	4	

Sub Basin 392 \*\*\*

<-Source->	<--Area-->	<-Target->	MBLK	***
<Name> #	<-factor->	<Name> #	Tbl#	***
PERLND 211	93.797	RCHRES 392	1	
PERLND 241	96.571	RCHRES 392	1	
PERLND 251	152.025	RCHRES 392	1	
PERLND 261	29.646	RCHRES 392	1	
PERLND 231	40.264	RCHRES 392	1	
IMPLND 291	5.752	RCHRES 392	4	
IMPLND 292	96.260	RCHRES 392	4	
IMPLND 293	20.537	RCHRES 392	4	
IMPLND 294	20.251	RCHRES 392	4	

Sub Basin 402 \*\*\*

<-Source->	<--Area-->	<-Target->	MBLK	***
<Name> #	<-factor->	<Name> #	Tbl#	***
PERLND 211	51.640	RCHRES 402	1	
PERLND 212	25.389	RCHRES 402	1	
PERLND 213	23.034	RCHRES 402	1	
PERLND 241	43.823	RCHRES 402	1	
PERLND 242	22.590	RCHRES 402	1	
PERLND 251	70.581	RCHRES 402	1	
PERLND 252	34.436	RCHRES 402	1	
PERLND 231	32.317	RCHRES 402	1	
IMPLND 291	4.617	RCHRES 402	4	
IMPLND 292	41.617	RCHRES 402	4	
IMPLND 293	12.221	RCHRES 402	4	
IMPLND 294	14.038	RCHRES 402	4	

Sub Basin 412 \*\*\*

<-Source->	<--Area-->	<-Target->	MBLK	***
<Name> #	<-factor->	<Name> #	Tbl#	***
PERLND 211	18.814	RCHRES 412	1	
PERLND 212	20.659	RCHRES 412	1	
PERLND 241	28.570	RCHRES 412	1	
PERLND 242	34.502	RCHRES 412	1	
PERLND 251	20.914	RCHRES 412	1	
PERLND 231	15.866	RCHRES 412	1	
PERLND 232	18.498	RCHRES 412	1	
PERLND 281	28.346	RCHRES 412	1	
IMPLND 291	5.241	RCHRES 412	4	
IMPLND 292	7.268	RCHRES 412	4	
IMPLND 293	1.942	RCHRES 412	4	
IMPLND 294	0.186	RCHRES 412	4	

Sub Basin 422 \*\*\*

<-Source->	<--Area-->	<-Target->	MBLK	***
<Name> #	<-factor->	<Name> #	Tbl#	***
PERLND 211	15.209	RCHRES 422	1	
PERLND 241	20.167	RCHRES 422	1	
PERLND 242	8.207	RCHRES 422	1	
PERLND 251	6.834	RCHRES 422	1	

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PERLND 231	10.934	RCHRES 422	1	
PERLND 232	4.787	RCHRES 422	1	
PERLND 283	4.700	RCHRES 422	1	
IMPLND 291	2.298	RCHRES 422	4	
IMPLND 292	2.206	RCHRES 422	4	
IMPLND 293	0.320	RCHRES 422	4	
Sub Basin 432 ***				
<-Source->	<--Area-->	<-Target->	MBLK	***
<Name> #	<-factor->	<Name> #	Tbl#	***
PERLND 211	205.292	RCHRES 432	1	
PERLND 212	198.774	RCHRES 432	1	
PERLND 221	88.000	RCHRES 432	1	
PERLND 241	149.905	RCHRES 432	1	
PERLND 242	123.988	RCHRES 432	1	
PERLND 251	145.131	RCHRES 432	1	
PERLND 252	88.945	RCHRES 432	1	
PERLND 231	148.670	RCHRES 432	1	
PERLND 285	69.291	RCHRES 432	1	
IMPLND 291	21.550	RCHRES 432	4	
IMPLND 292	99.907	RCHRES 432	4	
IMPLND 293	11.519	RCHRES 432	4	
IMPLND 294	31.756	RCHRES 432	4	
Sub Basin 442 ***				
<-Source->	<--Area-->	<-Target->	MBLK	***
<Name> #	<-factor->	<Name> #	Tbl#	***
PERLND 211	50.218	RCHRES 442	1	
PERLND 212	96.008	RCHRES 442	1	
PERLND 221	44.890	RCHRES 442	1	
PERLND 241	43.091	RCHRES 442	1	
PERLND 242	104.905	RCHRES 442	1	
PERLND 251	45.419	RCHRES 442	1	
PERLND 252	76.146	RCHRES 442	1	
PERLND 232	79.256	RCHRES 442	1	
PERLND 281	158.370	RCHRES 442	1	
IMPLND 291	12.854	RCHRES 442	4	
IMPLND 292	49.783	RCHRES 442	4	
IMPLND 293	5.238	RCHRES 442	4	
IMPLND 294	29.526	RCHRES 442	4	
Sub Basin 452 ***				
<-Source->	<--Area-->	<-Target->	MBLK	***
<Name> #	<-factor->	<Name> #	Tbl#	***
PERLND 211	103.930	RCHRES 452	1	
PERLND 221	43.136	RCHRES 452	1	
PERLND 241	77.045	RCHRES 452	1	
PERLND 242	82.702	RCHRES 452	1	
PERLND 251	95.736	RCHRES 452	1	
PERLND 252	77.761	RCHRES 452	1	
PERLND 231	85.786	RCHRES 452	1	
PERLND 274	57.399	RCHRES 452	1	
IMPLND 291	13.923	RCHRES 452	4	
IMPLND 292	83.213	RCHRES 452	4	
IMPLND 293	17.180	RCHRES 452	4	
IMPLND 294	38.676	RCHRES 452	4	
Sub Basin 462 ***				
<-Source->	<--Area-->	<-Target->	MBLK	***
<Name> #	<-factor->	<Name> #	Tbl#	***
PERLND 11	55.216	RCHRES 462	1	
PERLND 41	131.172	RCHRES 462	1	
PERLND 51	91.288	RCHRES 462	1	
PERLND 31	65.169	RCHRES 462	1	
PERLND 71	99.340	RCHRES 462	1	
PERLND 74	118.478	RCHRES 462	1	
PERLND 75	63.418	RCHRES 462	1	
PERLND 73	55.530	RCHRES 462	1	
PERLND 84	42.439	RCHRES 462	1	
IMPLND 91	17.664	RCHRES 462	4	
IMPLND 92	53.631	RCHRES 462	4	
IMPLND 93	1.364	RCHRES 462	4	
IMPLND 94	4.443	RCHRES 462	4	
Sub Basin 472 ***				
<-Source->	<--Area-->	<-Target->	MBLK	***

<Name>	#	<-factor->	<Name>	#	Tbl#	***
PERLND	11	52.557	RCHRES	472	1	
PERLND	21	47.071	RCHRES	472	1	
PERLND	41	57.843	RCHRES	472	1	
PERLND	51	29.540	RCHRES	472	1	
PERLND	31	28.137	RCHRES	472	1	
PERLND	71	84.615	RCHRES	472	1	
PERLND	74	80.873	RCHRES	472	1	
PERLND	75	63.817	RCHRES	472	1	
PERLND	73	34.573	RCHRES	472	1	
PERLND	81	33.133	RCHRES	472	1	
IMPLND	91	9.080	RCHRES	472	4	
IMPLND	92	34.194	RCHRES	472	4	
IMPLND	93	2.004	RCHRES	472	4	
IMPLND	94	0.310	RCHRES	472	4	

Sub Basin 482 \*\*\*

<-Source->	<-Area-->	<-Target->	MBLK	***		
<Name>	#	<-factor->	<Name>	#	Tbl#	***
PERLND	11	50.428	RCHRES	482	1	
PERLND	14	32.395	RCHRES	482	1	
PERLND	41	36.992	RCHRES	482	1	
PERLND	42	45.896	RCHRES	482	1	
PERLND	51	45.997	RCHRES	482	1	
PERLND	31	38.102	RCHRES	482	1	
PERLND	71	73.243	RCHRES	482	1	
PERLND	74	92.144	RCHRES	482	1	
PERLND	75	59.835	RCHRES	482	1	
IMPLND	91	9.002	RCHRES	482	4	
IMPLND	92	41.503	RCHRES	482	4	
IMPLND	93	2.304	RCHRES	482	4	
IMPLND	94	0.465	RCHRES	482	4	

Sub Basin 492 \*\*\*

<-Source->	<-Area-->	<-Target->	MBLK	***		
<Name>	#	<-factor->	<Name>	#	Tbl#	***
PERLND	11	111.021	RCHRES	492	1	
PERLND	42	163.698	RCHRES	492	1	
PERLND	51	144.148	RCHRES	492	1	
PERLND	31	81.021	RCHRES	492	1	
PERLND	71	104.234	RCHRES	492	1	
PERLND	74	178.777	RCHRES	492	1	
PERLND	75	126.293	RCHRES	492	1	
PERLND	83	80.786	RCHRES	492	1	
IMPLND	91	20.117	RCHRES	492	4	
IMPLND	92	104.210	RCHRES	492	4	
IMPLND	93	10.083	RCHRES	492	4	
IMPLND	94	22.680	RCHRES	492	4	

Sub Basin 502 \*\*\*

<-Source->	<-Area-->	<-Target->	MBLK	***		
<Name>	#	<-factor->	<Name>	#	Tbl#	***
PERLND	11	152.448	RCHRES	502	1	
PERLND	21	107.159	RCHRES	502	1	
PERLND	41	83.479	RCHRES	502	1	
PERLND	42	118.202	RCHRES	502	1	
PERLND	51	138.971	RCHRES	502	1	
PERLND	31	105.318	RCHRES	502	1	
PERLND	71	80.694	RCHRES	502	1	
PERLND	74	181.948	RCHRES	502	1	
PERLND	84	72.479	RCHRES	502	1	
IMPLND	91	20.307	RCHRES	502	4	
IMPLND	92	62.836	RCHRES	502	4	
IMPLND	93	9.215	RCHRES	502	4	
IMPLND	94	17.109	RCHRES	502	4	

\*\*\* CHANNEL NETWORK LINKAGES \*\*\*

<-Source->	<-Area-->	<-Target->	MBLK	***		
<Name>	#	<-factor->	<Name>	#	Tbl#	***
*** GOLDE CREEK			RCHRES	192	5	
RCHRES 122						
*** POPLAR CREEK			RCHRES	192	5	
RCHRES 132						
*** SCRIBER CREEK			RCHRES	152	5	
RCHRES 142						
RCHRES 152			RCHRES	162	5	

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RCHRES 162          RCHRES 172          5
RCHRES 172          RCHRES 182          5
RCHRES 182          RCHRES 192          5
RCHRES 192          RCHRES 472          5
  *** MARTHA CREEK
RCHRES 272          RCHRES 282          5
RCHRES 282          RCHRES 292          5
RCHRES 292          RCHRES 462          5
  *** SWAMP CREEK NORTH TRIB
RCHRES 362          RCHRES 392          5
  *** SWAMP CREEK YORK TRIB
RCHRES 372          RCHRES 432          5
  *** SWAMP CREEK
RCHRES 382          RCHRES 392          5
RCHRES 392          RCHRES 402          5
RCHRES 402          RCHRES 412          5
RCHRES 412          RCHRES 422          5
RCHRES 422          RCHRES 432          5
RCHRES 432          RCHRES 442          5
RCHRES 442          RCHRES 452          5
RCHRES 452          RCHRES 462          5
RCHRES 462          RCHRES 472          5
RCHRES 472          RCHRES 482          5
RCHRES 482          RCHRES 492          5
RCHRES 492          RCHRES 502          5
RCHRES 502          RCHRES 999          5

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END SCHEMATIC

RCHRES

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GEN-INFO
*** RCHRES      Name      Nexits  Unit Systems  Printer      BinaryOut
*** # - #<-----><----> User T-series  Engr Metr  LKFG Engr Metr
***
      in  out
122  GOLDE CREEK      1    1    1    1    62    0    0    91    0
132  POPLAR CREEK    1    1    1    1    62    0    0    91    0
142  SCRIBER CR AT 180TH  1    1    1    1    62    0    0    91    0
152  SCRIBER CR AT 196TH  1    1    1    1    62    0    0    91    0
162  SCRIBER LAKE      1    1    1    1    62    0    1    91    0
172  SCRIBER CR AT 44TH   1    1    1    1    62    0    0    91    0
182  SCRIBER CONF POPLAR  1    1    1    1    62    0    0    91    0
192  SCRIBER CONF W/SWAMP  1    1    1    1    62    0    0    91    0
272  MARTHA LAKE       1    1    1    1    62    0    1    91    0
282  MARTHA CR D/S 170TH  1    1    1    1    62    0    0    91    0
292  MARTHA CONF W/SWAMP  1    1    1    1    62    0    0    91    0
362  NORTH TRIB CENTER RD  1    1    1    1    62    0    0    91    0
372  YORK TRIB AT MANOR   1    1    1    1    62    0    0    91    0
382  SWAMP AT HOLLOW DALE  1    1    1    1    62    0    0    91    0
392  SWAMP AT CENTER RD   1    1    1    1    62    0    0    91    0
402  SWAMP AT ADMIRALTY   1    1    1    1    62    0    0    91    0
412  LAKE STICKNEY       1    1    1    1    62    0    1    91    0
422  SWAMP CR AT MANOR    1    1    1    1    62    0    0    91    0
432  SWAMP CR AT 164TH    1    1    1    1    62    0    0    91    0
442  SWAMP CR AT MAPLE RD  1    1    1    1    62    0    0    91    0
452  SWAMP CR AT FILBERT  1    1    1    1    62    0    0    91    0
462  SWAMP CONF W/SCRIBER  1    1    1    1    62    0    0    91    0
472  SWAMP CR D/S 228TH   1    1    1    1    62    0    0    91    0
482  SWAMP CR AT 244TH SW  1    1    1    1    62    0    0    91    0
492  SWAMP CR NR 185TH NE  1    1    1    1    62    0    0    91    0
502  SWAMP CR AT MOUTH    1    1    1    1    62    0    0    91    0
END GEN-INFO

```

ACTIVITY

```

RCHRES ***** Active Sections *****
# - # HYFG ADFG CNFG HTFG SDFG GQFG OXFG NUFG PKFG PHFG      ***
122 502 1 1 1 1 1 1 1 1 1 1 1
END ACTIVITY

```

PRINT-INFO

```

RCHRES ***** Printout Flags ***** PIVL PYR
# - # HYDR ADCA CONS HEAT SED  GQL OXRX NUTR PLNK PHCB *****
122 502 5 5 5 5 5 5 5 5 5 5 1 9
END PRINT-INFO

```

BINARY-INFO

```

RCHRES ***** Printout Flags ***** PIVL PYR

```

```
# - # HYDR ADCA CONS HEAT SED GQL OXRX NUTR PLNK PHCB *****
122 502 5 5 5 5 5 5 5 5 5 1 9
END BINARY-INFO
```

HYDR-PARM1

```
RCHRES Flags for each 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
      * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
122 502 0 1 1 1 4 0 0 0 0 0 0 0 0 0 2 2 2 2 2
END HYDR-PARM1
```

HYDR-PARM2

```
RCHRES NEED CORRECT LEN VALUES ***
# - # FTABNO LEN DELTH STCOR KS DB50 ***
<-----><-----><-----><-----><-----><-----><----->
122 122 0.88 72. 0. 0.5 0.10
132 132 0.98 95. 0. 0.5 0.10
142 142 1.02 39. 0. 0.5 0.10
152 152 1.19 39. 0. 0.5 0.10
162 162 0.51 56. 0. 0.5 0.10
172 172 1.04 13. 0. 0.5 0.10
182 182 0.97 36. 0. 0.5 0.10
192 192 2.05 118. 0. 0.5 0.10
272 272 0.48 3. 0. 0.5 0.10
282 282 0.91 56. 0. 0.5 0.10
292 292 1.48 102. 0. 0.5 0.10
362 362 1.13 62. 0. 0.5 0.10
372 372 1.69 121. 0. 0.5 0.10
382 382 1.77 39. 0. 0.5 0.10
392 392 0.68 33. 0. 0.5 0.10
402 402 0.86 26. 0. 0.5 0.10
412 412 0.36 3. 0. 0.5 0.10
422 422 0.42 20. 0. 0.5 0.10
432 432 1.67 75. 0. 0.5 0.10
442 442 1.19 5. 0. 0.5 0.10
452 452 1.06 62. 0. 0.5 0.10
462 462 2.14 105. 0. 0.5 0.10
472 472 1.34 72. 0. 0.5 0.10
482 482 0.93 62. 0. 0.5 0.10
492 492 1.12 46. 0. 0.5 0.10
502 502 1.20 20. 0. 0.5 0.10
END HYDR-PARM2
```

HYDR-INIT

```
RCHRES Initial conditions for each HYDR section ***
# - # *** VOL Initial value of COLIND Initial value of OUTDGT
      *** ac-ft for each possible exit for each possible exit
<-----><-----><-----><-----><-----><-----><----->
1 161 0.0 4.0
162 4.2 4.0
163 271 0.0 4.0
272 1280.0 4.0
273 411 0.0 4.0
412 0.0 4.0
413 999 0.0 4.0
END HYDR-INIT
```

HT-BED-FLAGS

```
RCHRES ***
# - # BDFG TGFG TSTP ***
122 502 2 3
END HT-BED-FLAGS
```

HEAT-PARM

```
RCHRES *** ELEV ELDAT CFSAX KATRAD KCOND KEVAP
# - # *** (ft) (ft)
122 316.3 -289.7 0.65 9.0 6.12 2.50
132 367.3 -238.7 0.65 9.0 6.12 2.50
142 410.9 -195.1 0.70 9.0 6.12 2.50
152 362.8 -243.2 0.65 9.0 6.12 2.50
162 375.0 -231.0 0.60 9.0 6.12 2.50
172 339.9 -266.1 0.50 9.0 6.12 2.50
182 314.1 -291.9 0.65 9.0 6.12 2.50
192 254.0 -352.0 0.65 9.0 6.12 2.50
272 456.0 -150.0 0.65 9.0 6.12 2.50
```

282	435.8	-170.2	0.60	9.0	6.12	2.50
292	356.2	-249.8	0.55	9.0	6.12	2.50
362	507.7	-98.3	0.50	9.0	6.12	2.50
372	499.2	-106.8	0.55	9.0	6.12	2.50
382	533.8	-72.2	0.55	9.0	6.12	2.50
392	493.7	-112.3	0.60	9.0	6.12	2.50
402	458.2	-147.8	0.60	9.0	6.12	2.50
412	449.4	-156.6	0.60	9.0	6.12	2.50
422	448.6	-157.4	0.60	9.0	6.12	2.50
432	396.0	-210.0	0.60	9.0	6.12	2.50
442	360.8	-245.2	0.65	9.0	6.12	2.50
452	330.9	-275.1	0.70	9.0	6.12	2.50
462	257.4	-348.6	0.70	9.0	6.12	2.50
472	169.3	-436.7	0.75	9.0	6.12	2.50
482	102.8	-503.2	0.65	9.0	6.12	2.50
492	55.0	-551.0	0.60	9.0	6.12	2.50
502	30.1	-575.9	0.50	9.0	6.12	2.50

END HEAT-PARM

HT-BED-PARM

RCHRES	MUDDEP	TGRND	KMUD	KGRND	***
# - #	(ft)	(degF)	(kcal/m2/C/hr)	***	***
122 502	2.0		80.	1.42	

END HT-BED-PARM

MON-HT-TGRND

RCHRES	Temperature of ground (degF)												***	
#	#	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	***
122	502	48.	49.	50.	50.	52.	54.	55.	54.	52.	51.	50.	49.	

END MON-HT-TGRND

HEAT-INIT

RCHRES	TW	AIRTMP	***
# - #	(deg F)	(deg F)	***
122 502	50.0	40.0	

END HEAT-INIT

SANDFG

RCHRES	***
# - #	SDFG
122 502	3

END SANDFG

SED-GENPARM

RCHRES	BEDWID	BEDWRN	POR	***
# - #	(ft)	(ft)	(-)	***
122	8.0	4.0	0.4	
132	8.0	4.0	0.4	
142	8.0	4.0	0.4	
152	8.0	4.0	0.4	
162	8.0	4.0	0.4	
172	8.0	4.0	0.4	
182	8.0	4.0	0.4	
192	8.0	4.0	0.4	
272	8.0	4.0	0.4	
282	8.0	4.0	0.4	
292	8.0	4.0	0.4	
362	8.0	4.0	0.4	
372	8.0	4.0	0.4	
382	8.0	4.0	0.4	
392	8.0	4.0	0.4	
402	8.0	4.0	0.4	
412	8.0	4.0	0.4	
422	8.0	4.0	0.4	
432	8.0	4.0	0.4	
442	8.0	4.0	0.4	
452	8.0	4.0	0.4	
462	8.0	4.0	0.4	
472	8.0	4.0	0.4	
482	8.0	4.0	0.4	
492	8.0	4.0	0.4	
502	8.0	4.0	0.4	

END SED-GENPARM

SAND-PM

RCHRES	***	D	W	RHO	KSAND	EXPSND
--------	-----	---	---	-----	-------	--------

#	-	#	***	(in)	(in/sec)	(gm/cm3)			
122				0.005	0.02	2.5	0.26	1.4	
132				0.005	0.02	2.5	0.26	1.4	
142				0.005	0.02	2.5	0.13	1.4	
152				0.005	0.02	2.5	0.26	1.4	
162				0.005	0.02	2.5	0.26	1.4	
172				0.005	0.02	2.5	0.26	1.4	
182				0.005	0.02	2.5	0.26	1.4	
192				0.005	0.02	2.5	0.26	1.4	
272				0.005	0.02	2.5	0.26	1.4	
282				0.005	0.02	2.5	0.26	1.4	
292				0.005	0.02	2.5	0.26	1.4	
362				0.005	0.02	2.5	0.52	1.4	
372				0.005	0.02	2.5	0.52	1.4	
382				0.005	0.02	2.5	0.52	1.4	
392				0.005	0.02	2.5	0.52	1.4	
402				0.005	0.02	2.5	0.52	1.4	
412				0.005	0.02	2.5	0.52	1.4	
422				0.005	0.02	2.5	0.52	1.4	
432				0.005	0.02	2.5	0.26	1.4	
442				0.005	0.02	2.5	0.26	1.4	
452				0.005	0.02	2.5	0.26	1.4	
462				0.005	0.02	2.5	0.26	1.4	
472				0.005	0.02	2.5	0.13	1.4	
482				0.005	0.02	2.5	0.13	1.4	
492				0.005	0.02	2.5	0.91	1.4	
502				0.005	0.02	2.5	0.91	1.4	

END SAND-PM

SILT-CLAY-PM				SILT PARAMETERS					
RCHRES ***				D	W	RHO	TAUCD	TAUCS	M
#	-	#	***	(in)	(in/sec)	(gm/cm3)	(lb/ft2)	(lb/ft2)	lb/ft2.d
122				0.0006	.0035	2.2	0.80	1.60	0.5
132				0.0006	.0035	2.2	1.10	1.50	0.5
142				0.0006	.0035	2.2	0.047	0.094	0.5
152				0.0006	.0035	2.2	0.25	0.50	0.5
162				0.0006	.0035	2.2	2.0e-4	1.0	0.5
172				0.0006	.0035	2.2	0.20	0.36	0.5
182				0.0006	.0035	2.2	0.25	0.45	0.5
192				0.0006	.0035	2.2	0.65	1.10	0.5
272				0.0006	.0035	2.2	2.0E-6	1.0	0.5
282				0.0006	.0035	2.2	0.30	0.60	0.5
292				0.0006	.0035	2.2	0.35	0.65	0.5
362				0.0006	.0035	2.2	0.85	1.60	0.5
372				0.0006	.0035	2.2	1.20	1.60	0.5
382				0.0006	.0035	2.2	0.70	1.30	0.5
392				0.0006	.0035	2.2	1.10	1.80	0.5
402				0.0006	.0035	2.2	0.70	1.20	0.5
412				0.0006	.0035	2.2	1.0e-5	1.0	0.5
422				0.0006	.0035	2.2	0.50	0.90	0.5
432				0.0006	.0035	2.2	1.20	1.40	0.5
442				0.0006	.0035	2.2	0.11	0.22	0.5
452				0.0006	.0035	2.2	0.50	0.90	0.5
462				0.0006	.0035	2.2	0.40	0.70	0.5
472				0.0006	.0035	2.2	0.50	1.00	0.5
482				0.0006	.0035	2.2	0.80	1.50	0.5
492				0.0006	.0035	2.2	0.35	1.50	0.5
502				0.0006	.0035	2.2	0.20	1.20	0.5

END SILT-CLAY-PM

SILT-CLAY-PM				CLAY PARAMETERS					
*** RCHRES				D	W	RHO	TAUCD	TAUCS	M
***	x	-	x	(in)	(in/sec)	gm/cm3	lb/ft2	lb/ft2	lb/ft2.d
122				0.00006	.0004	2.0	0.80	1.60	0.5
132				0.00006	.0004	2.0	1.10	1.50	0.5
142				0.00006	.0004	2.0	0.047	0.094	0.5
152				0.00006	.0004	2.0	0.25	0.50	0.5
162				0.00006	.0004	2.0	2.0e-4	1.0	0.5
172				0.00006	.0004	2.0	0.20	0.36	0.5
182				0.00006	.0004	2.0	0.25	0.45	0.5
192				0.00006	.0004	2.0	0.65	1.10	0.5
272				0.00006	.0004	2.0	2.0E-6	1.0	0.5
282				0.00006	.0004	2.0	0.30	0.60	0.5
292				0.00006	.0004	2.0	0.35	0.65	0.5
362				0.00006	.0004	2.0	0.85	1.60	0.5
372				0.00006	.0004	2.0	1.20	1.60	0.5

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382      0.00006      .0004      2.0      0.70      1.30      0.5
392      0.00006      .0004      2.0      1.10      1.80      0.5
402      0.00006      .0004      2.0      0.70      1.20      0.5
412      0.00006      .0004      2.0      1.0e-5      1.0      0.5
422      0.00006      .0004      2.0      0.50      0.90      0.5
432      0.00006      .0004      2.0      1.20      1.40      0.5
442      0.00006      .0004      2.0      0.11      0.22      0.5
452      0.00006      .0004      2.0      0.50      0.90      0.5
462      0.00006      .0004      2.0      0.40      0.70      0.5
472      0.00006      .0004      2.0      0.50      1.00      0.5
482      0.00006      .0004      2.0      0.80      1.50      0.5
492      0.00006      .0004      2.0      0.35      1.50      0.5
502      0.00006      .0004      2.0      0.20      1.20      0.5
END SILT-CLAY-PM

```

```

SSED-INIT
RCHRES *** Suspended sed concs (mg/l)
x - x *** Sand Silt Clay
122 502 0.0 0.0 0.0
END SSED-INIT

```

```

BED-INIT
*** RCHRES BEDDEP Initial bed composition
*** x - x (ft) Sand Silt Clay
122 2.0 0.65 0.15 0.20
132 2.0 0.65 0.15 0.20
142 2.0 0.65 0.15 0.20
152 2.0 0.65 0.15 0.20
162 2.0 0.65 0.15 0.20
172 2.0 0.65 0.15 0.20
182 2.0 0.65 0.15 0.20
192 2.0 0.65 0.15 0.20
272 2.0 0.65 0.15 0.20
282 2.0 0.65 0.15 0.20
292 2.0 0.65 0.15 0.20
362 2.0 0.65 0.15 0.20
372 2.0 0.65 0.15 0.20
382 2.0 0.65 0.15 0.20
392 2.0 0.65 0.15 0.20
402 2.0 0.65 0.15 0.20
412 2.0 0.65 0.15 0.20
422 2.0 0.65 0.15 0.20
432 2.0 0.65 0.15 0.20
442 2.0 0.65 0.15 0.20
452 2.0 0.65 0.15 0.20
462 2.0 0.65 0.15 0.20
472 2.0 0.65 0.15 0.20
482 2.0 0.65 0.15 0.20
492 2.0 0.65 0.15 0.20
502 2.0 0.65 0.15 0.20
END BED-INIT

```

```

NCONS
RCHRES ***
# - #NCONS ***
122 502 1
END NCONS

```

```

CONS-DATA
RCHRES Data for conservative constituent No. 1 ***
# - #<---Substance-id---> Conc ID CONV QTYID ***
122 502 Alkalinity as CaCO3 20.0 mg/l 16019. LBS
END CONS-DATA

```

```

GQ-GENDATA
RCHRES NGQL TPGF PHFG ROFG CDFG SDFG PYFG LAT ***
# - # ***
122 502 2 1 1 1 47.8
END GQ-GENDATA

```

```

GQ-QALDATA
RCHRES Data for general constituent No. 1 ***
# - #<-----GQID-----><-----DQAL> CONCID CONV QTYID ***
122 502 Silica 5. mg 16019. LBS
END GQ-QALDATA

```

```

GQ-QALFG
RCHRES HDRL OXID PHOT VOLT BIOD GEN SDAS ***
# - # ***
122 502 0 0 0 0 0 1 0
END GQ-QALFG

GQ-GENDECAY
RCHRES FSTDEC THFST ***
# - # ***
122 502 0.00010 1.07
END GQ-GENDECAY

GQ-SEDDECAY
RCHRES KSUSP THSUSP KBED THBED ***
# - # ***
122 502
END GQ-SEDDECAY

GQ-KD
RCHRES Partition coefficients ***
# - # ADPM(1,1) ADPM(2,1) ADPM(3,1) ADPM(4,1) ADPM(5,1) ADPM(6,1) ***
122 502 0.001 0.001 0.001 0.001 0.001 0.001
END GQ-KD

GQ-ADRATE
RCHRES Adsorption/desorption rate parameters ***
# - # ADPM(1,2) ADPM(2,2) ADPM(3,2) ADPM(4,2) ADPM(5,2) ADPM(6,2) ***
122 502 0.001 0.001 0.001 0.001 0.001 0.001
END GQ-ADRATE

GQ-SEDCONC
RCHRES SQAL1 SQAL2 SQAL3 SQAL4 SQAL5 SQAL6 ***
# - # ***
122 502
END GQ-SEDCONC

GQ-QALDATA
RCHRES Data for general constituent No. 2 ***
# - # <-----GQID-----> DQAL CONCID CONV QTYID ***
122 502 E-Coli 200.0 #CFU 3.531E+07 10^9CFU
END GQ-QALDATA

GQ-QALFG
RCHRES HDRL OXID PHOT VOLT BIOD GEN SDAS ***
# - # ***
122 502 0 0 0 0 0 1 0
END GQ-QALFG

GQ-GENDECAY
RCHRES FSTDEC THFST ***
# - # ***
122 502 1.0 1.07
END GQ-GENDECAY

GQ-SEDDECAY
RCHRES KSUSP THSUSP KBED THBED ***
# - # ***
122 502
END GQ-SEDDECAY

GQ-KD
RCHRES Partition coefficients ***
# - # ADPM(1,1) ADPM(2,1) ADPM(3,1) ADPM(4,1) ADPM(5,1) ADPM(6,1) ***
122 502 .0001 .001 .001 .0001 .001 .001
END GQ-KD

GQ-ADRATE
RCHRES Adsorption/desorption rate parameters ***
# - # ADPM(1,2) ADPM(2,2) ADPM(3,2) ADPM(4,2) ADPM(5,2) ADPM(6,2) ***
122 502 150. 150. 150. .25 .25 .25
END GQ-ADRATE

GQ-SEDCONC
RCHRES SQAL1 SQAL2 SQAL3 SQAL4 SQAL5 SQAL6 ***
# - # ***
122 502

```

END GQ-SEDCONC

GQ-VALUES

RCHRES	TWAT	PHVAL	ROC	CLD	SDCNC	PHY	***
# - #							***
122 502							***

END GQ-VALUES

BENTH-FLAG

RCHRES	BENF	***
# - #		***
122	0	
132	0	
142	1	
152	1	
162	0	
172	1	
182	1	
192	0	
272	1	
282	0	
292	0	
362	0	
372	0	
382	1	
392	1	
402	1	
412	1	
422	1	
432	1	
442	1	
452	0	
462	1	
472	0	
482	0	
492	1	
502	1	

END BENTH-FLAG

OX-FLAGS

RCHRES	REAM	***
# - #		***
122 502	2	

END OX-FLAGS

OX-GENPARM

RCHRES	KBOD20	TCBOD	KODSET	SUPSAT	***
# - #	/hr	(-)	(ft/hr)	(-)	***
122	.006	1.047	.027	1.3	
132	.006	1.047	.027	1.3	
142	.006	1.047	.027	1.3	
152	.006	1.047	.027	1.3	
162	.006	1.047	.027	1.3	
172	.006	1.047	.027	1.3	
182	.006	1.047	.027	1.3	
192	.006	1.047	.027	1.3	
272	.006	1.047	.027	1.3	
282	.006	1.047	.027	1.3	
292	.006	1.047	.027	1.3	
362	.006	1.047	.027	1.3	
372	.006	1.047	.027	1.3	
382	.006	1.047	.027	1.3	
392	.006	1.047	.027	1.3	
402	.006	1.047	.027	1.3	
412	.006	1.047	.027	1.3	
422	.006	1.047	.027	1.3	
432	.006	1.047	.027	1.3	
442	.006	1.047	.027	1.3	
452	.006	1.047	.027	1.3	
462	.006	1.047	.027	1.3	
472	.006	1.047	.027	1.3	
482	.006	1.047	.027	1.3	
492	.006	1.047	.027	1.3	
502	.006	1.047	.027	1.3	

END OX-GENPARM

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```

OX-BENPARM
RCHRES      BENOD      TC BEN      EXPOD      BRBOD (A)  BRBOD (2)  EXPREL***
# - #      mg/m2.hr
122        250.        1.074      1.22       .001       .001       2.82
132        250.        1.074      1.22       .001       .001       2.82
142        250.        1.074      1.22       .001       .001       2.82
152        250.        1.074      1.22       .001       .001       2.82
162        250.        1.074      1.22       .001       .001       2.82
172        250.        1.074      1.22       .001       .001       2.82
182        250.        1.074      1.22       .001       .001       2.82
192        250.        1.074      1.22       .001       .001       2.82
272        250.        1.074      1.22       .001       .001       2.82
282        250.        1.074      1.22       .001       .001       2.82
292        250.        1.074      1.22       .001       .001       2.82
362        250.        1.074      1.22       .001       .001       2.82
372        250.        1.074      1.22       .001       .001       2.82
382        250.        1.074      1.22       .001       .001       2.82
392        250.        1.074      1.22       .001       .001       2.82
402        250.        1.074      1.22       .001       .001       2.82
412        250.        1.074      1.22       .001       .001       2.82
422        250.        1.074      1.22       .001       .001       2.82
432        250.        1.074      1.22       .001       .001       2.82
442        250.        1.074      1.22       .001       .001       2.82
452        250.        1.074      1.22       .001       .001       2.82
462        250.        1.074      1.22       .001       .001       2.82
472        250.        1.074      1.22       .001       .001       2.82
482        250.        1.074      1.22       .001       .001       2.82
492        250.        1.074      1.22       .001       .001       2.82
502        250.        1.074      1.22       .001       .001       2.82
END OX-BENPARM

OX-TCGINV
RCHRES      TCGINV      ***
# - #      (-)      ***
122 502      1.07
END OX-TCGINV

OX-INIT
RCHRES      DOX          BOD          SATDO      ***
# - #      mg/l        mg/l        mg/l      ***
122 502      14.         1.0         14.
END OX-INIT

NUT-FLAGS
RCHRES      TAM      NO2      PO4      AMV      DEN      ADNH      ADPO      PHFG      ***
# - #
122 502      1      0      1      0      1      0      1
END NUT-FLAGS

CONV-VAL1
RCHRES      CVBO          CVBPC          CVBPN          BPCNTC      ***
# - #      mg/mg        mols/mol      mols/mol
122 502      1.63        106.         16.         49.
END CONV-VAL1

NUT-BENPARM
RCHRES      BRTAM (1)    BRTAM (2)    BRPO4 (1)    BRPO4 (2)    ANAER***
# - #      mg/m2.hr    mg/m2.hr    mg/m2.hr    mg/m2.hr    mg/l***
122 502      0.0        0.0        0.0        0.0        .001
END NUT-BENPARM

NUT-NITDENIT
RCHRES      KTAM20      KNO220      TCNIT      KNO320      TC DEN      DENOXT      ***
# - #      /hr        /hr        /hr        /hr        mg/l      mg/l      ***
122        .015        .002        1.070      .002        1.04      5.
132        .015        .002        1.070      .002        1.04      5.
142        .015        .002        1.070      .002        1.04      5.
152        .015        .002        1.070      .002        1.04      5.
162        .015        .002        1.070      .002        1.04      5.
172        .015        .002        1.070      .002        1.04      5.
182        .015        .002        1.070      .002        1.04      5.
192        .015        .002        1.070      .002        1.04      5.
272        .015        .002        1.070      .002        1.04      5.
282        .015        .002        1.070      .002        1.04      5.
292        .015        .002        1.070      .002        1.04      5.
362        .015        .002        1.070      .002        1.04      5.

```

```

372      .015      .002      1.070      .002      1.04      5.
382      .015      .002      1.070      .002      1.04      5.
392      .015      .002      1.070      .002      1.04      5.
402      .015      .002      1.070      .002      1.04      5.
412      .015      .002      1.070      .002      1.04      5.
422      .015      .002      1.070      .002      1.04      5.
432      .015      .002      1.070      .002      1.04      5.
442      .015      .002      1.070      .002      1.04      5.
452      .015      .002      1.070      .002      1.04      5.
462      .015      .002      1.070      .002      1.04      5.
472      .015      .002      1.070      .002      1.04      5.
482      .015      .002      1.070      .002      1.04      5.
492      .015      .002      1.070      .002      1.04      5.
502      .015      .002      1.070      .002      1.04      5.
END NUT-NITDENIT

```

```

NUT-BEDCONC
RCHRES      Bed concentrations of NH4 & PO4 (mg/mg)      ***
# - # NH4-sand NH4-silt NH4-clay PO4-sand PO4-silt PO4-clay ***
122 502 0.00010 0.00020 0.00030 0.00005 0.00030 0.00040
END NUT-BEDCONC

```

```

NUT-ADSPARM
RCHRES      Partition coefficients for NH4 AND PO4 (l/mg)      ***
# - # NH4-sand NH4-silt NH4-clay PO4-sand PO4-silt PO4-clay ***
122 502 0.0001 0.0001 0.0001 10. 10. 10.
END NUT-ADSPARM

```

```

NUT-DINIT
RCHRES      NO3      TAM      NO2      PO4      PH      ***
# - #      mg/l      mg/l      mg/l      mg/l      ***
122 502 1.0      .05      .030      7.
END NUT-DINIT

```

```

NUT-ADSINIT
RCHRES      Initial suspended NH4 and PO4 concentrations (mg/mg) ***
# - # NH4-sand NH4-silt NH4-clay PO4-sand PO4-silt PO4-clay ***
122 502 0.      0.      0.      0.      0.      0.
END NUT-ADSINIT

```

```

PLNK-FLAGS
RCHRES PHYF ZOOF BALF SDLT AMRF DECF NSFG ZFOO BNFG***
# - #
122 501 0 0 1 0 0 1 0 0 0
502 1 0 1 0 0 1 0 0 0
END PLNK-FLAGS

```

```

PLNK-PARM1
RCHRES ***RATCLP      NONREF      LITSED      ALNPR      EXTB      MALGR      PARADF
# - # ***      /ft      /hr
122 501 .68      .5      0.      .25      .20      .039
502 .68      .5      0.      .25      .20      .050
END PLNK-PARM1

```

```

PLNK-PARM2
RCHRES *** CMLLT      CMMN      CMMNP      CMMF      TALGRH      TALGRL      TALGRM
# - # ***ly/min      mg/l      mg/l      mg/l      deg F      deg F      degF
122 502 .010      0.025      .0001      .005      95.      43.0      68.
END PLNK-PARM2

```

```

PLNK-PARM3
RCHRES ALR20      ALDH      ALDL      OXALD      NALDH      PALDH ***
# - #      /hr      /hr      /hr      /hr      mg/l      mg/l ***
122 502 .005      .001      .001      .03      .010      .002
END PLNK-PARM3

```

```

PHYTO-PARM
RCHRES SEED      MXSTAY      OREF      CLALDH      PHYSET      REFSET ***
# - #      mg/l      mg/l      ug/l      ft/hr      ft/hr ***
122 502 1.0      1.5      400.      20.      0.02      0.120
END PHYTO-PARM

```

```

BENAL-PARM
RCHRES MBAL      CFBALR      CFBALG      ***
# - #      mg/m2      ***
122 502 2000.      0.34      0.33

```

END BENAL-PARM

PLNK-INIT

RCHRES	PHYTO	ZOO	BENAL	ORN	ORP	ORC	***
# - #	mg/l	org/l	mg/m2	mg/l	mg/l	mg/l	***
122 502	0.5		1000.	0.06	0.02	0.5	

END PLNK-INIT

PH-PARM1

RCHRES	PHCN	ALKC	***
# - #			***
122 502	50	1	

END PH-PARM1

PH-PARM2

RCHRES	CFCINV	BRCO2 (1)	BRCO2 (2)	***
# - #		mg/m2/hr	mg/m2/hr	***
122 502	0.05	1.	1.	

END PH-PARM2

PH-INIT

RCHRES	TIC	CO2	PH	***
# - #	mg/l	mg/l		***
122 502	12.	10.	7.0	

END PH-INIT

END RCHRES

FTABLES

FTABLE 502  
 \*\*\*\* SWAMP CREEK Confluence with Sammamish River \*\*\*\*\*  
 \*\*\*SNOHOMISH CO DNR MODEL FTABLE 5

ROWS	COLS	***		
11	4			
DEPTH	AREA	VOLUME	OUTFLOW1	***
(ft)	(acres)	(ac-ft)	(cfs)	***
0.00	0.00	0.000	0.00	
1.70	10.41	6.491	2.20	
2.00	13.78	10.106	6.70	
2.50	20.54	18.624	24.30	
3.00	28.74	30.882	64.00	
3.50	38.38	47.601	130.00	
4.00	49.46	69.499	217.00	
5.00	75.93	131.713	403.00	
6.00	76.50	207.929	620.00	
8.00	77.63	362.054	1170.00	
12.00	79.89	677.081	2900.00	

END FTABLE502

FTABLE 492  
 \*\*\*\* SWAMP CREEK near NE 185th \*\*\*\*\*  
 \*\*\*SNOHOMISH CO DNR MODEL FTABLES 25+50

ROWS	COLS	***		
10	4			
Depth	Area	Volume	Outflow1	***
(ft)	(acres)	(acre-ft)	(cfs)	***
0.000000	0.000000	0.000000	0.000000	
0.100000	1.410000	0.070000	0.860000	
0.500000	1.820000	0.706000	10.86000	
1.000000	2.820000	1.845000	32.24000	
1.500000	4.350000	3.614000	62.70000	
2.000000	6.400000	6.278000	102.8600	
2.500000	8.980000	10.10000	153.5200	
3.000000	12.08000	15.34500	215.5200	
5.000000	29.80500	55.90100	593.0700	
8.000000	64.05000	192.7780	1630.740	

END FTABLE492

FTABLE 482  
 \*\*\*\* SWAMP CREEK at 244th SW \*\*\*\*\*  
 \*\*\*SNOHOMISH CO DNR MODEL FTABLES 65+75

ROWS	COLS	***		
14	4			
Depth	Area	Volume	Outflow1	***
(ft)	(acres)	(acre-ft)	(cfs)	***
0.000000	0.000000	0.000000	0.000000	

```

0.200000 0.460000 0.120000 5.500000
1.060000 2.396926 1.575651 55.100000
2.060000 3.176659 3.601110 137.8000
2.820000 3.630596 5.845214 275.7000
3.010000 3.717733 6.515453 330.8000
3.210000 3.827352 7.408863 441.1000
3.400000 3.924489 8.289102 551.4000
4.040000 4.286829 11.00084 881.4000
4.130000 4.395413 11.64702 1002.300
4.230000 4.513248 12.34421 1131.800
4.610000 5.011401 14.16533 1358.200
5.280000 6.033074 17.78864 1697.700
6.280000 8.354705 25.87514 2263.600
END FTABLE482

```

```

FTABLE 472
**** SWAMP CREEK d/s of 228th****
***SNOHOMISH CO DNR MODEL FTABLES 110+120

```

```

Rows Cols      ***
 14      4
  Depth      Area      Volume  Outflow1      ***
  (ft)      (acres)  (acre-ft)  (cfs)      ***
0.000000 0.000000 0.000000 0.000000
0.280000 0.750000 0.220000 5.400000
1.110000 2.487071 1.502424 54.00000
1.790000 3.324524 2.909762 135.0000
2.560000 3.872857 4.831429 270.0000
2.830000 3.997750 5.587750 324.0000
3.330000 4.215250 7.065250 432.0000
3.790000 4.432727 8.558182 540.0000
4.940000 5.252892 12.70422 848.8000
5.350000 5.515238 14.06048 972.7000
5.750000 6.230000 18.38800 1100.000
6.420000 7.255625 23.30063 1320.000
7.400000 9.269174 31.69554 1650.000
9.940000 11.86959 45.14777 2200.000
END FTABLE472

```

```

FTABLE 462
**** SWAMP CREEK confluence with Scriber Creek****
***SNOHOMISH CO DNR MODEL FTABLES 125+140+145+170

```

```

Rows Cols      ***
 14      4
  Depth      Area      Volume  Outflow1      ***
  (ft)      (acres)  (acre-ft)  (cfs)      ***
0.000000 0.000000 0.000000 0.000000
0.440000 1.914062 0.577926 2.200000
0.950000 3.655243 2.192119 22.30000
1.370000 4.582143 3.913913 55.70000
1.870000 6.074550 6.552011 111.4000
2.050000 6.516505 7.681335 133.7000
2.390000 7.504795 10.09718 178.2000
2.650000 8.479687 12.24457 222.8000
3.200000 12.18744 17.78004 318.6000
3.550000 14.02463 22.08686 393.0000
3.810000 15.73303 26.98451 545.5000
4.200000 17.41787 32.76656 654.6000
6.380000 23.25089 55.45728 818.3000
8.320000 28.53904 78.75139 1091.000
END FTABLE462

```

```

FTABLE 452
**** SWAMP CREEK at Filbert Road****
***SNOHOMISH CO DNR MODEL FTABLES 203+215+227

```

```

Rows Cols      ***
 14      4
  Depth      Area      Volume  Outflow1      ***
  (ft)      (acres)  (acre-ft)  (cfs)      ***
0.000000 0.000000 0.000000 0.000000
0.300000 1.216667 0.486667 1.770000
0.750000 2.045498 1.430596 17.68000
1.140000 2.482308 2.457692 44.20000
1.560000 2.879211 3.716174 88.40000
1.710000 3.005441 4.198903 106.0800
1.960000 3.256724 5.080889 141.4400
2.170000 3.481679 5.917406 176.8000

```

2.480000 3.830385 7.225769 231.8000  
 2.790000 4.220408 8.820272 295.5000  
 3.130000 4.887273 11.72727 375.5000  
 3.530000 6.855447 18.56914 450.6000  
 3.980000 12.02339 39.35324 563.2500  
 4.660000 17.29548 132.0354 751.0000  
 END FTABLE452

FTABLE 442  
 \*\*\*\* SWAMP CREEK at Maple Road\*\*\*\*  
 \*\*\*SNOHOMISH CO DNR MODEL FTABLES 239+248+266+278+287+293  
 Rows Cols \*\*\*  
 13 4  
 Depth Area Volume Outflow1 \*\*\*  
 (ft) (acres) (acre-ft) (cfs) \*\*\*  
 0.000000 0.000000 0.000000 0.000000  
 2.650000 22.72553 30.44049 1.470000  
 3.320000 27.35488 43.74273 14.67000  
 3.990000 33.09027 62.55784 36.68000  
 4.900000 44.01385 100.6638 73.35000  
 5.220000 48.26980 115.5682 88.02000  
 5.860000 56.28270 145.0103 117.3600  
 6.510000 64.68554 183.1103 146.7000  
 7.770000 93.05506 308.6686 190.0000  
 9.240000 111.1596 478.4716 225.0000  
 12.16000 142.6166 864.5751 300.0000  
 22.20000 208.9003 2475.308 450.0000  
 30.05000 256.5269 3890.348 600.0000  
 END FTABLE442

FTABLE 432  
 \*\*\*\* SWAMP CREEK at 164th\*\*\*\*  
 \*\*\*SNOHOMISH CO DNR MODEL FTABLES 296+308+320+344+359  
 Rows Cols \*\*\*  
 14 4  
 Depth Area Volume Outflow1 \*\*\*  
 (ft) (acres) (acre-ft) (cfs) \*\*\*  
 0.000000 0.000000 0.000000 0.000000  
 0.310000 1.237184 0.462965 1.700000  
 0.790000 2.609554 1.682754 17.00000  
 1.170000 3.287595 2.866391 42.50000  
 1.640000 5.699818 6.843017 85.00000  
 1.780000 6.616007 8.298104 102.0000  
 2.030000 8.243088 11.03830 136.0000  
 2.250000 10.47713 14.19311 170.0000  
 2.820000 16.97091 24.84591 276.4200  
 3.100000 19.62911 29.86466 340.5200  
 3.540000 22.39657 36.23164 450.2600  
 3.880000 24.82158 42.42167 540.3100  
 4.330000 28.86294 53.35322 675.3900  
 9.150000 59.72299 141.7210 900.5200  
 END FTABLE432

FTABLE 422  
 \*\*\*\* SWAMP CREEK at Manor Way\*\*\*\*  
 \*\*\*SNOHOMISH CO DNR MODEL FTABLE 450  
 ROWS COLS \*\*\*  
 10 4  
 DEPTH AREA VOLUME OUTFLOW1 \*\*\*  
 (ft) (acres) (ac-ft) (cfs) \*\*\*  
 0.00 0.00 0.000 0.00  
 0.25 0.40 0.093 2.40  
 0.50 0.54 0.205 8.30  
 0.75 0.75 0.366 17.50  
 1.00 1.05 0.594 30.10  
 1.50 1.88 1.308 66.50  
 2.00 2.99 2.510 119.30  
 2.50 4.43 4.353 190.20  
 3.00 4.48 6.583 281.20  
 5.00 4.70 15.763 878.00  
 END FTABLE422

FTABLE 412  
 \*\*\* Lake Stickney  
 \*\*\*\* SWAMP CREEK discharge from Lake Stickney\*\*\*\*  
 \*\*\*SNOHOMISH CO DNR MODEL FTABLE 455

```

ROWS COLS   ***
 8         4
  DEPTH     AREA     VOLUME  OUTFLOW1     ELEV***
  (ft)      (acres)   (ac-ft) (cfs)         (FT) ***
  0.00      23.95     0.00     0.0           440.5
  0.50      23.95     11.76    0.8           441.0
  1.00      23.95     23.76    1.7           441.5
  1.50      23.95     35.99    5.4           442.0
  2.00      23.95     48.47   12.0          442.5
  4.50      23.95    118.54   95.6          445.0
  7.50      23.95    234.07  390.0         448.0
  9.50      23.95    342.38  790.0         450.0
END FTABLE412

```

```

FTABLE      402
**** SWAMP CREEK at Admiralty Way****
***SNOHOMISH CO DNR MODEL FTABLES 485+495
Rows Cols   ***
 09         4
  Depth     Area     Volume  Outflow1     ***
  (ft)      (acres)   (acre-ft) (cfs)         ***
  0.000000  0.000000  0.000000  0.000000
  0.100000  4.240000  0.374000  1.200000
  0.200000  4.240000  0.798000  3.780000
  0.490000  4.240000  2.025633  16.51000
  1.010000  4.240000  4.118380  40.00000
  1.500000  4.240000  6.117000  72.00000
  2.130000  4.622200  8.873280  120.0000
  3.010000  5.457300  13.35560  200.0000
  4.880000  8.692400  23.78086  400.0000
END FTABLE402

```

```

FTABLE      392
**** SWAMP CREEK at Center Road****
***SNOHOMISH CO DNR MODEL FTABLE 555
ROWS COLS   ***
 12         4
  DEPTH     AREA     VOLUME  OUTFLOW1     ***
  (ft)      (acres)   (ac-ft) (cfs)         ***
  0.00      0.00      0.000    0.00
  0.36      0.63      0.041    1.00
  0.87      0.77      0.157    4.00
  1.22      0.87      0.254    7.00
  1.54      0.97      0.350    10.00
  1.84      1.05      0.449    13.00
  2.16      1.14      0.555    16.00
  2.83      1.33      0.804    22.00
  4.99      1.97      2.011    34.00
  9.96      4.30     10.696   52.00
 10.30     4.94     11.703   152.90
 10.56     5.50     12.467   308.54
 11.00     6.00     14.000   600.00
END FTABLE392

```

```

FTABLE      382
**** SWAMP CREEK at Hollow Dale Road****
***SNOHOMISH CO DNR MODEL FTABLES 565+570+575
Rows Cols   ***
 10         4
  Depth     Area     Volume  Outflow1     ***
  (ft)      (acres)   (acre-ft) (cfs)         ***
  0.000000  0.000000  0.000000  0.000000
  0.270000  17.74167  4.652500  0.950000
  0.930000  19.01640  16.65963  6.000000
  1.370000  19.47636  24.75453  11.00000
  1.760000  19.79980  31.91144  16.00000
  2.130000  20.06354  38.68059  21.00000
  2.480000  20.29036  45.04141  26.00000
  3.170000  20.68564  57.54834  36.00000
  4.940000  21.15927  89.45662  56.00000
  5.450000  21.57440  99.66443  282.1800
END FTABLE382

```

```

FTABLE      372
**** YORK CREEK TRIB OF SWAMP CREEK at Manor Way****
***SNOHOMISH CO DNR MODEL FTABLES 405+420+430+435+440+445

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Swamp Creek UCI File

```

Rows Cols      ***
  10      4
  Depth      Area      Volume      Outflow1
  (ft)      (acres) (acre-ft) (cfs) ***
0.000000  0.000000  0.000000  0.000000
0.250000  0.471200  0.716080  1.000000
0.500000  1.357601  1.775793  4.100000
0.750000  1.989582  2.863737  9.700000
1.000000  4.007222  4.624646  18.30000
1.500000  6.344968  8.319213  46.50000
2.000000  9.349281  13.51538  91.90000
2.500000  12.54307  19.42447  157.7000
3.000000  14.74766  27.52218  246.8000
5.000000  30.31500  74.42217  888.5000
END FTABLE372

```

```

FTABLE      362
**** NORTH CREEK TRIB OF SWAMP CREEK at Center Road****
***SNOHOMISH CO DNR MODEL FTABLES 500+505+520

```

```

Rows Cols      ***
  11      4
  Depth      Area      Volume      Outflow1
  (ft)      (acres) (acre-ft) (cfs) ***
0.000000  0.000000  0.000000  0.000000
1.200000  1.802250  1.487000  2.000000
1.480000  3.650000  3.272760  5.000000
1.740000  5.243861  5.342379  10.00000
2.270000  6.229652  8.730387  20.00000
2.550000  6.806472  10.63084  30.00000
2.800000  8.036636  13.07529  40.00000
3.340000  9.826589  17.97689  60.00000
4.570000  18.86205  48.40470  80.00000
5.110000  37.58915  112.7681  100.0000
6.510000  83.30000  287.3935  200.0000
END FTABLE362

```

```

FTABLE      292
**** MARTHA CREEK at confluence with Swamp Creek near Filbert Road****
***SNOHOMISH CO DNR MODEL FTABLES 800+804+808+816+828+836+844

```

```

Rows Cols      ***
  11      4
  Depth      Area      Volume      Outflow1
  (ft)      (acres) (acre-ft) (cfs) ***
0.000000  0.000000  0.000000  0.000000
0.800000  0.370000  0.320000  20.00000
0.880000  0.930000  0.598286  25.00000
0.950000  1.020000  0.716333  30.00000
1.070000  1.170000  0.950000  40.00000
1.160000  1.307500  1.203125  50.00000
1.240000  1.467857  1.589071  60.00000
1.390000  2.108000  2.191705  80.00000
1.510000  2.556000  2.762219  100.0000
2.030000  4.635273  5.882676  200.0000
2.590000  6.257373  8.244152  300.0000
END FTABLE292

```

```

FTABLE      282
**** MARTHA CREEK downstream of 170th****
***SNOHOMISH CO DNR MODEL FTABLES 852+860+872+876+880

```

```

Rows Cols      ***
  11      4
  Depth      Area      Volume      Outflow1 ***
  (ft)      (acres) (acre-ft) (cfs) ***
0.000000  0.000000  0.000000  0.000000
0.840000  0.857857  0.404143  7.360000
1.050000  1.043307  0.565292  9.200000
1.210000  1.200561  0.705341  11.03000
1.490000  2.605156  1.464304  14.71000
1.770000  3.768607  2.700247  18.39000
2.050000  5.339963  3.465267  22.07000
2.730000  9.586556  5.882324  29.42000
3.300000  13.44075  8.241782  36.78000
3.930000  18.76818  12.42073  73.56000
4.280000  21.86626  15.03233  110.3400
END FTABLE282

```

```

FTABLE      272
**** MARTHA LAKE headwater source of Martha Creek****
***SNOHOMISH CO DNR MODEL FTABLE 900
ROWS COLS ***
  32      4
  Depth      Area      Volume      Outflow1      ELEV      ***
  (ft)      (acres)      (acre-ft)      (cfs)      (ft)      ***
  0.00      0.00      0.0      0.00      405.00
  1.00      0.20      0.4      0.00      406.00
  9.00      6.70      26.8      0.00      414.00
  19.00     18.50     148.0     0.00      424.00
  29.00     32.20     398.3     0.00      434.00
  39.00     44.80     781.6     0.00      444.00
  49.00     55.00    1279.8     0.00      454.00
  49.30     55.33    1296.3     0.05      454.30
  50.47     56.65    1361.9     0.81      455.47
  50.57     56.77    1367.5     1.01      455.57
  50.66     56.88    1372.6     1.21      455.66
  50.81     57.07    1381.2     1.62      455.81
  50.94     57.24    1388.6     2.02      455.94
  51.04     57.37    1394.3     2.42      456.04
  51.20     57.58    1403.5     3.23      456.20
  51.34     57.77    1411.6     4.04      456.34
  51.75     58.33    1435.4     8.08      456.75
  51.99     58.66    1449.5    12.12      456.99
  52.11     58.83    1456.5    14.14      457.11
  52.25     59.03    1464.8    16.17      457.25
  52.41     59.26    1474.2    18.19      457.41
  52.51     59.41    1480.2    20.21      457.51
  52.93     60.05    1505.2    24.25      457.93
  52.98     60.13    1508.2    26.27      457.98
  53.02     60.20    1510.7    28.29      458.02
  53.06     60.60    1513.1    30.31      458.06
  53.09     64.41    1514.9    32.33      458.09
  54.00    150.00    1700.0   107.00      459.00
  55.00    300.00    3000.0   300.00      460.00
  56.00    600.00    6000.0   900.00      461.00
  57.00    115.00   10000.0  2500.00     462.00
  58.00    130.00   15000.0  8000.00     463.00
END FTABLE272

```

```

FTABLE      192
**** SCRIBER CREEK at confluence with Swamp Creek****
***SNOHOMISH CO DNR MODEL FTABLES 600+605
Rows Cols      ***
  11      4
  Depth      Area      Volume      Outflow1      ***
  (ft)      (acres)      (acre-ft)      (cfs)      ***
  0.      0.344      0.0000      0.0000
  1.      1.940      1.5820      21.80
  2.      2.655      7.8800      81.30
  3.      3.181      9.7530      185.4
  4.      3.706      11.901      342.2
  5.      4.232      14.325      559.3
  6.      4.757      17.025      844.1
  7.      5.282      19.725      1128.9
  8.      5.807      22.425      1413.7
  9.      6.332      25.125      1700.0
  10.     6.857      27.825      2000.0
END FTABLE192

```

```

FTABLE      182
**** SCRIBER CREEK at confluence with Poplar Creek****
***SNOHOMISH CO DNR MODEL FTABLES 610+615
Rows Cols      ***
  06      4
  Depth      Area      Volume      Outflow1      ***
  (ft)      (acres)      (acre-ft)      (cfs)      ***
  0.000000  0.310000  0.000000  0.000000
  1.000000  0.806000  0.558000  26.50000
  2.000000  9.629031  7.634500  112.4000
  3.000000  13.70492  17.95715  278.2000
  4.000000  17.04950  32.73450  542.9000
  5.000000  17.93150  49.16550  923.8000
END FTABLE182

```

```

FTABLE      172
**** SCRIBER CREEK at 44th****
***SNOHOMISH CO DNR MODEL FTABLES 620+624
Rows Cols      ***
  11      4
  Depth      Area      Volume      Outflow1      ***
  (ft)      (acres)      (acre-ft)      (cfs)      ***
0.000000      0.000000      0.000000      0.000000
4.940000      4.588000      10.19000      100.0000
6.370000      10.56600      21.04300      200.0000
7.890000      16.91500      43.06400      300.0000
8.130000      17.65200      47.30500      400.0000
8.270000      18.26800      49.95500      500.0000
8.340000      18.57600      51.26000      600.0000
8.430000      18.97200      52.94500      700.0000
8.500000      19.28000      54.19000      800.0000
8.590000      19.67600      55.80500      900.0000
8.640000      19.89600      56.64000      1000.000
END FTABLE172

```

```

FTABLE      162
**** SCRIBER LAKE****
***SNOHOMISH CO DNR MODEL FTABLE 627
Rows Cols      ***
  9      4
  Depth      Area      Volume      Outflow1      ***
  (ft)      (acres)      (acre-ft)      (cfs)      ***
0.0000      0.000      0.00000      0.00
0.5000      0.100      0.04000      0.00
1.5000      0.200      0.20000      0.00
2.5000      0.400      0.50000      0.00
3.5000      6.900      4.20000      0.00
4.5000      12.100      13.70000      10.00
5.0000      14.400      20.90000      30.00
5.5000      16.800      28.10000      190.00
10.5000      33.100      153.00000      500.00
END FTABLE162

```

```

FTABLE      152
**** SCRIBER CREEK at 196th****
***SNOHOMISH CO DNR MODEL FTABLES 630+632
Rows Cols      ***
  08      4
  Depth      Area      Volume      Outflow1      ***
  (ft)      (acres)      (acre-ft)      (cfs)      ***
0.000000      0.000000      0.000000      0.000000
0.000100      0.827000      0.000200      0.000000
1.000000      1.212400      0.590400      21.43000
2.000000      1.733400      1.461000      67.09000
2.500000      2.081400      2.025600      98.10000
3.000000      2.463000      2.827000      134.7800
5.000000      4.014000      7.387000      363.3900
8.000000      5.130000      15.69745      706.3000
END FTABLE152

```

```

FTABLE      142
**** SCRIBER CREEK at 180th****
***SNOHOMISH CO DNR MODEL FTABLE 634
Rows Cols      ***
  7      4
  Depth      Area      Volume      Outflow1      ***
  (ft)      (acres)      (acre-ft)      (cfs)      ***
0.0000      0.000      0.00000      0.00
2.0000      0.100      0.10000      20.00
3.0000      0.100      0.20000      60.00
4.0000      0.100      0.30000      80.00
5.0000      0.100      0.40000      100.00
6.0000      0.100      0.50000      120.00
25.0000      0.100      2.40000      500.00
END FTABLE142

```

```

FTABLE      132
**** POPLAR CREEK TRIB OF SCRIBER CREEK ****
***SNOHOMISH CO DNR MODEL FTABLES 650+655+660+665
Rows Cols      ***
  23      4

```

Depth (ft)	Area (acres)	Volume (acre-ft)	Outflow1 (cfs)	***
0.000000	0.000000	0.000000	0.000000	
0.500000	0.494000	0.593000	0.300000	
1.000000	1.042250	1.237665	3.700000	
1.500000	1.169750	1.811642	10.600000	
2.000000	1.280750	2.376851	19.100000	
2.500000	1.380750	2.941760	20.200000	
3.000000	1.426650	3.493005	27.800000	
3.500000	1.481650	4.057664	36.800000	
4.000000	1.535150	4.639073	47.400000	
4.500000	1.577650	5.236982	59.700000	
5.000000	1.627700	5.853751	68.300000	
5.500000	1.667700	6.483660	72.900000	
6.000000	1.734700	7.172169	76.000000	
6.500000	1.825200	7.902378	81.600000	
7.000000	1.910050	8.671167	84.000000	
7.500000	1.995050	9.452576	88.000000	
8.000000	2.090050	10.24499	91.000000	
8.500000	2.149550	11.05107	94.200000	
9.000000	2.180173	11.86253	98.000000	
9.500000	2.220554	12.68686	101.000000	
10.000000	2.250934	13.52319	104.200000	
10.500000	2.291315	14.37153	107.000000	
11.000000	2.321696	15.23186	110.000000	

FTABLE 122  
 \*\*\*\* GOLDE CREEK TRIB OF SCRIBER CREEK\*\*\*\*  
 \*\*\*SNOHOMISH CO DNR MODEL FTABLES 670+675+680+685+690+700

Rows Cols \*\*\*

Depth (ft)	Area (acres)	Volume (acre-ft)	Outflow1 (cfs)	***
0.000000	0.101000	0.000000	0.000000	
1.000000	4.032466	6.419044	24.900000	
2.000000	8.311285	32.08134	96.100000	
3.000000	10.18336	39.67707	224.800000	
4.000000	11.49101	47.80936	422.400000	

END FTABLES

MASS-LINK

<Volume> <-Grp> <-Member-><--Mult--> <Target> <-Grp> <-Member->\*\*\*  
 <Name> <Name> # <-factor-> <Name> <Name> # #\*\*\*

MASS-LINK	1	***
conversion from acre-inches to acre-ft (1/12)		
PERLND PWATER PERO	0.0833333	RCHRES INFLOW IVOL
PERLND SEDMNT SOSED 1	0.05	RCHRES INFLOW ISED 1
PERLND SEDMNT SOSED 1	0.70	RCHRES INFLOW ISED 2
PERLND SEDMNT SOSED 1	0.25	RCHRES INFLOW ISED 3
PERLND PWTGAS POHT	1.	RCHRES INFLOW IHEAT
PERLND PWTGAS PODOXM	1.	RCHRES INFLOW OXIF 1
PERLND PWATER SURO	4.0	RCHRES INFLOW PHIF 1
PERLND PWTGAS IOCO2M	40.	RCHRES INFLOW PHIF 1
PERLND PWTGAS AOCO2M	40.	RCHRES INFLOW PHIF 1
PERLND PQUAL POQUAL 1	1.	RCHRES INFLOW NUIF1 1
PERLND PQUAL POQUAL 2	1.	RCHRES INFLOW NUIF1 2
PERLND PQUAL POQUAL 3	1.	RCHRES INFLOW NUIF1 4
PERLND PQUAL POQUAL 4	0.40	RCHRES INFLOW OXIF 2
PERLND PQUAL POQUAL 4	0.040	RCHRES INFLOW PKIF 3
PERLND PQUAL POQUAL 4	0.0030	RCHRES INFLOW PKIF 4
PERLND PQUAL POQUAL 4	1.	RCHRES INFLOW PKIF 5
PERLND PQUAL IOQUAL 5	1.	RCHRES INFLOW ICON 1
PERLND PQUAL AOQUAL 5	1.	RCHRES INFLOW ICON 1
PERLND PWATER SURO	12.	RCHRES INFLOW ICON 1
PERLND PQUAL POQUAL 6	1.	RCHRES INFLOW IDQAL 1
PERLND PQUAL POQUAL 7	1.	RCHRES INFLOW IDQAL 2

MASS-LINK	4	
IMPLND IWATER SURO	0.0833333	RCHRES INFLOW IVOL
IMPLND SOLIDS SOSLD 1	0.05	RCHRES INFLOW ISED 1
IMPLND SOLIDS SOSLD 1	0.70	RCHRES INFLOW ISED 2
IMPLND SOLIDS SOSLD 1	0.25	RCHRES INFLOW ISED 3

## Swamp Creek UCI File

```

IMPLND    IWTGAS  SOHT          1.          RCHRES      INFLOW  IHEAT
IMPLND    IWTGAS  SODOXM         1.          RCHRES      INFLOW  OXIF   1
IMPLND    IWATER  SURO          4.0         RCHRES      INFLOW  PHIF   1
IMPLND    IQUAL   SOQUAL  1          1.          RCHRES      INFLOW  NUIF1  1
IMPLND    IQUAL   SOQUAL  2          1.          RCHRES      INFLOW  NUIF1  2
IMPLND    IQUAL   SOQUAL  3          1.          RCHRES      INFLOW  NUIF1  4
IMPLND    IQUAL   SOQUAL  4          0.40        RCHRES      INFLOW  OXIF   2
IMRLND    IQUAL   SOQUAL  4          0.040       RCHRES      INFLOW  PKIF   3
IMPLND    IQUAL   SOQUAL  4          0.0030      RCHRES      INFLOW  PKIF   4
IMPLND    IQUAL   SOQUAL  4          1.          RCHRES      INFLOW  PKIF   5
IMPLND    IWATER  SURO          12.         RCHRES      INFLOW  ICON   1
IMPLND    IQUAL   SOQUAL  6          1.          RCHRES      INFLOW  IDQAL  1
IMPLND    IQUAL   SOQUAL  7          1.          RCHRES      INFLOW  IDQAL  2
    END MASS-LINK      4

    MASS-LINK          5
RCHRES      ROFLOW          RCHRES      INFLOW
    END MASS-LINK      5

END MASS-LINK

END RUN

```