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

In Progress



King County

Department of Natural Resources and Parks
Water and Land Resources Division

Science Section

King Street Center, KSC-NR-0600
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Section 5—Appendix A

July 2003

Prepared for:



King County

Department of Natural Resources and Parks
Water and Land Resources Division

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Prepared by:

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Mountain View, California 94043

In conjunction with King County

Alternative formats available

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->      ***
WDM1      27  C:\Project\Puget\KCModel\Basins\MetData.WDM
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

```

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
# - # NPT NMN ***
1 999 1
END TIMESERIES
END COPY

PERLND
GEN-INFO
*** <PLS ><-----Name----->NBLKS Unit-systems Printer BinaryOut
*** # - # User t-series Engl Metr Engl Metr
*** in out
11 TILL, FOREST, FLAT 1 1 1 1 61 0 91 0
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 ***
 11 286 1 0 1 1 1 1 1 0 0 0 0 0

END ACTIVITY

PRINT-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 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 ***
 11 286 0 0 0 0 0 0 0 0 1
 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 |

Swamp Creek UCI File

| | | | | | | |
|-----|-----|------|-----|------|------|------|
| 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 |

Swamp Creek UCI File

| | | | | | | | |
|-----|-----|--------|-------|--------|--------|--------|--------|
| 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 | |

Swamp Creek UCI File

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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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Swamp Creek UCI File

| | | | | | | | |
|---------|------|-----|--------|-----|------|------|------|
| 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.

```

```

      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

```

MON-COVER

```

*** <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

```

```

***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

```

```

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

```

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
251 254.0008.0008.0006.0006.0006.0006.0006.0006.0006.0006.0009.0008.0008
261 264.0017.0017.0015.0015.0015.0015.0015.0015.0015.0015.0015.0017
271 .0015.0015.0006.0006.0006.0006.0006.0006.0006.0006.0012.0012.0015
272 .0048.0048.0039.0039.0039.0039.0039.0039.0039.0039.0039.0048
273 .0008.0008.0007.0007.0007.0007.0007.0007.0007.0007.0007.0008
274 .0008.0007.0006.0006.0006.0006.0006.0006.0006.0006.0008.0008
275 .0008.0008.0006.0006.0006.0006.0006.0006.0006.0006.0009.0008.0008
276 .0017.0017.0015.0015.0015.0015.0015.0015.0015.0015.0015.0017
281 .0015.0015.0006.0006.0006.0006.0006.0006.0006.0006.0012.0012.0015
282 .0048.0048.0039.0039.0039.0039.0039.0039.0039.0039.0039.0048
283 .0008.0008.0007.0007.0007.0007.0007.0007.0007.0007.0007.0008
284 .0008.0007.0006.0006.0006.0006.0006.0006.0006.0006.0008.0008
285 .0008.0008.0006.0006.0006.0006.0006.0006.0006.0006.0009.0008.0008
286 .0017.0017.0015.0015.0015.0015.0015.0015.0015.0015.0015.0017
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 0.010.0050.0040.0040.0040.0040.0040.0040.0040.0040.004 0.01
21 240.0240.0240.0140.0140.0140.0140.0140.0140.0140.0140.024
31 340.0050.0050.0020.0020.0020.0020.0020.0020.002.0022.0025.00250.005
41 440.0060.0060.0020.0020.0020.0020.0020.0020.0020.004.00420.004.0072
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 0.010.0050.0040.0040.0040.0040.0040.0040.0040.0040.004 0.01
72 0.0240.0240.0140.0140.0140.0140.0140.0140.0140.0140.024
73 0.0050.0050.0020.0020.0020.0020.0020.002.0022.0025.00250.005
74 0.0060.0060.0020.0020.0020.0020.0020.0020.004.00420.004.0072
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 0.010.0050.0040.0040.0040.0040.0040.0040.0040.0040.004 0.01
82 0.0240.0240.0140.0140.0140.0140.0140.0140.0140.0140.024
83 0.0050.0050.0020.0020.0020.0020.0020.002.0022.0025.00250.005
84 0.0060.0060.0020.0020.0020.0020.0020.0020.004.00420.004.0072
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 0.010.0050.0040.0040.0040.0040.0040.0040.0040.0040.004 0.01
221 2240.0240.0240.0140.0140.0140.0140.0140.0140.0140.0140.024
231 2340.0050.0050.0020.0020.0020.0020.0020.0020.002.0022.0025.00250.005
241 2440.0060.0060.0020.0020.0020.0020.0020.0020.004.00420.004.0072
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 0.010.0050.0040.0040.0040.0040.0040.0040.0040.0040.004 0.01
272 0.0240.0240.0140.0140.0140.0140.0140.0140.0140.0140.024
273 0.0050.0050.0020.0020.0020.0020.0020.002.0022.0025.00250.005
274 0.0060.0060.0020.0020.0020.0020.0020.0020.004.00420.004.0072
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 0.010.0050.0040.0040.0040.0040.0040.0040.0040.0040.004 0.01
282 0.0240.0240.0140.0140.0140.0140.0140.0140.0140.0140.024
283 0.0050.0050.0020.0020.0020.0020.0020.002.0022.0025.00250.005
284 0.0060.0060.0020.0020.0020.0020.0020.0020.004.00420.004.0072
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

```

*** 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

```

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
*** 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

```

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

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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 286BOD/Organics 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.
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 |

Swamp Creek UCI File

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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 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 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 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 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 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

```

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

```

QUAL-PROPS

```

*** <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

```

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.
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 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 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 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 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 6.6 0.44 0.44

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211 2140.0080.0080.0080.008 1 1 1 1 1 10.0080.008
221 224 0.74 0.74 0.74 0.74 92.5 92.5 92.5 92.5 92.5 92.5 0.74 0.74
231 234 0.08 0.08 0.08 0.08 2 2 2 2 2 2 0.08 0.08
241 244 0.4 0.4 0.4 0.4 6 6 6 6 6 6 0.4 0.4
251 254 0.6 0.6 0.6 0.6 9 9 9 9 9 9 0.6 0.6
261 264 0.44 0.44 0.44 0.44 6.6 6.6 6.6 6.6 6.6 6.6 0.44 0.44
271 0.0080.0080.0080.008 1 1 1 1 1 10.0080.008
272 0.74 0.74 0.74 0.74 92.5 92.5 92.5 92.5 92.5 92.5 0.74 0.74
273 0.08 0.08 0.08 0.08 2 2 2 2 2 2 0.08 0.08
274 0.4 0.4 0.4 0.4 6 6 6 6 6 6 0.4 0.4
275 0.6 0.6 0.6 0.6 9 9 9 9 9 9 0.6 0.6
276 0.44 0.44 0.44 0.44 6.6 6.6 6.6 6.6 6.6 6.6 0.44 0.44
281 0.0080.0080.0080.008 1 1 1 1 1 10.0080.008
282 0.74 0.74 0.74 0.74 92.5 92.5 92.5 92.5 92.5 92.5 0.74 0.74
283 0.08 0.08 0.08 0.08 2 2 2 2 2 2 0.08 0.08
284 0.4 0.4 0.4 0.4 6 6 6 6 6 6 0.4 0.4
285 0.6 0.6 0.6 0.6 9 9 9 9 9 9 0.6 0.6
286 0.44 0.44 0.44 0.44 6.6 6.6 6.6 6.6 6.6 6.6 0.44 0.44
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 0.1 0.1 0.1 0.1 12.5 12.5 12.5 12.5 12.5 12.5 0.1 0.1
21 24 4.8 4.8 4.8 4.8 600 600 600 600 600 600 4.8 4.8
31 34 0.8 0.8 0.8 0.8 20 20 20 20 20 20 0.8 0.8
41 44 2.4 2.4 2.4 2.4 36 36 36 36 36 36 2.4 2.4
51 54 3.6 3.6 3.6 3.6 54 54 54 54 54 54 3.6 3.6
61 64 1.4 1.4 1.4 1.4 21 21 21 21 21 21 1.4 1.4
71 0.1 0.1 0.1 0.1 12.5 12.5 12.5 12.5 12.5 12.5 0.1 0.1
72 4.8 4.8 4.8 4.8 600 600 600 600 600 600 4.8 4.8
73 0.8 0.8 0.8 0.8 20 20 20 20 20 20 0.8 0.8
74 2.4 2.4 2.4 2.4 36 36 36 36 36 36 2.4 2.4
75 3.6 3.6 3.6 3.6 54 54 54 54 54 54 3.6 3.6
76 1.4 1.4 1.4 1.4 21 21 21 21 21 21 1.4 1.4
81 0.1 0.1 0.1 0.1 12.5 12.5 12.5 12.5 12.5 12.5 0.1 0.1
82 4.8 4.8 4.8 4.8 600 600 600 600 600 600 4.8 4.8
83 0.8 0.8 0.8 0.8 20 20 20 20 20 20 0.8 0.8
84 2.4 2.4 2.4 2.4 36 36 36 36 36 36 2.4 2.4
85 3.6 3.6 3.6 3.6 54 54 54 54 54 54 3.6 3.6
86 1.4 1.4 1.4 1.4 21 21 21 21 21 21 1.4 1.4
211 214 0.1 0.1 0.1 0.1 12.5 12.5 12.5 12.5 12.5 12.5 0.1 0.1
221 224 4.8 4.8 4.8 4.8 600 600 600 600 600 600 4.8 4.8
231 234 0.8 0.8 0.8 0.8 20 20 20 20 20 20 0.8 0.8
241 244 2.4 2.4 2.4 2.4 36 36 36 36 36 36 2.4 2.4
251 254 3.6 3.6 3.6 3.6 54 54 54 54 54 54 3.6 3.6
261 264 1.4 1.4 1.4 1.4 21 21 21 21 21 21 1.4 1.4
271 0.1 0.1 0.1 0.1 12.5 12.5 12.5 12.5 12.5 12.5 0.1 0.1
272 4.8 4.8 4.8 4.8 600 600 600 600 600 600 4.8 4.8
273 0.8 0.8 0.8 0.8 20 20 20 20 20 20 0.8 0.8
274 2.4 2.4 2.4 2.4 36 36 36 36 36 36 2.4 2.4
275 3.6 3.6 3.6 3.6 54 54 54 54 54 54 3.6 3.6
276 1.4 1.4 1.4 1.4 21 21 21 21 21 21 1.4 1.4
281 0.1 0.1 0.1 0.1 12.5 12.5 12.5 12.5 12.5 12.5 0.1 0.1
282 4.8 4.8 4.8 4.8 600 600 600 600 600 600 4.8 4.8
283 0.8 0.8 0.8 0.8 20 20 20 20 20 20 0.8 0.8
284 2.4 2.4 2.4 2.4 36 36 36 36 36 36 2.4 2.4
285 3.6 3.6 3.6 3.6 54 54 54 54 54 54 3.6 3.6
286 1.4 1.4 1.4 1.4 21 21 21 21 21 21 1.4 1.4
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
11 141.e-61.e-61.e-61.e-61.e-61.e-6.0002.0002.0002.0002.00021.e-61.e-6
21 245.e-65.e-65.e-65.e-65.e-60.0010.0010.0010.0010.0015.e-65.e-6
31 348.e-78.e-78.e-78.e-78.e-7.0001.0001.0001.0001.00018.e-78.e-7
41 441.e-61.e-61.e-61.e-61.e-6.0002.0002.0002.0002.00021.e-61.e-6
51 543.e-63.e-63.e-63.e-63.e-6.0006.0006.0006.0006.00063.e-63.e-6
61 647.e-77.e-77.e-77.e-77.e-7.0001.0001.0001.0001.00017.e-77.e-7
71 1.e-61.e-61.e-61.e-61.e-6.0002.0002.0002.0002.00021.e-61.e-6
72 5.e-65.e-65.e-65.e-65.e-60.0010.0010.0010.0010.0015.e-65.e-6
73 8.e-78.e-78.e-78.e-78.e-7.0001.0001.0001.0001.00018.e-78.e-7
74 1.e-61.e-61.e-61.e-61.e-6.0002.0002.0002.0002.00021.e-61.e-6
75 3.e-63.e-63.e-63.e-63.e-6.0006.0006.0006.0006.00063.e-63.e-6
76 7.e-77.e-77.e-77.e-77.e-7.0001.0001.0001.0001.00017.e-77.e-7

```

```

81 1.e-61.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-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-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-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-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-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-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

```

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 >      ***
# - #      L SUR      S SUR      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/ | | | |
| | | | 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
```

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 | | | | |

Swamp Creek UCI File

| | | | | | |
|------------|-----|------------|------------|------|-----|
| 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 |

Swamp Creek UCI File

| | | | | | |
|-------------------|-----|------------|------------|-----|----------|
| 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 |

Swamp Creek UCI File

| | | | | |
|-------------------|------------|------------|------|-----|
| 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 | *** |

Swamp Creek UCI File

| <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 | |

Swamp Creek UCI File

```

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

```

END SCHEMATIC

RCHRES

```

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 CFSAXE 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

Swamp Creek UCI File

```

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       TCDEN       DENOXT      ***
# - #      /hr          /hr          /hr          /hr          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 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 | 10.860000 | |
| 1.000000 | 2.820000 | 1.845000 | 32.240000 | |
| 1.500000 | 4.350000 | 3.614000 | 62.700000 | |
| 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

```

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      0.000000      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 |

END MASS-LINK 1

| 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

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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

```