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FLOOD CONTROL DISTRICT
OF MARICOPA COUNTY

FOUNTAIN HILLS SOUTH FLOODPLAIN DELINEATION STUDY

FCD 92-05

TECHNICAL DATA NOTEBOOK HYDROLOGY

VOLUME 3 OF 4

AUGUST 1995
Revised November 1996

Prepared by

AGK ENGINEERS, INC.
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Phoenix, Arizona 85008
(602) 244-2566

APPENDIX J

HEC-1 OUTPUT FOR 100-YEAR, 6-HOUR STORM (EXISTING CONDITION)

J.1

POWDER WASH

```
****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*              MAY   1991              *
*           VERSION 4.0.1E             *
*     Lahey F77L-EM/32 version 5.01    *
*       Dodson & Associates, Inc.      *
* RUN DATE  04/05/95  TIME  13:58:47   *
****************************************
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****************************************
*                                      *
*    U.S. ARMY CORPS OF ENGINEERS      *
*    HYDROLOGIC ENGINEERING CENTER     *
*          609 SECOND STREET           *
*       DAVIS, CALIFORNIA 95616        *
*           (916) 551-1748             *
*                                      *
****************************************
```

```
X     X  XXXXXXX   XXXXX          X
X     X  X        X     X        XX
X     X  X        X               X
XXXXXXX  XXXX     X       XXXXX   X
X     X  X        X               X
X     X  X        X     X         X
X     X  XXXXXXX   XXXXX         XXX
```

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

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

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

  1           ID   POWDER WASH - EXISTING CONDITIONS, AGK ENGINEERS, 04-05-95
  2           ID   First routing 4-3-93
  3           ID   Time steps at 2 minutes
  4           ID   6-Hour 100-Year storm
  5           ID   FILE: 110-6CE.DAT
  6           ID
              *Diagram
  7           IT       2                    180
  8           IO       5
  9           IN      15
 10           JD    3.20    0.01
 11           PC    .000    .008    .016    .025    .033    .041    .050    .058    .066    .074
 12           PC    .087    .099    .118    .138    .216    .377    .834    .911    .931    .950
 13           PC    .962    .972    .983    .991   1.000
 14           JD    3.18    0.50
 15           JD    3.14    2.80
 16           PC    .000    .009    .016    .025    .034    .042    .051    .059    .067    .076
 17           PC    .087    .100    .120    .163    .252    .451    .694    .837    .900    .938
 18           PC    .950    .963    .975    .988   1.000
 19           JD    2.95    16.0
 20           PC    .000    .015    .020    .030    .048    .063    .076    .090    .105    .119
 21           PC    .135    .152    .175    .222    .304    .472    .670    .796    .868    .912
 22           PC    .946    .960    .973    .987   1.000

 23           KK    110A
 24           KM   SUB-BASIN 110A
 25           KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 26           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 27           BA    .022
 28           LG    .150    .156   7.300    .110  25.620
 29           UC    .192    .215
 30           UA       0       3       5       8      12      20      43      75      90      96
 31           UA     100

 32           KK    110B
 33           KM   SUB-BASIN 110B
 34           KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 35           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 36           BA    .036
 37           LG    .150    .170   6.800    .134  23.920
 38           UC    .204    .203
 39           UA       0       3       5       8      12      20      43      75      90      96
 40           UA     100

 41           KK     PW1
 42           KM   POWDER WASH CONSENTRATION POINT 1 - COMBINE BASINS 110A AND 110B
 43           HC       2

 44           KK    RPW1
 45           KM   ROUTE FLOWS THROUGH BASIN 110C
 46           RS       1    FLOW       0
 47           RC     .04     .04     .04     379    .026    1710
 48           RX    9895    9930    9957    9995   10005   10043   10073   10110
 49           RY    1710    1700    1692    1682    1682    1692    1700    1710
```

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

  50          KK    110C
  51          KM   SUB-BASIN 110C
  52          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
  53          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
  54          BA    .004
  55          LG    .150    .190   6.600    .146  22.410
  56          UC    .125    .167
  57          UA       0       3       5       8      12      20      43      75      90      96
  58          UA     100

  59          KK    110D
  60          KM   SUB-BASIN 110D
  61          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
  62          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
  63          BA    .071
  64          LG    .150    .150   7.300    .110  25.500
  65          UC    .200    .135
  66          UA       0       3       5       8      12      20      43      75      90      96
  67          UA     100

  68          KK     PW2
  69          KM   POWDER WASH CONCENTRASTION POINT 2 - COMBINE RPW1, 110C AND 110D
  70          HC       3

  71          KK    RPW2
  72          KM   NORMAL DEPTH ROUTING THROUGH BASIN 110E
  73          RS       2    FLOW      -1
  74          RC     .04     .04     .04    1128    .019    1710
  75          RX    9875    9905    9955   10000   10030   10085   10120   10140
  76          RY    1696    1690    1680    1668    1668    1680    1690  1694.5

  77          KK    110E
  78          KM   SUB-BASIN 110E
  79          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
  80          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
  81          BA    .025
  82          LG    .150    .230   6.200    .171  21.250
  83          UC    .167    .132
  84          UA       0       3       5       8      12      20      43      75      90      96
  85          UA     100

  86          KK    *PW3
  87          KM    UPSTREAM MAIN CHANNEL FLOW
  88          HC       2

  89          KK    110F
  90          KM   SUB-BASIN 110F
  91          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
  92          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
  93          BA    .008
  94          LG    .150    .230   6.200    .171  28.750
  95          UC    .146    .174
  96          UA       0       5      16      30      65      77      84      90      94      97
  97          UA     100
```

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

 98           KK    110G
 99           KM   SUB-BASIN 110G
100           KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
101           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
102           BA    .006
103           LG    .150    .230   6.200    .171  22.750
104           UC    .117    .115
105           UA       0       5      16      30      65      77      84      90      94      97
106           UA     100

107           KK     PW3
108           KM   POWDER WASH CONSENTRATION POINT 3 - COMBINE (RPW2, 110E), 110F, 110G
109           HC       3

110           KK    RPW3
111           KM   ROUTE PW3 THROUGH BASIN 110H
112           RS       3    FLOW      -1
113           RC     .04     .04     .04    1893    .021    1650
114           RX    9810    9870    9955    9980   10050   10068   10100   10110
115           RY    1648    1641    1642    1634    1634    1642    1650    1652

116           KK    110H
117           KM   SUB-BASIN 110H
118           KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
119           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
120           BA    .031
121           LG    .120    .250   6.000    .173   8.720
122           UC    .271    .302
123           UA       0       5      16      30      65      77      84      90      94      97
124           UA     100

125           KK    *PW4
126           KM   UPSTREAM MAIN CHANNEL FLOW
127           HC       2

128           KK    110I
129           KM   SUB-BASIN 110I
130           KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
131           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
132           BA    .020
133           LG    .150    .262   6.000    .183   5.400
134           UC    .208    .242
135           UA       0       5      16      30      65      77      84      90      94      97
136           UA     100

137           KK     PW4
138           KM   POWDER WASH CONCENTRATION POINT 4 - COMBINES (RPW3, 110H), 110I
139           HC       2
```

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

 140          KK    SPW4
 141          KM   ROUTE PW4 THROUGH 5 48" CMP CULVERT UNDER LEO DRIVE
 142          RS       1    STOR       0
 143          SQ       0     110     325     625     650
 144          SE  1612.6  1614.6  1616.6  1620.6  6121.0
 145          SA       0    0.07    1.51
 146          SE  1612.6    1614  1621.5

 147          KK    110J
 148          KM   SUB-BASIN 110J
 149          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 150          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 151          BA    .007
 152          LG    .150    .250   6.000    .183  19.530
 153          UC    .108    .129
 154          UA       0       5      16      30      65      77      84      90      94      97
 155          UA     100

 156          KK    110K
 157          KM   SUB-BASIN 110K
 158          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 159          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 160          BA    .012
 161          LG    .050    .250   6.000    .150  23.450
 162          UC    .083    .064
 163          UA       0       5      16      30      65      77      84      90      94      97
 164          UA     100

 165          KK   R110K
 166          KM   ROUTE 110K THROUGH SUB-BASIN 110L TO CON. POINT PW5
 167          RS       2    FLOW       0
 168          RC    0.04    0.04    0.04     900   0.013
 169          RX    9956    9961    9966  9966.5 10033.5   10034   10039   10044
 170          RY  1626.5  1626.5  1626.5    1626    1626  1626.5  1626.5  1626.5

 171          KK    110L
 172          KM   SUB-BASIN 110L
 173          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 174          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 175          BA    .024
 176          LG    .092    .250   6.000    .177   5.820
 177          UC    .158    .193
 178          UA       0       5      16      30      65      77      84      90      94      97
 179          UA     100

 180          KK     PW5
 181          KM   POWEDER WASH CONSENTRATION POINT 5 - COMBINNES SPW4, 110J, R110K
 182          HC       4
```

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

 183          KK    RPW5
 184          KM   ROUTE PW5 THROUGH BASIN 110M
 185          RS       3    FLOW      -1
 186          RC     .04     .04     .04    1728    .018    1610
 187          RX    9855    9910    9962    9995   10010   10060   10123   10190
 188          RY    1606    1604    1602    1598    1598    1602    1599    1610

 189          KK    110M
 190          KM   SUB-BASIN 110M
 191          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 192          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 193          BA    .031
 194          LG    .121    .250   6.000    .173  14.700
 195          UC    .183    .176
 196          UA       0       5      16      30      65      77      84      90      94      97
 197          UA     100

 198          KK    *PW6
 199          KM   UPSTREAM FLOW IN MAIN CHANNEL
 200          HC       2

 201          KK    110N
 202          KM   SUB-BASIN 110N
 203          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 204          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 205          BA    .015
 206          LG    .150    .250   6.000    .183   7.500
 207          UC    .167    .223
 208          UA       0       5      16      30      65      77      84      90      94      97
 209          UA     100

 210          KK    1100
 211          KM   SUB-BASIN 1100
 212          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 213          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 214          BA    .004
 215          LG    .120    .250   6.000    .173  18.750
 216          UC    .112    .121
 217          UA       0       5      16      30      65      77      84      90      94      97
 218          UA     100

 219          KK     PW6
 220          KM   POWDER WASH CONCENTRATION POINT 6 - COMBINE (RPW5, 110M), 100N, 1100
 221          HC       3
 222          ZZ
```

SCHEMATIC DIAGRAM OF STREAM NETWORK

```
LINE    (V) ROUTING          (--->) DIVERSION OR PUMP FLOW
NO.     (.) CONNECTOR        (<---) RETURN OF DIVERTED OR PUMPED FLOW
 23      110A
          .
          .
 32       .        110B
          .          .
          .          .
 41       PW1............
          V
          V
 44      RPW1
          .
          .
 50       .        110C
          .          .
          .          .
 59       .          .        110D
          .          .          .
          .          .          .
 68       PW2........................
          V
          V
 71      RPW2
          .
          .
 77       .        110E
          .          .
          .          .
 86      *PW3............
          .
          .
 [illegible]  .        110F
          .          .
          .          .
 98       .          .        110G
          .          .          .
          .          .          .
107       PW3........................
          V
          V
110      RPW3
          .
          .
116       .        110H
          .          .
          .          .
125     *PW4............
          .
          .
128       .        110I
          .          .
          .          .
137       PW4............
          V
          V
140      SPW4
          .
          .
147       .        110J
          .          .
          .          .
156       .          .        110K
          .          .          V
          .          .          V
          .          .       R110K
          .          .          .
```

```
            .          .          .
            .          .          .        110L
            .          .          .          .
            .          .          .          .
180       PW5.......................................
            V
            V
183      RPW5
            .
            .
189         .       110M
            .          .
            .          .
198      *PW6............
            .
            .
201         .       110N
            .          .
            .          .
210         .          .       1100
            .          .          .
            .          .          .
219       PW6........................
```

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

```
*****************************************
*                                       *
*  FLOOD HYDROGRAPH PACKAGE  (HEC-1)    *
*            MAY   1991                 *
*          VERSION 4.0.1E               *
*    Lahey F77L-EM/32 version 5.01      *
*      Dodson & Associates, Inc.        *
* RUN DATE  04/05/95  TIME  13:58:47    *
*****************************************
```

```
*****************************************
*                                       *
*    U.S. ARMY CORPS OF ENGINEERS       *
*    HYDROLOGIC ENGINEERING CENTER      *
*          609 SECOND STREET            *
*       DAVIS, CALIFORNIA 95616         *
*           (916) 551-1748              *
*                                       *
*****************************************
```

```
                    POWDER WASH - EXISTING CONDITIONS, AGK ENGINEERS, 04-05-95
                    First routing 4-3-93
                    Time steps at 2 minutes
                    6-Hour 100-Year storm
                    FILE: 110-6CE.DAT

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

    IT        HYDROGRAPH TIME DATA
                     NMIN          2  MINUTES IN COMPUTATION INTERVAL
                    IDATE      1   0  STARTING DATE
                    ITIME       0000  STARTING TIME
                       NQ        180  NUMBER OF HYDROGRAPH ORDINATES
                   NDDATE      1   0  ENDING DATE
                   NDTIME       0558  ENDING TIME
                    ICENT         19  CENTURY MARK

              COMPUTATION INTERVAL    0.03 HOURS
                   TOTAL TIME BASE    5.97 HOURS

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

 10 JD        INDEX STORM NO. 1
                    STRM       3.20  PRECIPITATION DEPTH
                    TRDA       0.01  TRANSPOSITION DRAINAGE AREA

 11 PI          PRECIPITATION PATTERN
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.01      0.01      0.01
                  0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                  0.02      0.02      0.04      0.06      0.06      0.06      0.06      0.06      0.06      0.06
                  0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

 JD        INDEX STORM NO. 2
```

```
                STRM        3.18  PRECIPITATION DEPTH
                TRDA        0.50  TRANSPOSITION DRAINAGE AREA

 0 PI         PRECIPITATION PATTERN
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.01        0.01        0.01
                0.01        0.01        0.01        0.01        0.01        0.02        0.02        0.02        0.02        0.02
                0.02        0.02        0.04        0.06        0.06        0.06        0.06        0.06        0.06        0.06
                0.01        0.01        0.01        0.01        0.01        0.01        0.01        0.01        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00

15 JD         INDEX STORM NO. 3
                STRM        3.14  PRECIPITATION DEPTH
                TRDA        2.80  TRANSPOSITION DRAINAGE AREA

16 PI         PRECIPITATION PATTERN
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.01        0.01        0.01        0.01        0.01        0.01        0.01        0.01        0.01        0.01
                0.01        0.01        0.01        0.01        0.01        0.03        0.03        0.03        0.03        0.03
                0.03        0.03        0.03        0.03        0.03        0.03        0.03        0.03        0.03        0.03
                0.02        0.02        0.02        0.02        0.02        0.02        0.02        0.01        0.01        0.01
                0.01        0.01        0.01        0.01        0.01        0.01        0.01        0.01        0.01        0.01
                0.01        0.01        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00

19 JD         INDEX STORM NO. 4
                STRM        2.95  PRECIPITATION DEPTH
                TRDA       16.00  TRANSPOSITION DRAINAGE AREA

20 PI         PRECIPITATION PATTERN
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.01        0.01        0.01        0.01        0.01        0.01        0.01        0.01        0.01        0.01
                0.01        0.01        0.01        0.01        0.01        0.02        0.02        0.02        0.02        0.02
                0.02        0.02        0.02        0.03        0.03        0.03        0.03        0.03        0.03        0.03
                0.02        0.02        0.02        0.02        0.02        0.02        0.02        0.01        0.01        0.01
                0.01        0.01        0.01        0.01        0.01        0.01        0.01        0.01        0.01        0.01
                0.01        0.01        0.01        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
        WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
        WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
```

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

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	110A	57.	4.10	6.	6.	6.	0.02		
+	HYDROGRAPH AT	110B	93.	4.10	9.	9.	9.	0.04		
+	2 COMBINED AT	PW1	149.	4.10	14.	14.	14.	0.06		
+	ROUTED TO	RPW1	148.	4.13	14.	14.	14.	0.06		
+	HYDROGRAPH AT	110C	11.	4.07	1.	1.	1.	0.00		
+	HYDROGRAPH AT	110D	211.	4.10	18.	18.	18.	0.07		
+	3 COMBINED AT	PW2	368.	4.10	34.	34.	34.	0.13		
+	ROUTED TO	RPW2	360.	4.13	33.	33.	33.	0.13		
+	HYDROGRAPH AT	110E	73.	4.07	6.	6.	6.	0.03		
+	2 COMBINED AT	*PW3	423.	4.13	39.	39.	39.	0.16		
+	HYDROGRAPH AT	110F	22.	4.03	2.	2.	2.	0.01		
+	HYDROGRAPH AT	110G	18.	4.03	1.	1.	1.	0.01		
+	3 COMBINED AT	PW3	453.	4.10	43.	43.	43.	0.17		
+	ROUTED TO	RPW3	446.	4.17	43.	43.	43.	0.17		
+	HYDROGRAPH AT	110H	61.	4.10	7.	7.	7.	0.03		
+	2 COMBINED AT	*PW4	502.	4.17	49.	49.	49.	0.20		
+	HYDROGRAPH AT	110I	45.	4.07	4.	4.	4.	0.02		
+	2 COMBINED AT	PW4	538.	4.17	53.	53.	53.	0.22		
+	ROUTED TO	SPW4	474.	4.23	53.	53.	53.	0.22		
+	HYDROGRAPH AT	110J	21.	4.03	2.	2.	2.	0.01		
+	HYDROGRAPH AT	110K	42.	4.00	3.	3.	3.	0.01		

+	ROUTED TO R110K	38.	4.03	3.	3.	3.	0.01
+	HYDROGRAPH AT 110L	61.	4.03	5.	5.	5.	0.02
+	4 COMBINED AT PW5	529.	4.20	63.	63.	63.	0.27
+	ROUTED TO RPW5	523.	4.27	62.	62.	62.	0.27
+	HYDROGRAPH AT 110M	81.	4.03	7.	7.	7.	0.03
+	2 COMBINED AT *PW6	560.	4.27	69.	69.	69.	0.30
+	HYDROGRAPH AT 110N	35.	4.03	3.	3.	3.	0.01
+	HYDROGRAPH AT 110O	12.	4.03	1.	1.	1.	0.00
+	3 COMBINED AT PW6	583.	4.23	73.	73.	73.	0.32

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

J.2

CEREUS WASH

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****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*              MAY   1991              *
*           VERSION 4.0.1E             *
*     Lahey F77L-EM/32 version 5.01    *
*       Dodson & Associates, Inc.      *
*  RUN DATE  01/20/97  TIME  09:25:35  *
****************************************
```

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****************************************
*                                      *
*    U.S. ARMY CORPS OF ENGINEERS      *
*    HYDROLOGIC ENGINEERING CENTER     *
*          609 SECOND STREET           *
*       DAVIS, CALIFORNIA 95616        *
*           (916) 551-1748             *
*                                      *
****************************************
```

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X     X  XXXXXXX   XXXXX          X
X     X  X        X     X        XX
X     X  X        X               X
XXXXXXX  XXXX     X        XXXXX  X
X     X  X        X               X
X     X  X        X     X         X
X     X  XXXXXXX   XXXXX         XXX
```

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

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

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

  1           ID   CEREUS WASH - EXISTING CONDITIONS AGK ENGINEERS, 04-05-95
  2           ID   First routing 5-28-93
  3           ID   time steps at 2 minutes
  4           ID   6-Hr 100-Yr storm
  5           ID   File: 120-6CE.DAT
  6           ID
  7           IT       2                    200
  8           IO       5
              *DIAGRAM
  9           IN      15
 10           JD    3.20    0.01
 11           PC    .000    .008    .016    .025    .033    .041    .050    .058    .066    .074
 12           PC    .087    .099    .118    .138    .216    .377    .834    .911    .931    .950
 13           PC    .962    .972    .983    .991   1.000
 14           JD    3.18    0.50
 15           JD    3.14    2.80
 16           PC    .000    .009    .016    .025    .034    .042    .051    .059    .067    .076
 17           PC    .087    .100    .120    .163    .252    .451    .694    .837    .900    .938
 18           PC    .950    .963    .975    .988   1.000
 19           JD    2.95    16.0
 20           PC    .000    .015    .020    .030    .048    .063    .076    .090    .105    .119
 21           PC    .135    .152    .175    .222    .304    .472    .670    .796    .868    .912
 22           PC    .946    .960    .973    .987   1.000

 23           KK    120A
 24           KM   SUB-BASIN 120A
 25           KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 26           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 27           BA    .016
 28           LG    .100    .250   5.700    .170  31.500
 29           UC    .183    .336
 30           UA       0       5      16      30      65      77      84      90      94      97
 31           UA     100

 32           KK    120B
 33           KM   SUB-BASIN 120B
 34           KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 35           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 36           BA    .053
 37           LG    .150    .250   5.700    .207   9.000
 38           UC    .237    .219
 39           UA       0       5      16      30      65      77      84      90      94      97
 40           UA     100

 41           KK    160A
 42           KM   SUB-BASIN 160A
 43           KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 44           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 45           BA    .006
 46           LG    .100    .250   5.700    .170  40.500
 47           UC    .096    .099
 48           UA       0       5      16      30      65      77      84      90      94      97
 49           UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  50          KK   R160A
  51          KM   ROUTE 160A THROUGH SUB-BASIN 120B TO CON. POINT CER1
  52          RS       5    FLOW       0
  53          RC    0.04    0.04    0.04    2300   0.054
  54          RX    9920    9942    9975    9997   10003   10050   10060   10085
  55          RY    1810    1806    1800    1791    1791    1802    1804    1810

  56          KK    CER1
  57          KM   CEREUS WASH CONCENTRATION POINT 1 - COMBINE R160A, 120A AND 120B
  58          HC       3

  59          KK   SCER1
  60          KM   ROUTE CER1 THROUGH 60" CULVERT AT FOUNTAIN HILLS BLVD.
  61          KO       3
  62          RS       1    ELEV    1756
  63          SQ       0      37     115     222     355    1000
  64          SE    1757  1759.5    1762    1767  1778.7    1779
  65          SA     .04     .23    2.68
  66          SE    1756    1760    1780

  67          KK    120C
  68          KM   SUB-BASIN 120C
  69          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
  70          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
  71          BA    .005
  72          LG    .100    .250   5.700    .170  34.300
  73          UC    .121    .176
  74          UA       0       5      16      30      65      77      84      90      94      97
  75          UA     100

  76          KK    CER2
  77          KM   CEREUS WASH CONCENTRATION POINT 2 - COMBINE SCER1 WITH SUB-BASIN 120C
  78          HC       2

  79          KK   RCER2
  80          KM   ROUTE CER2 THROUGH SUB-BASIN 120D
  81          RS       4    FLOW       0
  82          RC     .04     .04     .04    2012    .029
  83          RX    9927    9935    9965   10000   10007   10035   10063   10080
  84          RY    1720    1718    1712    1706    1706    1710    1716    1720

  85          KK    120D
  86          KM   SUB-BASIN 120D
  87          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
  88          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
  89          BA    .069
  90          LG    .132    .250   5.800    .187   5.810
  91          UC    .213    .191
  92          UA       0       5      16      30      65      77      84      90      94      97
  93          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  94          KK   *CER3
  95          KM   CEREUS WASH CONCENTRATION POINT *3 - COMBINE RCER2, 120D
  96          HC       2

  97          KK    120H
  98          KM   SUB-BASIN 120H
  99          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 100          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 101          BA    .005
 102          LG    .085    .250   5.800    .160  30.910
 103          UC    .158    .384
 104          UA       0       5      16      30      65      77      84      90      94      97
 105          UA     100

 106          KK   R120H
 107          KM   ROUTE 120H THROUGH 120I
 108          RS       1    FLOW       0
 109          RC     .04     .04     .04     557    .115
 110          RX    9870    9910    9960    9999   10001   10080   10125   10225
 111          RY    1732    1726    1718    1712    1712    1718    1724    1730

 112          KK    120I
 113          KM   SUB-BASIN 120I
 114          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 115          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 116          BA    .007
 117          LG    .150    .250   5.700    .207  10.000
 118          UC    .154    .199
 119          UA       0       5      16      30      65      77      84      90      94      97
 120          UA     100

 121          KK   CER3A
 122          KM   COMBINE R120H AND 120I
 123          HC       2

 124          KK  SCER3A
 125          KM   ROUTE CER3A BY STAGE DISCHARGE TO CER3 - PONDED STORAGE
 126          RS       1    ELEV    1694
 127          SQ       0    25.2     160     473    1019    1850
 128          SE    1700    1701    1702    1703    1704    1705
 129          SA       0     .22     .22
 130          SE    1694    1700    1710

 131          KK    CER3
 132          KM   CEREUS WASH CONCENTRATION POINT 3 - COMBINE (RCER2, 120D),CER3A
 133          HC       2

 134          KK   SCER3
 135          KM   ROUTE CER3 THROUGH 1-84" CULVERTS AT SHEA BLVD.
 136          KO       3
 137          RS       1    ELEV  1687.3
 138          SQ       0      96     300     610     850     900
 139          SE  1687.3  1690.8  1694.3  1701.3    1710    1711
 140          SA       0     .08    1.47    4.98
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 141          SE  1687.3    1692    1700    1710

 142          KK   RCER3
 143          KM   ROUTE CER3 THROUGH SUB-AREA 120E TO CONFLUENCE WITH WALNUT WASH
 144          RS       1    FLOW       0
 145          RC     .04     .04     .04     768    .034
 146          RX    9920    9974    9985    9999   10001   10021   10135   10222
 147          RY    1690    1678    1674    1670    1670    1674    1680    1690

 148          KK    120E
 149          KM   SUB-BASIN 120E
 150          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 151          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 152          BA    .018
 153          LG    .050    .250   5.800    .160  13.960
 154          UC    .208    .350
 155          UA       0       5      16      30      65      77      84      90      94      97
 156          UA     100

 157          KK   *CER4
 158          KM   CEREUS WASH CONCENTRATION POINT *4 - RCER3, 120E
 159          HC       2

 160          KK    126A
 161          KM   SUB-BASIN 126A
 162          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 163          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 164          BA    .007
 165          LG    .100    .250   5.700    .170  27.000
 166          UC    .142    .197
 167          UA       0       5      16      30      65      77      84      90      94      97
 168          UA     100

 169          KK   R126A
 170          KM   ROUTE SUB-BASIN 126A THROUGH SUB-BASIN 126B
 171          RS       4    FLOW       0
 172          RC     .04    .017     .04    2348    .035
 173          RX    9975    9980    9985    9986   10014   10015   10020   10025
 174          RY  1922.5  1922.5  1922.5    1922    1922  1922.5  1922.5  1922.5

 175          KK    126B
 176          KM   SUB-BASIN 126B
 177          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 178          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 179          BA    .021
 180          LG    .100    .250   5.700    .179  22.500
 181          UC    .196    .299
 182          UA       0       5      16      30      65      77      84      90      94      97
 183          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 184          KK     WW1
 185          KM   WALNUT WASH CONCENTRATION POINT 1 - COMBINE R126A AND 126B
 186          HC       2

 187          KK    RWW1
 188          KM   ROUTE WW1 THROUGH SUB-BASIN 126D
 189          RS       1    FLOW       0
 190          RC     .04     .04     .04     546    .019
 191          RX    9895    9935    9955    9962   10003   10010   10020   10045
 192          RY    1830    1818    1816    1813    1813    1816    1820    1830

 193          KK    126C
 194          KM   SUB-BASIN 126C
 195          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 196          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .998
 197          BA    .142
 198          LG    .140    .320   5.700    .204   1.240
 199          UC    .358    .355
 200          UA       0       5      16      30      65      77      84      90      94      97
 201          UA     100

 202          KK   R126C
 203          KM   ROUTE 126C THROUGH SUB-BASIN 126D
 204          RS       2    FLOW       0
 205          RC     .04     .04     .04    1291    .029
 206          RX    9895    9935    9955    9962   10003   10010   10020   10045
 207          RY    1830    1818    1816    1813    1813    1816    1820    1830

 208          KK    126D
 209          KM   SUB-BASIN 126D
 210          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 211          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 212          BA    .028
 213          LG    .146    .250   5.700    .204   3.240
 214          UC    .196    .187
 215          UA       0       5      16      30      65      77      84      90      94      97
 216          UA     100

 217          KK     WW3
 218          KM   WALNUT WASH CONCENTRATION POINT 3 - RWW1 AND RWW2 AND 126D
 219          HC       3

 220          KK    RWW3
 221          KM   ROUTE WW3 THROUGH 126H
 222          RS       2    FLOW       0
 223          RC     .04     .04     .04     894    .027
 224          RX    9910    9940    9985    9995   10020   10080   10105   10145
 225          RY    1810    1800    1790    1786    1786    1792    1800    1810
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 226          KK    126E
 227          KM   SUB-BASIN 126E
 228          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 229          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 230          BA    .090
 231          LG    .150    .360   6.800    .134  21.880
 232          UC    .242    .187
 233          UA       0       3       5       8      12      20      43      75      90      96
 234          UA     100

 235          KK    126F
 236          KM   SUB-BASIN 126F
 237          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 238          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 239          BA    .055
 240          LG    .150    .330   7.300    .110  30.000
 241          UC    .208    .169
 242          UA       0       3       5       8      12      20      43      75      90      96
 243          UA     100

 244          KK     WW4
 245          KM   WALNUT WASH CONCENTRATION POINT 4 - 126E AND 126F
 246          HC       2

 247          KK    RWW4
 248          KM   ROUTE WW4 THROUGH 126G
 249          RS       7    FLOW       0
 250          RC     .04     .04     .04    4158    .031
 251          RX    9870    9940    9980    9995   10005   10015   10040   10090
 252          RY    1820    1802    1800    1796    1796    1800    1810    1820

 253          KK    126G
 254          KM   SUB-BASIN 126G
 255          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 256          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .998
 257          BA    .136
 258          LG    .150    .240   6.600    .146  16.340
 259          UC    .304    .273
 260          UA       0       3       5       8      12      20      43      75      90      96
 261          UA     100

 262          KK    126H
 263          KM   SUB-BASIN 126H
 264          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 265          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 266          BA    .020
 267          LG    .127    .250   5.700    .199   9.760
 268          UC    .188    .199
 269          UA       0       5      16      30      65      77      84      90      94      97
 270          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 271          KK     WW5
 272          KM   WALNUT WASH CONCENTRATION POINT 5 - RWW3, RWW4, 126H AND 126G
 273          HC       4

 274          KK    RWW5
 275          KM   ROUTE WW5 THROUGH 126I
 276          RS       3    FLOW       0
 277          RC     .04     .04     .04    1740     .02
 278          RX    9790    9860    9910    9975   10010   10055   10090   10150
 279          RY    1780    1764    1762    1758    1758    1766    1768    1780

 280          KK    126I
 281          KM   SUB-BASIN 126I
 282          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 283          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 284          BA    .082
 285          LG    .133    .190   6.600    .144  14.100
 286          UC    .229    .167
 287          UA       0       5      16      30      65      77      84      90      94      97
 288          UA     100

 289          KK    126J
 290          KM   SUB-BASIN 126J
 291          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 292          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 293          BA    .002
 294          LG    .100    .250   5.700    .179  22.500
 295          UC    .133    .299
 296          UA       0       5      16      30      65      77      84      90      94      97
 297          UA     100

 298          KK   R126J
 299          KM   ROUTE 126J THROUGH 126I
 300          RS       4    FLOW       0
 301          RC     .04     .02     .04    2299    .066
 302          RX    9790    9860    9910    9975   10010   10055   10090   10150
 303          RY    1780    1764    1762    1758    1758    1766    1768    1780

 304          KK     WW6
 305          KM   WALNUT WASH CONCENTRATION POINT 6 - RWW5, R126J AND 126I
 306          HC       3

 307          KK    RWW6
 308          KM   ROUTE WW6 THROUGH 126M
 309          RS       2    FLOW       0
 310          RC     .04     .04     .04    1206    .019
 311          RX    9830    9890    9925    9985   10005   10020   10055   10100
 312          RY    1738    1736    1722    1720    1720    1722    1730    1740
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 313          KK    126M
 314          KM   SUB-BASIN 126M
 315          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 316          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 317          BA    .025
 318          LG    .144    .230   6.200    .169   7.630
 319          UC    .208    .235
 320          UA       0       5      16      30      65      77      84      90      94      97
 321          UA     100

 322          KK    *WW7
 323          KM   WALNUT WASH CONCENTRATION POIT *7 - RWW6, 126M
 324          HC       2

 325          KK    126K
 326          KM   SUB-BASIN 126K
 327          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 328          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 329          BA    .012
 330          LG    .100    .250   5.700    .179  27.000
 331          UC    .158    .263
 332          UA       0       5      16      30      65      77      84      90      94      97
 333          UA     100

 334          KK   R126K
 335          KM   ROUTE 126K THROUGH 126M
 336          RS       2    FLOW       0
 337          RC     .04     .04     .04    1061    .072
 338          RX    9830    9890    9925    9985   10005   10020   10055   10100
 339          RY    1738    1736    1722    1720    1720    1722    1730    1740

 340          KK    126L
 341          KM   SUB-BASIN 126L
 342          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 343          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 344          BA    .023
 345          LG    .150    .210   6.400    .159   9.420
 346          UC    .221    .280
 347          UA       0       5      16      30      65      77      84      90      94      97
 348          UA     100

 349          KK     WW7
 350          KM   WALNUT WASH CONCENTRATION POINT 7 - (RWW6, 126M), R126K, 126L
 351          HC       3

 352          KK    SWW7
 353          KM   ROUTE WW7 THROUGH 10'BY 10' RCB UNDER SHEA BLVD.
 354          RS       1    ELEV    1704
 355          SQ       0     290     800    1650    1850
 356          SE    1704    1709    1714    1724    1727
 357          SA       0     .01     .44    2.44
 358          SE    1704    1710    1716  1728.5
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 359          KK    127A
 360          KM   SUB-BASIN 127A
 361          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 362          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 363          BA    .028
 364          LG    .150    .250   5.700    .207    .000
 365          UC    .204    .215
 366          UA       0       3       5       8      12      20      43      75      90      96
 367          UA     100

 368          KK    127B
 369          KM   SUB-BASIN 127B
 370          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 371          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 372          BA    .039
 373          LG    .100    .250   5.700    .189   4.500
 374          UC    .196    .162
 375          UA       0       5      16      30      65      77      84      90      94      97
 376          UA     100

 377          KK    CAP1
 378          KM   CAP WASH CONCENTRATION POINT 1 - SUB-BASINS 127A AND 127B
 379          HC       2

 380          KK   RCAP1
 381          KM   ROUTE CAP1 THROUGH 127D
 382          RS       2    FLOW       0
 383          RC     .04     .04     .04    1146    .026
 384          RX    9870    9910    9955    9985   10000   10020   10050   10100
 385          RY    1760    1756    1750    1742    1742    1744    1750    1760

 386          KK    127C
 387          KM   SUB-BASIN 127C
 388          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 389          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 390          BA    .042
 391          LG    .150    .170   6.800    .134  18.710
 392          UC    .208    .186
 393          UA       0       3       5       8      12      20      43      75      90      96
 394          UA     100

 395          KK    127D
 396          KM   SUB-BASIN 127D
 397          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 398          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 399          BA    .024
 400          LG    .150    .250   5.800    .195   1.500
 401          UC    .192    .189
 402          UA       0       5      16      30      65      77      84      90      94      97
 403          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 404          KK    CAP2
 405          KM   CAP WASH CONCENTRATION POINT 2 - RCAP1, 127C, AND 127D
 406          HC       3

 407          KK   RCAP2
 408          KM   ROUTE CAP2 THROUGH 127H
 409          RS       1    FLOW       0
 410          RC     .04     .04     .04     545    .017
 411          RX    9895    9940    9950    9995   10005   10047   10105   10180
 412          RY    1741    1740    1738    1732    1732    1736    1739    1748

 413          KK    127E
 414          KM   SUB-BASIN 127E
 415          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 416          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .998
 417          BA    .103
 418          LG    .150    .204   6.800    .134  16.730
 419          UC    .258    .189
 420          UA       0       5      16      30      65      77      84      90      94      97
 421          UA     100

 422          KK    127F
 423          KM   SUB-BASIN 127F
 424          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 425          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .998
 426          BA    .147
 427          LG    .150    .229   7.300    .110  25.520
 428          UC    .287    .234
 429          UA       0       3       5       8      12      20      43      75      90      96
 430          UA     100

 431          KK    CAP3
 432          KM   CAP WASH CONCENTRATION POINT 3 - SUB-BASINS 127E AND 127F
 433          HC       2

 434          KK   RCAP3
 435          KM   ROUTE CAP3 THROUGH 127G
 436          RS       2    FLOW       0
 437          RC     .04     .04     .04    1253    .025
 438          RX    9870    9920    9940    9974   10007   10055   10075   10130
 439          RY    1780    1770    1768    1758    1758    1770    1774    1780

 440          KK    127G
 441          KM   SUB-BASIN 127G
 442          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 443          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 444          BA    .057
 445          LG    .150    .150   7.000    .122  19.750
 446          UC    .208    .160
 447          UA       0       5      16      30      65      77      84      90      94      97
 448          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 449          KK    CAP4
 450          KM   CAP WASH CONCENTRATION POINT 4 - RCAP3 AND SUB-BASIN 127G
 451          HC       2

 452          KK   SCAP4
 453          KM   ROUTE CAP4 THROUGH 2-72" CULVERTS UNDER SHEA BLVD.
 454          KO       3
 455          RS       1    ELEV  1742.2
 456          SQ       0     130     410     830    1300
 457          SE  1742.2  1742.5  1748.2  1754.2  1766.5
 458          SA       0    .008    .037    3.31
 459          SE  1742.2    1746    1752    1766

 460          KK  R2CAP4
 461          KM   ROUTE CAP4 THROUGH 127I
 462          RS       1    FLOW       0
 463          RC     .04     .04     .04     743     .02
 464          RX    9800    9837    9985    9995   10020   10070   10180   10200
 465          RY    1760  1745.5    1738    1736    1736    1742    1752    1756

 466          KK    127I
 467          KM   SUB-BASIN 127I
 468          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 469          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 470          BA    .010
 471          LG    .100    .250   6.000    .158   9.000
 472          UC    .158    .292
 473          UA       0       5      16      30      65      77      84      90      94      97
 474          UA     100

 475          KK   *CAP5
 476          KM   CAP WASH CONCENTRATION POINT *5 - RCAP4, 127I
 477          HC       2

 478          KK    127H
 479          KM   SUB-BASIN 127H
 480          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 481          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 482          BA    .018
 483          LG    .150    .150   7.000    .122  21.740
 484          UC    .171    .180
 485          UA       0       3       5       8      12      20      43      75      90      96
 486          UA     100

 487          KK    CAP5
 488          KM   CAP WASH CONCENTRATION POINT 5 - RCAP4, 127H, (RCAP4,127I)
 489          HC       3

 490          KK   RCAP5
 491          KM   ROUTE CAP5 THROUGH 127J TO WALNUT WASH (WW8)
 492          RS       2    FLOW       0
 493          RC     .04     .04     .04    1382    .018
 494          RX    9895    9937    9960    9982   10005   10030   10075   10125
 495          RY    1730    1714  1711.5    1710    1710    1714    1720    1730
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 496          KK    127J
 497          KM   SUB-BASIN 127J
 498          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 499          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 500          BA    .032
 501          LG    .100    .170   6.800    .122  16.060
 502          UC    .204    .212
 503          UA       0       3       5       8      12      20      43      75      90      96
 504          UA     100

 505          KK    CAP6
 506          KM   CAP WASH COMBINATION POINT 6 - RCAP5, 127J
 507          HC       2

 508          KK     WW8
 509          KM   WALNUT WASH CONCENTRATION POINT 8 - RWW7,CAP6
 510          KM   CONFLUENCE OF CAP WASH AND WALNUT WASH
 511          HC       2

 512          KK    RWW8
 513          KM   ROUTE WW8 THROUGH 126N TO CONFLUENCE WITH CEREUS WASH
 514          RS       5    FLOW       0
 515          RC     .04     .04     .04    2789    .016
 516          RX    9850    9915    9930    9990   10005   10030   10142   10205
 517          RY    1700    1686    1682    1678    1678    1680 1685.25    1700

 518          KK    126N
 519          KM   SUB-BASIN 126N
 520          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 521          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 522          BA    .077
 523          LG    .150    .230   6.200    .171  12.260
 524          UC    .271    .272
 525          UA       0       5      16      30      65      77      84      90      94      97
 526          UA     100

 527          KK     WW9
 528          KM    WALNUT WASH CONCENTRATION POIT 9 - RWW8, 126N
 529          HC       2

 530          KK    CER4
 531          KM   CEREUS WASH CONCENTRATION POINT 4 - (RCER3,120E), (WW9, 126N)
 532          KM   CONFLUENCE OF CEREUS WASH AND WALNUT WASH
 533          HC       2

 534          KK   RCER4
 535          KM   ROUTE CER4 THROUGH SUB-BASIN 120F TO CONFLUENCE WITH CHUKAR WASH
 536          RS       2    FLOW       0
 537          RC     .04     .04     .04    1183    .015
 538          RX    9967    9973    9982    9999   10055   10135   10235   10325
 539          RY    1766    1762    1756    1744    1744    1756  1753.5    1756
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 540          KK    120F
 541          KM   SUB-BASIN 120F
 542          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 543          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 544          BA    .022
 545          LG    .150    .250   6.000    .183  12.460
 546          UC    .162    .174
 547          UA       0       5      16      30      65      77      84      90      94      97
 548          UA     100

 549          KK   *CER5
 550          KM   CEREUS WASH CONCENTRATION POIT *5 - RCER4, 120F
 551          HC       2

 552          KK    125A
 553          KM   SUB-BASIN 125A
 554          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 555          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 556          BA    .077
 557          LG    .150    .150   7.300    .110  25.500
 558          UC    .279    .298
 559          UA       0       3       5       8      12      20      43      75      90      96
 560          UA     100

 561          KK    125B
 562          KM   SUB-BASIN 125B
 563          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 564          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 565          BA    .113
 566          LG    .150    .150   7.300    .110  25.250
 567          UC    .296    .258
 568          UA       0       3       5       8      12      20      43      75      90      96
 569          UA     100

 570          KK    CHK1
 571          KM   CHUKAR WASH CONCENTRATION POINT 1 - SUB-BASINS 125A AND 125B
 572          HC       2

 573          KK   RCHK1
 574          KM   ROUTE CHK1 THROUGH 125D
 575          RS       1    FLOW      0
 576          RC     .04     .04     .04     544    .004
 577          RX    9830    9880    9915    9955   10005   10032   10140   10190
 578          RY    1700    1696    1690    1682    1682    1690    1690    1698

 579          KK    125C
 580          KM   SUB-BASIN 125C
 581          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 582          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 583          BA    .030
 584          LG    .150    .150   7.300    .110  25.060
 585          UC    .200    .198
 586          UA       0       3       5       8      12      20      43      75      90      96
 587          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 588          KK   R125C
 589          KM   ROUTE 125C THROUGH SUB-BASIN 125D TO CON. POINT CHK2
 590          RS       1    FLOW       0
 591          RC    0.04    0.04    0.04     290  0.0001
 592          RX    9905    9930    9945    9972   10025   10080   10090   10130
 593          RY    1680    1674    1670  1665.5  1665.5    1668    1670    1680

 594          KK    125D
 595          KM   SUB-BASIN 125D
 596          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 597          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 598          BA    .018
 599          LG    .100    .210   6.400    .159  22.030
 600          UC    .475    .459
 601          UA       0       3       5       8      12      20      43      75      90      96
 602          UA     100

 603          KK    CHK2
 604          KM   CHUKAR WASH CONCENTRATION POINT 2 - RCHK1 AND SUB BASINS 125C AND 125D
 605          HC       3

 606          KK  R2CHK2
 607          KM   ROUTE CHK2 THROUGH SUB-BASIN 125E TO CONFLUENCE WITH CEREUS WASH
 608          RS       3    FLOW       0
 609          RC     .04     .04     .04    1780    .027
 610          RX    9905    9930    9945    9972   10025   10080   10090   10130
 611          RY    1680    1674    1670  1665.5  1665.5    1668    1670    1680

 612          KK    125E
 613          KM   SUB-BASIN 125E
 614          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 615          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 616          BA    .047
 617          LG    .150    .230   6.200    .171  19.180
 618          UC    .200    .174
 619          UA       0       3       5       8      12      20      43      75      90      96
 620          UA     100

 621          KK    CHK3
 622          KM   CHUKAR WASH CONCENTRATON POINT 3 - RCHK2, 125E
 623          HC       2

 624          KK    CER5
 625          KM   CEREUS WASH CONCENTRATION POINT 5 - (RCER4, 120F), CHK3
 626          KM   CONFLUENCE OF CHUKAR WASH AND CEREUS WASH
 627          HC       2

 628          KK   RCER5
 629          KM   ROUTE CEREUS WASH (CER5) THROUGH 120G TO CONFLUENCE WITH LOGAN WASH
 630          RS       2    FLOW       0
 631          RC     .04     .04     .04    1119    .017
 632          RX    9885    9930    9970    9999   10001   10006   10200   10299
 633          RY    1650    1645    1640    1630    1630    1634    1631    1640
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 634          KK    120G
 635          KM   SUB-BASIN 120G
 636          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 637          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 638          BA    .037
 639          LG    .150    .170   6.800    .134  12.920
 640          UC    .208    .196
 641          UA       0       3       5       8      12      20      43      75      90      96
 642          UA     100

 643          KK   *CER6
 644          KM   CEREUS WASH CONCENTRATION POINT *6 - RCER5, 120G
 645          HC       2

 646          KK    124A
 647          KM   SUB-BASIN 124A
 648          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 649          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 650          BA    .071
 651          LG    .150    .150   7.000    .122  20.640
 652          UC    .254    .252
 653          UA       0       3       5       8      12      20      43      75      90      96
 654          UA     100

 655          KK    124B
 656          KM   SUB-BASIN 124B
 657          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 658          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 659          BA    .043
 660          LG    .150    .170   6.800    .134  19.010
 661          UC    .179    .126
 662          UA       0       3       5       8      12      20      43      75      90      96
 663          UA     100

 664          KK    LOG1
 665          KM   LOGAN WASH CONCENTRATION POINT 1 - SUB-BASINS 124A AND 124B
 666          HC       2

 667          KK   RLOG1
 668          KM   ROUTE LOG1 THROUGH 124D
 669          RS       1    FLOW       0
 670          RC     .04     .04     .04     647    .015
 671          RX    9920    9940    9965    9993   10008   10040   10057   10090
 672          RY    1670    1666    1660  1655.5  1655.5    1658    1662    1663

 673          KK    124D
 674          KM   SUB-BASIN 124D
 675          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 676          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 677          BA    .009
 678          LG    .150    .230   6.200    .171   9.350
 679          UC    .213    .439
 680          UA       0       3       5       8      12      20      43      75      90      96
 681          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 682          KK   *LOG2
 683          KM   LOGAN WASH CONCENTRATION POINT *2 - RLOG1,124D
 684          HC       2

 685          KK    124C
 686          KM   SUB-BASIN 124C
 687          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 688          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 689          BA    .020
 690          LG    .150    .230   6.200    .171  17.240
 691          UC    .213    .278
 692          UA       0       5      16      30      65      77      84      90      94      97
 693          UA     100

 694          KK    LOG2
 695          KM   LOGAN WASH CONCENTRATION POINT 2 - (RLOG1,124D), 124C
 696          HC       2

 697          KK   RLOG2
 698          KM   ROUTE LOG2 THROUGH 124E TO CONFLUENCE WITH CEREUS WASH
 699          RS       3    FLOW       0
 700          RC     .04     .04     .04    1436    .014
 701          RX    9885    9920    9965   10005   10030   10060   10090   10140
 702          RY    1660    1650    1642    1640    1640    1650    1660    1670

 703          KK    124E
 704          KM   SUB-BASIN 124E
 705          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 706          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 707          BA    .051
 708          LG    .150    .210   6.400    .159  13.430
 709          UC    .217    .192
 710          UA       0       3       5       8      12      20      43      75      90      96
 711          UA     100

 712          KK    LOG3
 713          KM   LOGAN WASH CONCENTRATION POINT 3 - RLOG2, 124E
 714          HC       2

 715          KK    CER6
 716          KM   CEREUS WASH CONCENTRATION POINT 6 - (RCER5, 120G), RLOG2
 717          KM   CONFLUENCE OF LOGAN AND CEREUS WASH
 718          HC       2

 719          KK   RCER6
 720          KM   ROUTE CER6 THROUGH 120L
 721          RS       3    FLOW       0
 722          RC     .04     .04     .04    1481    .011
 723          RX    9945    9955    9970    9990   10020   10150   10180   10210
 724          RY    1628    1627    1626    1612    1612    1618    1624    1630
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 725          KK    120L
 726          KM   SUB-BASIN 120L
 727          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 728          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 729          BA    .036
 730          LG    .150    .150   7.000    .122   5.550
 731          UC    .208    .203
 732          UA       0       3       5       8      12      20      43      75      90      96
 733          UA     100

 734          KK   *CER7
 735          KM   CEREUS WASH PONCENTRATION POINT *7 - RCER6, 120L
 736          HC       2

 737          KK    120J
 738          KM   SUB-BASIN 120J
 739          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 740          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 741          BA    .006
 742          LG    .100    .250   5.700    .170  15.000
 743          UC    .225    .524
 744          UA       0       5      16      30      65      77      84      90      94      97
 745          UA     100

 746          KK   R120J
 747          KM   ROUTE 120J THROUGH 120K
 748          RS       1    FLOW       0
 749          RC     .04     .04     .04     624    .159
 750          RX    9840    9940    9985    9993   10005   10040   10047   10110
 751          RY    1710    1690    1685  1682.5  1682.5    1690    1692    1710

 752          KK    120K
 753          KM   SUB-BASIN 120K
 754          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 755          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 756          BA    .034
 757          LG    .150    .250   5.700    .207  11.250
 758          UC    .242    .268
 759          UA       0       5      16      30      65      77      84      90      94      97
 760          UA     100

 761          KK   CER7A
 762          KM   CEREUS WASH CONCENTRATION POINT 7A- R120J AND 120K
 763          HC       2

 764          KK  SCER7A
 765          KM   ROUTE CER7A THROUGH 48" CULVERT UNDER SHEA BLVD.
 766          KO       3
 767          RS       1    ELEV  1640.9
 768          SQ       0      24      73     150     240
 769          SE  1640.9  1642.9  1644.9  1648.9    1658
 770          SA       0     .81
 771          SE  1640.9    1658
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 772          KK  RCER7A
 773          KM   ROUTE CER7A THROUGH SUB-BASIN 120M TO CON. POINT CER7
 774          RS       3    FLOW       0
 775          RC     .04     .04     .04    1400    .027
 776          RX    9895    9920    9950    9975   10015   10110   10140   10200
 777          RY    1640    1636    1632    1628    1628    1632    1634    1640

 778          KK    120M
 779          KM   SUB-BASIN 120M
 780          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 781          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 782          BA    .040
 783          LG    .100    .250   5.800    .186  19.930
 784          UC    .246    .367
 785          UA       0       5      16      30      65      77      84      90      94      97
 786          UA     100

 787          KK    123B
 788          KM   SUB-BASIN 123B
 789          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 790          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 791          BA    .019
 792          LG    .150    .250   5.700    .207   6.250
 793          UC    .179    .179
 794          UA       0       5      16      30      65      77      84      90      94      97
 795          UA     100

 796          KK   S123B
 797          KM   ROUTE 123B THROUGH 36" CMP CULVERT UNDER SHEA BLVD
 798          KO       3
 799          RS       1    ELEV  1624.7
 800          SQ       0      11      33      63      77
 801          SE  1624.7  1626.2  1627.7  1630.7  1633.1
 802          SA       0   0.004    0.01
 803          SE  1624.7    1628    1629

 804          KK   R123B
 805          KM   ROUTE 123B THROUGH SUB-BASIN 120M TO WASH
 806          RS       2    FLOW       0
 807          RC    0.04    0.04    0.04     412   0.034
 808          RX    9965    9970    9980    9995   10005   10080  100115   10160
 809          RY    1630    1628    1623    1616    1616    1624    1628    1634

 810          KK   R123B
 811          KM   ROUTE R123B THROUGH SUB-BASIN 120M (IN WASH) TO CON. POINT CER7
 812          RS       1    FLOW       0
 813          RC    0.04    0.04    0.04     193    0.36
 814          RX    9895    9920    9950    9975   10015   10110   10140   10200
 815          RY    1640    1636    1632    1628    1628    1632    1634    1640
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 863          KK    TRV1
 864          KM   TREVINO WASH CONCENTRATION POINT 1 - S123A AND 123D
 865          HC       2

 866          KK   STRV1
 867          KM   ROUTE TRV1 THROUGH 84" CMP CULVERT UNDER SHEA BLVD
 868          KO       3
 869          RS       1    ELEV  1588.7
 870          SQ       0      97     300     435     620
 871          SE  1588.7  1591.7  1595.7  1602.7    1598
 872          SA       0    0.01    0.14
 873          SE  1588.7    1589    1598

 874          KK   RTRV1
 875          KM   ROUTE TRV1 THROUGH SUB-BASIN 120N TO *CER8
 876          RS       2    FLOW       0
 877          RC     .04     .04     .04     971    .007
 878          RX    9860    9910    9945    9985   10010   10150   10180   10300
 879          RY    1597    1596    1594    1582    1582    1586    1590    1592

 880          KK    123C
 881          KM   SUB-BASIN 123C
 882          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 883          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 884          BA    .003
 885          LG    .150    .250   5.700    .207   3.750
 886          UC    .092    .085
 887          UA       0       5      16      30      65      77      84      90      94      97
 888          UA     100

 889          KK   S123C
 890          KM   ROUTE THROUGH 24" CMP CULVERT UNDER SHEA BLVD
 891          KO       3
 892          RS       1    ELEV    1618
 893          SQ       0       4      12      22      28
 894          SE    1618    1619    1620    1622    1624
 895          SA       0    0.01
 896          SE    1618    1623

 897          KK   R123C
 898          KM   ROUTE R123C THROUGH SUB-BASIN 120N TO WASH
 899          RS       1    FLOW       0
 900          RC    0.04    0.04    0.04     136   0.147
 901          RX    9965    9970    9980    9995   10005   10080   10115   10160
 902          RY    1630    1628    1623    1616    1616    1624    1628    1634

 903          KK   R123C
 904          KM   ROUTE 123C THROUGH SUB-BASIN 120N (WASH) TO CON. POINT CER8
 905          RS       5    FLOW       0
 906          RC    0.04    0.04    0.04    1688   0.012
 907          RX    9860    9910    9945    9985   10010   10150   10180   10300
 908          RY    1597    1596    1594    1582    1582    1586    1590    1592
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 909          KK    CER8
 910          KM   CEREUS WASH CONCENTRATION POINT 8 - (RCER7, 120N), R2TREV, 123C
 911          KM   CONFLUENCE WITH TREVINO WASH
 912          HC       3

 913          KK   RCER8
 914          KM   ROUTE CER8 THROUGH SUB-BASIN 120Q
 915          RS       3    FLOW       0
 916          RC     .04     .04     .04    1703    .013
 917          RX    9890    9920    9980    9999   10001   10055   10095   10180
 918          RY    1571    1570    1558    1556    1556    1560    1570    1574

 919          KK    120O
 920          KM   SUB-BASIN 120O
 921          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 922          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 923          BA    .008
 924          LG    .100    .250   5.700    .189  10.000
 925          UC    .117    .104
 926          UA       0       5      16      30      65      77      84      90      94      97
 927          UA     100

 928          KK   S120O
 929          KM   ROUTE 120O THROUGH 2 30" CMP CULVERT UNDER SHEA BLVD
 930          KO       3
 931          RS       1    ELEV    1587
 932          SQ       0      15      44      90     180     400
 933          SE    1585  1588.8  1590.6  1594.2    1595    1596
 934          SA       0    0.01    0.02
 935          SE    1587    1589    1594

 936          KK   R120O
 937          KM   ROUTE 120O TO WASH THROUGH 120Q
 938          RS       1    FLOW       0
 939          RC     .04     .04     .04     572    .028
 940          RX    9860    9910    9945    9985   10010   10150   10180   10300
 941          RY    1597    1596    1594    1582    1582    1586    1590    1590

 942          KK   R120O
 943          KM   ROUTE 120O FROM WASH TO *CER9 THROUGH SUB-BASIN 120Q
 944          RS       3    FLOW       0
 945          RC     .04     .04     .04    1503    .013
 946          RX    9890    9920    9980    9999   10001   10055   10095   10180
 947          RY    1571    1570    1558    1556    1556    1560    1570    1574

 948          KK    120Q
 949          KM   SUB-BASIN 120Q
 950          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 951          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 952          BA    .035
 953          LG    .138    .150   7.000    .118  11.720
 954          UC    .213    .220
 955          UA       0       5      16      30      65      77      84      90      94      97
 956          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  957         KK   *CER9
  958         KM   CEREUS WASH CONCENTRATION POINT *9 - RCER8, 120Q, R120O
  959         HC       3

  960         KK    120P
  961         KM   SUB-BASIN 120P
  962         KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
  963         KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
  964         BA    .028
  965         LG    .150    .250   5.700    .198   7.500
  966         UC    .121    .053
  967         UA       0       5      16      30      65      77      84      90      94      97
  968         UA     100

  969         KK   S120P
  970         KM   ROUTE 120P THROUGH 36" CMP CULVERT UNDER SHEA BLVD
  971         KO       3
  972         RS       1    ELEV    1580
  973         SQ       0      11      35      70
  974         SE    1580  1581.5    1583    1586
  975         SA       0    0.02    0.25
  976         SE    1580    1990    1593

  977         KK   R120P
  978         KM   ROUTE 120P THROUGH SUB-BASIN 120Q
  979         RS       2    FLOW       0
  980         RC     .04     .04     .04    1168    .025
  981         RX    9890    9920    9980    9999   10001   10055   10095   10180
  982         RY    1571    1570    1558    1556    1556  1560.5    1570    1574

  983         KK    CER9
  984         KM   CEREUS WASH CONCENTRATION POINT 9 - (RCER8, 120Q), R120P
  985         HC       2

  986         KK   SCER9
  987         KM   ROUTE CER9 THROUGH 2 10' X 8' BOX CULVERT UNDER SAGUARO BLVD
  988         KM   ******* NEW CULVERT CULVERT INSTALLED TO REPLACE 2-60" CMP  *********
  989         KO       3
  990         RS       1    ELEV 1549.37
  991         SQ       0     226     480    1500    2400    3786
  992         SE  1549.4 1551.77 1553.37 1557.37 1563.53 1565.37
  993         SA       0    0.02    0.48    2.43
  994         SE  1549.4    1552    1556    1564

  995         KK    120R
  996         KM   SUB-BASIN 120R
  997         KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
  998         KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
  999         BA    .012
 1000         LG    .140    .250   6.000    .178   4.610
 1001         UC    .208    .324
 1002         UA       0       5      16      30      65      77      84      90      94      97
 1003         UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1004          KK    120S
1005          KM   SUB-BASIN 120S
1006          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1007          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1008          BA    .007
1009          LG    .054    .150   8.000    .070  33.280
1010          UC    .162    .239
1011          UA       0       5      16      30      65      77      84      90      94      97
1012          UA     100

1013          KK   CER10
1014          KM   CEREUS WASH CONCENTRATION POINT 10- SCER9, 120R, 120S
1015          HC       3

1016          KK  RCER10
1017          KM   ROUTE CER10 THROUGH SUB-BASIN 120T
1018          RS       1    FLOW       0
1019          RC     .04     .04     .04     405     .01
1020          RX    9790    9815    9895    9965   10030   10065   10150   10220
1021          RY    1562    1560    1558    1546    1546    1558    1558    1562

1022          KK    120T
1023          KM   SUB-BASIN 120T
1024          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1025          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1026          BA    .002
1027          LG    .150    .150   8.000    .085    .000
1028          UC    .129    .209
1029          UA       0       3       5       8      12      20      43      75      90      96
1030          UA     100

1031          KK  *CER11
1032          KM   CEREUS WASH CONCENTRATION POINT *11 - RCER10, 120T
1033          HC       2

1034          KK    122C
1035          KM   SUB-BASIN 122C
1036          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1037          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1038          BA    .014
1039          LG    .150    .250   6.000    .163  11.320
1040          UC    .158    .162
1041          UA       0       5      16      30      65      77      84      90      94      97
1042          UA     100

1043          KK   D122C
1044          KM   DIVERTION AT 122C INTO 122A
1045          DT  DO122C
1046          DI       0      10     100    1000
1047          DQ     0.5       5      50     500
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1048          KK   R122C
1049          KM   ROUTE 122C THROUGH SUB-BASIN 122E TO CON. POINT LSR2B
1050          RS       2    FLOW       0
1051          RC    0.02    0.02    0.02    1000   0.032
1052          RX    9975    9980    9985    9986   10014   10015   10020   10025
1053          RY  1614.5  1614.5  1614.5    1614    1614  1614.5  1614.5  1614.5

1054          KK    122E
1055          KM   SUB-BASIN 122E
1056          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1057          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1058          BA    .032
1059          LG    .144    .250   6.000    .168  12.390
1060          UC    .192    .173
1061          UA       0       5      16      30      65      77      84      90      94      97
1062          UA     100

1063          KK   LSR2B
1064          KM   LASER WASH CONSENTRATION POINT 2B - COMBINE RD122E, 122E
1065          HC       2

1066          KK  RLSR2B
1067          KM   ROUTE LASER WASH LSR2B THROUGH SUB-BASIN 120G TO CON. POINT LSR2
1068          RS       2    FLOW       0
1069          RC    0.02    0.02    0.02    1281   0.017
1070          RX    9780    9905    9955    9975   10015   10050   10060   10085
1071          RY    1600    1598    1596    1592    1590  1591.5    1592  1592.5

1072          KK    122D
1073          KM   SUB-BASIN 122D
1074          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1075          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1076          BA    .032
1077          LG    .150    .250   6.000    .183   1.480
1078          UC    .196    .194
1079          UA       0       5      16      30      65      77      84      90      94      97
1080          UA     100

1081          KK   R122D
1082          KM   ROUTE 122D THROUGH SUB-BASIN 122G TO CON. POIT LSR2
1083          RS       2    FLOW       0
1084          RC    0.02    0.02    0.02     480   0.015
1085          RX    9780    9905    9955    9975   10015   10050   10060   10085
1086          RY    1600    1598    1596    1592    1590  1591.5    1592   10085

1087          KK    122F
1088          KM   SUB-BASIN 122F
1089          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1090          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1091          BA    .010
1092          LG    .150    .230   6.200    .171  20.110
1093          UC    .200    .327
1094          UA       0       5      16      30      65      77      84      90      94      97
1095          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1096          KK   R122F
1097          KM   ROUTE 122F THROUGH SUB-BAASIN 122G TO CON. POINT LSR2
1098          RS       2    FLOW       0
1099          RC    0.02    0.02    0.02     430   0.032
1100          RX    9780    9905    9955    9975   10015   10050   10060   10085
1101          RY    1600    1598    1596    1592    1590  1591.5    1592  1592.5

1102          KK    122G
1103          KM   SUB-BASIN 122G
1104          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1105          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1106          BA    .022
1107          LG    .100    .250   6.000    .158  64.500
1108          UC    .125    .124
1109          UA       0       5      16      30      65      77      84      90      94      97
1110          UA     100

1111          KK    LSR2
1112          KM   LASER DRAIN CONCENTRATION POINT 2 - RLSR2B, R122F, R122D, 122G
1113          HC       4

1114          KK    LSR2
1115          KM   ROUTE LSR2 THROUGH SUB-BASIN 122I TO CON. POINT LSR3
1116          RS       2    FLOW       0
1117          RC    0.02    0.02    0.02     826   0.017
1118          RX    9790    9875    9895    9985   10015   10070   10130   10170
1119          RY    1576    1576  1574.5    1571  1570.5    1574    1576    1578

1120          KK    122A
1121          KM   SUB-BASIN 122A
1122          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1123          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1124          BA    .020
1125          LG    .115    .250   6.000    .162   8.200
1126          UC    .208    .335
1127          UA       0       5      16      30      65      77      84      90      94      97
1128          UA     100

1129          KK   D122C
1130          KM   FLOW FROM DIVERSION OUT OF 122C INTO 122A
1131          DR  DO122C

1132          KK  RD122C
1133          KM   ROUTE D122C THROUGH SUB-BASIN 122A TO CON. POINT LSR1B
1134          RS       4    FLOW       0
1135          RC    0.02    0.02    0.02    2050   0.019
1136          RX    9956    9961    9966  9966.5 10033.5   10034   10039   10044
1137          RY  1606.5  1606.5  1606.5    1606    1606  1606.5  1606.5  1606.5
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1138          KK   LSR1B
1139          KM   LASER WASH CONCENTRATION POINT 1B - COMBINE 122A, RD122C
1140          HC       2

1141          KK  RLSR1B
1142          KM   ROUTE LSR1B THROUGH SUB-BASIN 122B TO CON. POINT LSR1
1143          RS       2    FLOW       0
1144          RC     .04     .04     .04    1052    .019
1145          RX    9840    9870    9890    9930   10045   10105   10130   10170
1146          RY    1582    1582    1582    1578    1577    1582    1582    1582

1147          KK    122B
1148          KM   SUB-BASIN 122B
1149          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1150          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1151          BA    .034
1152          LG    .110    .250   6.000    .162  31.040
1153          UC    .175    .148
1154          UA       0       5      16      30      65      77      84      90      94      97
1155          UA     100

1156          KK    LSR1
1157          KM   LASER DRAIN CONCENTRATION POINT 1 - R122A AND 122B
1158          HC       2

1159          KK   RLSR1
1160          KM   ROUTE LSR1 THROUGH SUB-BASIN 122H TO CON. POINT LSR3
1161          RS       2    FLOW       0
1162          RC    0.02    0.02    0.02     500   0.018
1163          RX    9885    9905    9935    9960   10030   10050   10110   10130
1164          RY  1574.5    1574    1570  1568.5  1568.5    1572    1572    1574

1165          KK    122H
1166          KM   SUB-BASIN 122H
1167          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1168          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1169          BA    .006
1170          LG    .150    .250   6.000    .181  16.130
1171          UC    .129    .163
1172          UA       0       5      16      30      65      77      84      90      94      97
1173          UA     100

1174          KK    122I
1175          KM   SUB-BASIN 122I
1176          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1177          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1178          BA    .007
1179          LG    .150    .250   6.000    .175  14.250
1180          UC    .175    .239
1181          UA       0       5      16      30      65      77      84      90      94      97
1182          UA     100
```

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

1183          KK    LSR3
1184          KM   LASER DRAIN CONCENTRATION POINT 3 - RLSR1,RLSR2,122H,122I
1185          HC       4

1186          KK    RSL3
1187          KM   ROUTE LSR3 THROUGH SUB-BASIN 122J TO CON. POINT LSR4
1188          RS       2    FLOW       0
1189          RC    0.04    0.04    0.04     422   0.017
1190          RX    9835    9875    9890    9910   10045   10055   10070   10080
1191          RY    1570    1568    1564    1562    1562    1564    1566    1568

1192          KK    122J
1193          KM   SUB-BASIN 122J
1194          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1195          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1196          BA    .025
1197          LG    .150    .250   6.000    .183  19.780
1198          UC    .213    .245
1199          UA       0       5      16      30      65      77      84      90      94      97
1200          UA     100

1201          KK    LSR4
1202          KM   LASER DRAIN CONCENTRATION POINT 4 - RLSR3 AND 122J
1203          HC       2

1204          KK    RSL4
1205          KM   ROUTE LSR4 THROUGH SUB-BASIN 122K TO CONFLUENCE WITH CEREUS WASH CER11
1206          RS       2    FLOW       0
1207          RC    0.04    0.04    0.04     666    0.02
1208          RX    9790    9815    9895    9965   10030   10065   10150   10220
1209          RY    1562    1560    1558    1546    1546    1556    1558    1562

1210          KK    122K
1211          KM   SUB-BASIN 122K
1212          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1213          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1214          BA    .003
1215          LG    .134    .210   6.400    .152   9.670
1216          UC    .179    .382
1217          UA       0       5      16      30      65      77      84      90      94      97
1218          UA     100

1219          KK    LSR5
1220          KM   LASER DRAIN CONCENTRATION POINT 5 - RLSR4, 122K
1221          HC       2

1222          KK   CER11
1223          KM   CEREUS WASH CONCENTRATION POINT 11 - (RCER10, 120T), (RLSR4, 122K)
1224          KM   CONFLUENCE OF CEREUS WASH AND LASER DRAIN
1225          HC       2
```

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

1226          KK  RCER11
1227          KM   ROUTE CER11 THROUGH SUB-BASIN 120U TO CON. POINT CER12
1228          RS       2    FLOW       0
1229          RC     .04     .04     .04     821    .012
1230          RX    9885    9920    9965    9995   10020   10070   10120   10270
1231          RY    1570    1560    1548    1540    1540    1550    1554    1556

1232          KK    120U
1233          KM   SUB-BASIN 120U
1234          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1235          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1236          BA    .019
1237          LG    .128    .170   6.800    .128  13.230
1238          UC    .154    .151
1239          UA       0       5      16      30      65      77      84      90      94      97
1240          UA     100

1241          KK  *CER12
1242          KM   CEREUS WASH CONCENTRATION POINT *12 - RCER11, 120U
1243          HC       2

1244          KK    121A
1245          KM   SUB-BASIN 121A
1246          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1247          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
1248          BA    .050
1249          LG    .150    .250   6.000    .175   6.000
1250          UC    .258    .273
1251          UA       0       5      16      30      65      77      84      90      94      97
1252          UA     100

1253          KK   R121A
1254          KM   ROUTE 121A THROUGH SUB-BASIN 121B TO CON. POINT CER12
1255          RS       2    FLOW       0
1256          RC    0.04    0.04    0.04     446   0.036
1257          RX    9870    9905    9925    9990   10010   10052   10065   10100
1258          RY    1552    1550    1548    1542    1542    1550    1552    1554

1259          KK    121B
1260          KM   SUB-BASIN 121B
1261          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1262          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1263          BA    .020
1264          LG    .150    .250   6.000    .175  10.980
1265          UC    .225    .341
1266          UA       0       5      16      30      65      77      84      90      94      97
1267          UA     100

1268          KK    LTD1
1269          KM   LAST TRAIL DRAIN CONCENTRATION POINT 1 - R121A, 121B
1270          HC       2
```

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

1271          KK   CER12
1272          KM   CEREUS WASH CONCENTRATION POINT 12 - (RCER11, 120U), (R121A, 121B)
1273          KM   CONFLUENCE WITH LAST TRAIL DRAIN
1274          HC       2

1275          KK  RCER13
1276          KM   ROUTE CER12 THROUGH SUB-BASIN 120V TO CON. POINT CER13
1277          RS       1    FLOW       0
1278          RC    0.04    0.04    0.04     317   0.006
1279          RX    9820    9900    9950    9995   10030   10075   10120   10150
1280          RY    1550    1548    1540    1532    1532    1542    1552    1556

1281          KK    120V
1282          KM   SUB-BASIN 120V
1283          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1284          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1285          BA    .010
1286          LG    .150    .190   6.600    .146    .990
1287          UC    .162    .188
1288          UA       0       5      16      30      65      77      84      90      94      97
1289          UA     100

1290          KK   CER13
1291          KM   CEREUS WASH CONCENTRATION POINT 13 - RCER12, 120V UPSTREAM OF SHEA BLVD
1292          HC       2

1293          KK  SCER13
1294          KM   ROUTE CER13 THROGH 3 12'X12' BOX CULVERTS UNDER SHEA BLVD
1295          KO       3
1296          RS       1    ELEV 1530.30
1297          SQ       0    1332    3780    6300
1298          SE  1530.3  1536.3  1542.3  1549.1
1299          SA       0   0.011    0.95    3.40    6.46
1300          SE  1530.3    1532    1536    1544    1548

1301          KK  RCER13
1302          KM   ROUTE SCER13 THROUGHT SUB-BASIN 120X TO CON. POINT CER14
1303          RS       2    FLOW       0
1304          RC    0.04    0.04    0.04     868   0.013
1305          RX    9785    9850    9875    9910   10090   10135   10200   10280
1306          RY    1539    1538    1536    1525    1524    1536    1537    1538

1307          KK    120X
1308          KM   SUB-BASIN 120X
1309          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1310          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1311          BA    .016
1312          LG    .117    .150   7.600    .092  24.240
1313          UC    .133    .115
1314          UA       0       5      16      30      65      77      84      90      94      97
1315          UA     100
```

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

1316          KK  *CER14
1317          KM   CEREUS WASH CONCENTRATION POINT *14 - RCER13, 120X
1318          HC       2

1319          KK    120W
1320          KM   SUB-BASIN 120W
1321          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1322          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1323          BA    .005
1324          LG    .147    .250   6.000    .181   3.010
1325          UC    .087    .067
1326          UA       0       5      16      30      65      77      84      90      94      97
1327          UA     100

1328          KK   S120W
1329          KM   ROUTE 120W THROUGH 2 30" CMP CULVERT UNDER SHEA BLVD
1330          KO       3
1331          RS       1    ELEV 1540.94
1332          SQ       0      28      60     100
1333          SE  1540.9  1542.8  1544.6  1548.2
1334          SA       0    0.06    0.46
1335          SE    1539    1540    1543

1336          KK   R120W
1337          KM   ROUTE R120W THROUGH SUB-BASIN 120X TO CON. POINT CER14
1338          RS       2    FLOW       0
1339          RC    0.04    0.04    0.04     500   0.042
1340          RX    9970    9985    9995    9998   10002   10015   10050   10065
1341          RY    1532    1530    1528  1527.5  1527.5    1530    1536    1538

1342          KK   CER14
1343          KM   CEREUS WASH POINT OF CONCENTRATION 13 - (RCER13,120X), R120W
1344          HC       2
1345          ZZ
```

SCHEMATIC DIAGRAM OF STREAM NETWORK

```
INPUT
                (V) ROUTING          (--->) DIVERSION OR PUMP FLOW

                (.) CONNECTOR        (<---) RETURN OF DIVERTED OR PUMPED FLOW

 23               120A
                    .
                    .
 32                 .        120B
                    .           .
                    .           .
 41                 .           .        160A
                    .           .           V
                    .           .           V
 50                 .           .       R160A
                    .           .           .
                    .           .           .
 56               CER1.......................
                    V
                    V
 59              SCER1
                    .
                    .
 67                 .        120C
                    .           .
                    .           .
 76               CER2............
                    V
                    V
 79              RCER2
                    .
                    .
 85                 .        120D
                    .           .
                    .           .
 94              *CER3............
                    .
                    .
 97                 .        120H
                    .           V
                    .           V
106                 .       R120H
                    .           .
                    .           .
                    .           .        120I
                    .           .           .
                    .           .           .
121                 .       CER3A............
                    .           V
                    .           V
124                 .      SCER3A
                    .           .
                    .           .
131               CER3............
                    V
                    V
134              SCER3
                    V
                    V
142              RCER3
                    .
                    .
148                 .        120E
                    .           .
                    .           .
157              *CER4............
                    .
                    .
160                 .        126A
                    .           V
                    .           V
169                 .       R126A
                    .           .
                    .           .
175                 .           .        126B
                    .           .           .
                    .           .           .
184                 .         WW1............
                    .           V
                    .           V
187                 .        RWW1
                    .           .
                    .           .
193                 .           .        126C
                    .           .           V
```

```
                    V
2             R126C
                    .
                    .
208                 .        126D
                    .          .
                    .          .
217         WW3.......................
              V
              V
220         RWW3
              .
              .
226             126E
                  .
                  .
235               .        126F
                  .          .
                  .          .
244               .     WW4............
                  .       V
                  .       V
247               .     RWW4
                  .       .
                  .       .
253               .        126G
                  .          .
                  .          .
262               .          .        126H
                  .          .          .
                  .          .          .
271         WW5.................................
              V
              V
274         RWW5
              .
              .
280             126I
                  .
                  .
289               .        126J
                  .          V
                  .          V
8                 .       R126J
                  .          .
                  .          .
304         WW6.......................
              V
              V
307         RWW6
              .
              .
313             126M
                  .
                  .
322         *WW7............
              .
              .
325             126K
                  .
                  .
                  V
                  V
334             R126K
                  .
                  .
340               .        126L
                  .          .
                  .          .
349         WW7.......................
              V
              V
352         SWW7
              .
              .
359             127A
                  .
                  .
368               .        127B
                  .          .
                  .          .
377             CAP1............
                  .
                  .
                  V
                  V
380             RCAP1
                  .
                  .
6                 .        127C
                  .          .
```

```
                                                  127D
404                        CAP2.......................
                              V
                              V
407                       RCAP2
                                 .
                                 .
413                                     127E
                                            .
                                            .
422                                            .        127F
                                            .           .
                                            .           .
431                                     CAP3............
                                            V
                                            V
434                                    RCAP3
                                            .
                                            .
440                                            .        127G
                                            .           .
                                            .           .
449                                     CAP4............
                                            V
                                            V
452                                    SCAP4
                                            V
                                            V
460                                   R2CAP4
                                            .
                                            .
466                                            .        127I
                                            .           .
                                            .           .
475                                    *CAP5............
                                            .
                                            .
478                                            .        127H
                                            .           .
                                            .           .
                           CAP5.......................
                              V
                              V
490                       RCAP5
                                 .
                                 .
496                                     127J
                                            .
                                            .
505                        CAP6............
                                 .
                                 .
508                  WW8............
                       V
                       V
512                 RWW8
                       .
                       .
518                           126N
                                 .
                                 .
527                  WW9............
                       .
                       .
530            CER4............
                  V
                  V
534           RCER4
                  .
                  .
540                 120F
                       .
                       .
549           *CER5............
                  .
                  .
552                 125A
                       .
                       .
561                           125B
                                 .
                                 .
                    CHK1............
                       V
```

```
          .          V
573       .      RCHK1
          .          .
          .          .
579       .          .        125C
          .          .           V
          .          .           V
588       .          .       R125C
          .          .           .
          .          .           .
594       .          .           .        125D
          .          .           .           .
          .          .           .           .
603       .       CHK2.......................
          .          V
          .          V
606       .     R2CHK2
          .          .
          .          .
612       .          .        125E
          .          .           .
          .          .           .
621       .       CHK3............
          .          .
          .          .
624     CER5............
           V
           V
628    RCER5
          .
          .
634       .       120G
          .          .
          .          .
643    *CER6............
          .
          .
646       .       124A
          .          .
          .          .
655       .          .        124B
          .          .           .
          .          .           .
4         .       LOG1............
          .          V
          .          V
667       .      RLOG1
          .          .
          .          .
673       .          .        124D
          .          .           .
          .          .           .
682       .      *LOG2............
          .          .
          .          .
685       .          .        124C
          .          .           .
          .          .           .
694       .       LOG2............
          .          V
          .          V
697       .      RLOG2
          .          .
          .          .
703       .          .        124E
          .          .           .
          .          .           .
712       .       LOG3............
          .          .
          .          .
715     CER6............
           V
           V
719    RCER6
          .
          .
725       .       120L
          .          .
          .          .
734    *CER7............
          .
          .
737       .       120J
          .          V
          .          V
6         .      R120J
          .          .
```

```
[illegible]
[illegible]          120K
761          CER7A............
                V
                V
764         SCER7A
                V
                V
772         RCER7A
[illegible]
[illegible]
778          120M
[illegible]
[illegible]
787                          123B
[illegible]                     V
[illegible]                     V
796                         S123B
[illegible]                     V
[illegible]                     V
804                         R123B
[illegible]                     V
[illegible]                     V
810                         R123B
[illegible]                     .
[illegible]                     .
816      CER7.................................
            V
            V
819     RCER7
[illegible]
[illegible]
825          120N
[illegible]
[illegible]
834     *CER8............
[illegible]
[illegible]
837          123A
[illegible]     V
[illegible]     V
[illegible]  S123A
[illegible]
[illegible]
854          123D
[illegible]
[illegible]
863          TRV1............
[illegible]     V
[illegible]     V
866         STRV1
[illegible]     V
[illegible]     V
874         RTRV1
[illegible]
[illegible]
880          123C
[illegible]     V
[illegible]     V
889         S123C
[illegible]     V
[illegible]     V
897         R123C
[illegible]     V
[illegible]     V
903         R123C
[illegible]
[illegible]
909      CER8........................
            V
            V
913     RCER8
[illegible]
[illegible]
919          120O
[illegible]     V
[illegible]     V
928         S120O
[illegible]     V
[illegible]     V
936         R120O
[illegible]     V
[illegible]     V
[illegible]  R120O
[illegible]
```

```
 948          .           .
              .           .        120Q
              .           .           .
              .           .           .
 957      *CER9.......................
              .
              .
 960          .        120P
              .           V
              .           V
 969          .       S120P
              .           V
              .           V
 977          .       R120P
              .           .
              .           .
 983       CER9............
              V
              V
 986      SCER9
              .
              .
 995          .        120R
              .           .
              .           .
1004          .           .        120S
              .           .           .
              .           .           .
1013      CER10......................
              V
              V
1016     RCER10
              .
              .
1022          .        120T
              .           .
              .           .
1031     *CER11............
              .
              .
1034          .        122C
              .           .
              .           .
1045          .           .-------> DO122C
1048          .       D122C
              .           V
              .           V
1048          .       R122C
              .           .
              .           .
1054          .           .        122E
              .           .           .
              .           .           .
1063          .       LSR2B............
              .           V
              .           V
1066          .      RLSR2B
              .           .
              .           .
1072          .           .        122D
              .           .           V
              .           .           V
1081          .           .       R122D
              .           .           .
              .           .           .
1087          .           .           .        122F
              .           .           .           V
              .           .           .           V
1096          .           .           .       R122F
              .           .           .           .
              .           .           .           .
1102          .           .           .           .        122G
              .           .           .           .           .
              .           .           .           .           .
1111          .        LSR2.................................
              .           V
              .           V
1114          .        LSR2
              .           .
              .           .
1120          .           .        122A
              .           .           .
              .           .           .
1131          .           .           .           .<-------  DO122C
1129          .           .           .       D122C
              .           .           .           V
              .           .           .           V
```

```
1132          .           .           .      RD122C
              .           .           .           .
              .           .           .           .
              .           .       LSR1B...........
              .           .           V
              .           .           V
1141          .           .      RLSR1B
              .           .           .
              .           .           .
1147          .           .           .        122B
              .           .           .           .
              .           .           .           .
1156          .           .        LSR1...........
              .           .           V
              .           .           V
1159          .           .       RLSR1
              .           .           .
              .           .           .
1165          .           .           .        122H
              .           .           .           .
              .           .           .           .
1174          .           .           .           .        122I
              .           .           .           .           .
              .           .           .           .           .
1183          .        LSR3.................................
              .           V
              .           V
1186          .        RSL3
              .           .
              .           .
1192          .           .        122J
              .           .           .
              .           .           .
1201          .        LSR4...........
              .           V
              .           V
1204          .        RSL4
              .           .
              .           .
1210          .           .        122K
              .           .           .
              .           .           .
1219          .        LSR5...........
              .           .
              .           .
122      CER11...........
             V
             V
1226     RCER11
             .
             .
1232         .        120U
             .           .
             .           .
1241     *CER12..........
             .
             .
1244         .        121A
             .           V
             .           V
1253         .       R121A
             .           .
             .           .
1259         .           .        121B
             .           .           .
             .           .           .
1268         .        LTD1...........
             .           .
             .           .
1271      CER12...........
             V
             V
1275     RCER13
             .
             .
1281         .        120V
             .           .
             .           .
1290      CER13...........
             V
             V
1293     SCER13
             V
             V
01       RCER13
             .
             .
```

```
1307          .        120X
              .           .
              .           .
1316     *CER14............
              .
              .
1319          .        120W
              .           V
              .           V
              .       S120W
              .           V
              .           V
1336          .       R120W
              .           .
              .           .
1342      CER14............
```

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

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

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	120A	32.	4.07	4.	4.	4.	0.02		
+	HYDROGRAPH AT	120B	122.	4.07	11.	10.	10.	0.05		
+	HYDROGRAPH AT	160A	20.	4.00	2.	1.	1.	0.01		
+	ROUTED TO	R160A	19.	4.07	2.	1.	1.	0.01		
+	3 COMBINED AT	CER1	172.	4.07	16.	15.	15.	0.08		
+	ROUTED TO	SCER1	132.	4.20	16.	15.	15.	0.08		
+	HYDROGRAPH AT	120C	14.	4.03	1.	1.	1.	0.00		
+	2 COMBINED AT	CER2	140.	4.17	17.	16.	16.	0.08		
+	ROUTED TO	RCER2	139.	4.23	17.	16.	16.	0.08		
+	HYDROGRAPH AT	120D	170.	4.07	14.	13.	13.	0.07		
+	2 COMBINED AT	*CER3	283.	4.10	31.	28.	28.	0.15		
+	HYDROGRAPH AT	120H	10.	4.07	1.	1.	1.	0.00		
+	ROUTED TO	R120H	9.	4.07	1.	1.	1.	0.00		
+	HYDROGRAPH AT	120I	17.	4.03	1.	1.	1.	0.01		
+	2 COMBINED AT	CER3A	26.	4.03	3.	2.	2.	0.01		
+	ROUTED TO	SCER3A	19.	4.20	2.	2.	2.	0.01		
+	2 COMBINED AT	CER3	299.	4.10	33.	30.	30.	0.16		
+	ROUTED TO	SCER3	291.	4.13	33.	30.	30.	0.16		
+	ROUTED TO	RCER3	290.	4.17	33.	30.	30.	0.16		
+	HYDROGRAPH AT	120E	35.	4.07	4.	4.	4.	0.02		
+	2 COMBINED AT	*CER4	321.	4.17	37.	34.	34.	0.18		
+	HYDROGRAPH AT	126A	18.	4.03	2.	2.	2.	0.01		
+	ROUTED TO	R126A	17.	4.13	2.	2.	2.	0.01		
+	HYDROGRAPH AT	126B	44.	4.07	5.	4.	4.	0.02		
+	2 COMBINED AT	WW1	60.	4.10	7.	6.	6.	0.03		
	ROUTED TO	RWW1	59.	4.13	7.	6.	6.	0.03		

+	HYDROGRAPH AT 126C	233.	4.13	26.	24.	24.	0.14
+	ROUTED TO R126C	228.	4.20	26.	24.	24.	0.14
+	HYDROGRAPH AT 126D	69.	4.07	6.	5.	5.	0.03
+	3 COMBINED AT WW3	332.	4.17	38.	35.	35.	0.20
+	ROUTED TO RWW3	329.	4.20	38.	35.	35.	0.20
+	HYDROGRAPH AT 126E	227.	4.13	20.	18.	18.	0.09
+	HYDROGRAPH AT 126F	149.	4.10	13.	12.	12.	0.05
+	2 COMBINED AT WW4	372.	4.13	34.	30.	30.	0.15
+	ROUTED TO RWW4	358.	4.20	34.	30.	30.	0.15
+	HYDROGRAPH AT 126G	288.	4.17	31.	28.	28.	0.14
+	HYDROGRAPH AT 126H	49.	4.07	4.	4.	4.	0.02
+	4 COMBINED AT WW5	1005.	4.20	106.	96.	96.	0.50
+	ROUTED TO RWW5	986.	4.23	106.	96.	96.	0.50
+	HYDROGRAPH AT 126I	219.	4.07	19.	17.	17.	0.08
+	HYDROGRAPH AT 126J	4.	4.03	0.	0.	0.	0.00
+	ROUTED TO R126J	4.	4.07	0.	0.	0.	0.00
+	3 COMBINED AT WW6	1080.	4.23	125.	113.	113.	0.58
+	ROUTED TO RWW6	1074.	4.27	125.	113.	113.	0.58
+	HYDROGRAPH AT 126M	57.	4.07	5.	5.	5.	0.03
+	2 COMBINED AT *WW7	1098.	4.27	129.	117.	117.	0.61
+	HYDROGRAPH AT 126K	27.	4.03	3.	3.	3.	0.01
+	ROUTED TO R126K	27.	4.10	3.	3.	3.	0.01
+	HYDROGRAPH AT 126L	49.	4.07	5.	5.	5.	0.02
+	3 COMBINED AT WW7	1137.	4.23	137.	124.	124.	0.64
+	ROUTED TO SWW7	1066.	4.33	137.	124.	124.	0.64
+	HYDROGRAPH AT 127A	65.	4.10	5.	5.	5.	0.03
+	HYDROGRAPH AT 127B	102.	4.03	8.	7.	7.	0.04
+	2 COMBINED AT CAP1	163.	4.07	13.	12.	12.	0.07
	ROUTED TO RCAP1	161.	4.10	13.	12.	12.	0.07

+	HYDROGRAPH AT	127C	111.	4.10	10.	9.	9.	0.04
+	HYDROGRAPH AT	127D	59.	4.07	5.	4.	4.	0.02
+	3 COMBINED AT	CAP2	326.	4.10	28.	25.	25.	0.13
+	ROUTED TO	RCAP2	322.	4.10	28.	25.	25.	0.13
+	HYDROGRAPH AT	127E	261.	4.07	24.	22.	22.	0.10
+	HYDROGRAPH AT	127F	348.	4.17	36.	33.	33.	0.15
+	2 COMBINED AT	CAP3	576.	4.13	60.	54.	54.	0.25
+	ROUTED TO	RCAP3	573.	4.13	60.	54.	54.	0.25
+	HYDROGRAPH AT	127G	158.	4.07	14.	13.	13.	0.06
+	2 COMBINED AT	CAP4	704.	4.13	74.	67.	67.	0.31
+	ROUTED TO	SCAP4	702.	4.13	74.	67.	67.	0.31
+	ROUTED TO	R2CAP4	698.	4.17	74.	67.	67.	0.31
+	HYDROGRAPH AT	127I	21.	4.07	2.	2.	2.	0.01
+	2 COMBINED AT	*CAP5	715.	4.17	76.	69.	69.	0.32
	HYDROGRAPH AT	127H	49.	4.10	4.	4.	4.	0.02
+	3 COMBINED AT	CAP5	1076.	4.13	108.	98.	98.	0.47
+	ROUTED TO	RCAP5	1067.	4.17	108.	98.	98.	0.47
+	HYDROGRAPH AT	127J	81.	4.10	8.	7.	7.	0.03
+	2 COMBINED AT	CAP6	1141.	4.17	116.	105.	105.	0.50
+	2 COMBINED AT	WW8	1819.	4.20	245.	222.	222.	1.14
+	ROUTED TO	RWW8	1804.	4.27	245.	222.	222.	1.14
+	HYDROGRAPH AT	126N	161.	4.10	17.	15.	15.	0.08
+	2 COMBINED AT	WW9	1880.	4.27	260.	235.	235.	1.22
+	2 COMBINED AT	CER4	2069.	4.27	293.	266.	266.	1.40
+	ROUTED TO	RCER4	2063.	4.30	293.	265.	265.	1.40
+	HYDROGRAPH AT	120F	58.	4.03	5.	4.	4.	0.02
+	2 COMBINED AT	*CER5	2078.	4.30	298.	269.	269.	1.42
+	HYDROGRAPH AT	125A	167.	4.17	20.	18.	18.	0.08
	HYDROGRAPH AT	125B	260.	4.17	29.	26.	26.	0.11

+	2 COMBINED AT	CHK1	427.	4.17	48.	44.	44.	0.19
+	ROUTED TO	RCHK1	421.	4.20	48.	44.	44.	0.19
+	HYDROGRAPH AT	125C	79.	4.10	8.	7.	7.	0.03
+	ROUTED TO	R125C	65.	4.20	8.	7.	7.	0.03
+	HYDROGRAPH AT	125D	29.	4.30	4.	4.	4.	0.02
+	3 COMBINED AT	CHK2	509.	4.20	60.	54.	54.	0.24
+	ROUTED TO	R2CHK2	499.	4.27	60.	54.	54.	0.24
+	HYDROGRAPH AT	125E	124.	4.10	11.	10.	10.	0.05
+	2 COMBINED AT	CHK3	573.	4.23	70.	64.	64.	0.28
+	2 COMBINED AT	CER5	2426.	4.30	363.	328.	328.	1.71
+	ROUTED TO	RCER5	2417.	4.30	362.	328.	328.	1.71
+	HYDROGRAPH AT	120G	95.	4.10	9.	8.	8.	0.04
+	2 COMBINED AT	*CER6	2451.	4.30	370.	335.	335.	1.74
+	HYDROGRAPH AT	124A	165.	4.13	17.	16.	16.	0.07
	HYDROGRAPH AT	124B	128.	4.07	10.	9.	9.	0.04
+	2 COMBINED AT	LOG1	285.	4.10	28.	25.	25.	0.11
+	ROUTED TO	RLOG1	281.	4.13	28.	25.	25.	0.11
+	HYDROGRAPH AT	124D	15.	4.13	2.	2.	2.	0.01
+	2 COMBINED AT	*LOG2	296.	4.13	30.	27.	27.	0.12
+	HYDROGRAPH AT	124C	43.	4.07	4.	4.	4.	0.02
+	2 COMBINED AT	LOG2	336.	4.13	34.	31.	31.	0.14
+	ROUTED TO	RLOG2	324.	4.20	34.	31.	31.	0.14
+	HYDROGRAPH AT	124E	128.	4.10	11.	10.	10.	0.05
+	2 COMBINED AT	LOG3	435.	4.17	45.	41.	41.	0.19
+	2 COMBINED AT	CER6	2665.	4.30	412.	372.	372.	1.94
+	ROUTED TO	RCER6	2651.	4.33	411.	372.	372.	1.94
+	HYDROGRAPH AT	120L	92.	4.10	8.	7.	7.	0.04
+	2 COMBINED AT	*CER7	2682.	4.33	419.	379.	379.	1.97
	HYDROGRAPH AT	120J	9.	4.10	1.	1.	1.	0.01

+	ROUTED TO	R120J	9.	4.10	1.	1.	1.	0.01
+	HYDROGRAPH AT	120K	71.	4.07	7.	6.	6.	0.03
+	2 COMBINED AT	CER7A	80.	4.07	8.	8.	8.	0.04
+	ROUTED TO	SCER7A	77.	4.13	8.	8.	8.	0.04
+	ROUTED TO	RCER7A	75.	4.20	8.	8.	8.	0.04
+	HYDROGRAPH AT	120M	73.	4.10	9.	8.	8.	0.04
+	HYDROGRAPH AT	123B	48.	4.03	4.	3.	3.	0.02
+	ROUTED TO	S123B	48.	4.07	4.	3.	3.	0.02
+	ROUTED TO	R123B	47.	4.07	4.	3.	3.	0.02
+	ROUTED TO	R123B	47.	4.07	4.	3.	3.	0.02
+	4 COMBINED AT	CER7	2761.	4.33	437.	396.	396.	2.07
+	ROUTED TO	RCER7	2744.	4.40	436.	395.	395.	2.07
+	HYDROGRAPH AT	120N	116.	4.03	10.	9.	9.	0.04
+	2 COMBINED AT	*CER8	2770.	4.40	446.	403.	403.	2.12
	HYDROGRAPH AT	123A	173.	4.07	15.	13.	13.	0.08
+	ROUTED TO	S123A	167.	4.10	15.	13.	13.	0.08
+	HYDROGRAPH AT	123D	16.	4.10	2.	2.	2.	0.01
+	2 COMBINED AT	TRV1	182.	4.10	17.	15.	15.	0.09
+	ROUTED TO	STRV1	181.	4.13	17.	15.	15.	0.09
+	ROUTED TO	RTRV1	173.	4.20	17.	15.	15.	0.09
+	HYDROGRAPH AT	123C	10.	4.00	1.	1.	1.	0.00
+	ROUTED TO	S123C	10.	4.00	1.	1.	1.	0.00
+	ROUTED TO	R123C	10.	4.00	1.	1.	1.	0.00
+	ROUTED TO	R123C	8.	4.13	1.	1.	1.	0.00
+	3 COMBINED AT	CER8	2842.	4.40	461.	417.	417.	2.20
+	ROUTED TO	RCER8	2835.	4.43	459.	416.	416.	2.20
+	HYDROGRAPH AT	120O	25.	4.00	2.	2.	2.	0.01
+	ROUTED TO	S120O	25.	4.03	2.	2.	2.	0.01
	ROUTED TO	R120O	24.	4.03	2.	2.	2.	0.01

+	ROUTED TO	R120O	20.	4.17	2.	2.	2.	0.01
+	HYDROGRAPH AT	120Q	87.	4.07	8.	8.	8.	0.04
+	3 COMBINED AT	*CER9	2862.	4.43	468.	424.	424.	2.25
+	HYDROGRAPH AT	120P	94.	4.00	6.	5.	5.	0.03
+	ROUTED TO	S120P	94.	4.00	6.	5.	5.	0.03
+	ROUTED TO	R120P	92.	4.03	6.	5.	5.	0.03
+	2 COMBINED AT	CER9	2868.	4.43	473.	428.	428.	2.28
+	ROUTED TO	SCER9	2813.	4.50	473.	428.	428.	2.28
+	HYDROGRAPH AT	120R	23.	4.07	2.	2.	2.	0.01
+	HYDROGRAPH AT	120S	18.	4.03	2.	2.	2.	0.01
+	3 COMBINED AT	CER10	2823.	4.50	477.	432.	432.	2.29
+	ROUTED TO	RCER10	2823.	4.50	477.	431.	431.	2.29
+	HYDROGRAPH AT	120T	5.	4.07	0.	0.	0.	0.00
+	2 COMBINED AT	*CER11	2824.	4.50	477.	432.	432.	2.30
	HYDROGRAPH AT	122C	38.	4.03	3.	3.	3.	0.01
+	DIVERSION TO	DO122C	19.	4.03	2.	1.	1.	0.01
+	HYDROGRAPH AT	D122C	19.	4.03	1.	1.	1.	0.01
+	ROUTED TO	R122C	19.	4.07	1.	1.	1.	0.01
+	HYDROGRAPH AT	122E	83.	4.03	7.	6.	6.	0.03
+	2 COMBINED AT	LSR2B	102.	4.07	8.	8.	8.	0.05
+	ROUTED TO	RLSR2B	99.	4.10	8.	8.	8.	0.05
+	HYDROGRAPH AT	122D	78.	4.07	6.	6.	6.	0.03
+	ROUTED TO	R122D	78.	4.07	6.	6.	6.	0.03
+	HYDROGRAPH AT	122F	20.	4.07	2.	2.	2.	0.01
+	ROUTED TO	R122F	20.	4.10	2.	2.	2.	0.01
+	HYDROGRAPH AT	122G	70.	4.03	6.	6.	6.	0.02
+	4 COMBINED AT	LSR2	257.	4.07	23.	21.	21.	0.11
+	ROUTED TO	LSR2	254.	4.07	23.	21.	21.	0.11
	HYDROGRAPH AT	122A	39.	4.07	4.	4.	4.	0.02

+	HYDROGRAPH AT	D122C	19.	4.03	2.	1.	1.	0.01
+	ROUTED TO	RD122C	16.	4.17	2.	1.	1.	0.01
+	2 COMBINED AT	LSR1B	52.	4.10	6.	5.	5.	0.02
+	ROUTED TO	RLSR1B	49.	4.23	6.	5.	5.	0.02
+	HYDROGRAPH AT	122B	97.	4.03	8.	8.	8.	0.03
+	2 COMBINED AT	LSR1	126.	4.07	14.	13.	13.	0.05
+	ROUTED TO	RLSR1	126.	4.07	14.	13.	13.	0.05
+	HYDROGRAPH AT	122H	17.	4.03	1.	1.	1.	0.01
+	HYDROGRAPH AT	122I	16.	4.07	2.	1.	1.	0.01
+	4 COMBINED AT	LSR3	411.	4.07	40.	37.	37.	0.18
+	ROUTED TO	RSL3	410.	4.10	40.	37.	37.	0.18
+	HYDROGRAPH AT	122J	57.	4.07	6.	5.	5.	0.03
+	2 COMBINED AT	LSR4	464.	4.10	46.	42.	42.	0.20
+	ROUTED TO	RSL4	461.	4.10	46.	42.	42.	0.20
	HYDROGRAPH AT	122K	6.	4.07	1.	1.	1.	0.00
+	2 COMBINED AT	LSR5	466.	4.10	47.	42.	42.	0.21
+	2 COMBINED AT	CER11	2952.	4.50	518.	469.	469.	2.50
+	ROUTED TO	RCER11	2952.	4.50	518.	469.	469.	2.50
+	HYDROGRAPH AT	120U	55.	4.03	4.	4.	4.	0.02
+	2 COMBINED AT	*CER12	2958.	4.50	522.	472.	472.	2.52
+	HYDROGRAPH AT	121A	103.	4.10	10.	9.	9.	0.05
+	ROUTED TO	R121A	103.	4.10	10.	9.	9.	0.05
+	HYDROGRAPH AT	121B	38.	4.10	4.	4.	4.	0.02
+	2 COMBINED AT	LTD1	141.	4.10	15.	13.	13.	0.07
+	2 COMBINED AT	CER12	2995.	4.50	534.	484.	484.	2.59
+	ROUTED TO	RCER13	2991.	4.53	534.	483.	483.	2.59
+	HYDROGRAPH AT	120V	26.	4.03	2.	2.	2.	0.01
+	2 COMBINED AT	CER13	2994.	4.53	536.	485.	485.	2.60
	ROUTED TO	SCER13	2933.	4.57	536.	485.	485.	2.60

+	ROUTED TO	RCER13	2932.	4.60	535.	484.	484.	2.60
+	HYDROGRAPH AT	120X	51.	4.03	4.	4.	4.	0.02
+	2 COMBINED AT	*CER14	2935.	4.60	538.	487.	487.	2.62
+	HYDROGRAPH AT	120W	17.	4.00	1.	1.	1.	0.00
+	ROUTED TO	S120W	11.	4.07	1.	1.	1.	0.00
+	ROUTED TO	R120W	11.	4.10	1.	1.	1.	0.00
+	2 COMBINED AT	CER14	2936.	4.60	539.	488.	488.	2.62

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

J.3

CYPRUS POINT WASH

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*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*              MAY   1991               *
*            VERSION 4.0.1E             *
*     Lahey F77L-EM/32 version 5.01     *
*       Dodson & Associates, Inc.       *
*  RUN DATE  04/05/95  TIME  14:07:50   *
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*                                       *
*    U.S. ARMY CORPS OF ENGINEERS       *
*    HYDROLOGIC ENGINEERING CENTER      *
*          609 SECOND STREET            *
*       DAVIS, CALIFORNIA 95616         *
*           (916) 551-1748              *
*                                       *
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X     X  XXXXXXX   XXXXX          X
X     X  X        X     X        XX
X     X  X        X              X
XXXXXXX  XXXX     X        XXXXX  X
X     X  X        X              X
X     X  X        X     X        X
X     X  XXXXXXX   XXXXX         XXX
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THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

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

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

  1           ID   CYPRUS POINT WASH - EXISTING CONDITIOS, AGK ENGINEERS, 04-05-95
  2           ID   First routing 5-6-93
  3           ID   Time steps at 2 minutes
  4           ID   6-Hour 100-year storm
  5           ID   File:  130-6CE.DAT
  6           ID
  7           IT      2                    180
  8           IO      5
              *DIAGRAM
  9           IN     15
 10           JD   3.20    0.01
 11           PC   .000    .008    .016    .025    .033    .041    .050    .058    .066    .074
 12           PC   .087    .099    .118    .138    .216    .377    .834    .911    .931    .950
 13           PC   .962    .972    .983    .991   1.000
 14           JD   3.18    0.50
 15           JD   3.14    2.80
 16           PC   .000    .009    .016    .025    .034    .042    .051    .059    .067    .076
 17           PC   .087    .100    .120    .163    .252    .451    .694    .837    .900    .938
 18           PC   .950    .963    .975    .988   1.000
 19           JD   2.95    16.0
 20           PC   .000    .015    .020    .030    .048    .063    .076    .090    .105    .119
 21           PC   .135    .152    .175    .222    .304    .472    .670    .796    .868    .912
 22           PC   .946    .960    .973    .987   1.000

 23           KK   130A
 24           KM   SUB-BASIN 130A
 25           KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 26           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 27           BA   .008
 28           LG   .062    .250   5.700    .170  19.550
 29           UC   .183    .441
 30           UA     0       5      16      30      65      77      84      90      94      97
 31           UA   100

 32           KK   130B
 33           KM   SUB-BASIN 130B
 34           KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 35           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 36           BA   .031
 37           LG   .150    .250   5.700    .207  10.360
 38           UC   .175    .136
 39           UA     0       5      16      30      65      77      84      90      94      97
 40           UA   100

 41           KK   130C
 42           KM   SUB-BASIN 130C
 43           KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 44           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 45           BA   .005
 46           LG   .050    .250   5.700    .170  18.500
 47           UC   .142    .331
 48           UA     0       5      16      30      65      77      84      90      94      97
 49           UA   100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  50          KK   R130C
  51          KM   ROUTE 130C THROUGH 130D
  52          RS       3    FLOW       0
  53          RC    .025    .013    .025    1767    .054
  54          RX    9975    9980    9985    9986   10014   10015   10020   10025
  55          RY  1640.5  1640.5  1640.5    1640    1640  1640.5  1640.5  1640.5

  56          KK    130D
  57          KM   SUB-BASIN 130D
  58          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
  59          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
  60          BA    .004
  61          LG    .100    .250   5.700    .170  31.880
  62          UC    .158    .470
  63          UA       0       5      16      30      65      77      84      90      94      97
  64          UA     100

  65          KK     CP1
  66          KM   CYPRUS POINT WASH CONC. POINT 1 - 130A, 130B, R130C, 130D
  67          HC       4

  68          KK    RCP1
  69          KM   ROUTE CP1 THROUGH SUB-BASIN 130F TO CON. POINT CP2
  70          RS       4    FLOW       0
  71          RC     .04     .04     .04    1902    .034
  72          RX    9840    9870    9955    9996   10004   10060   10105   10190
  73          RY    1596    1594    1576    1575    1575    1578    1582    1600

  74          KK    130F
  75          KM   SUB-BASIN 130F
  76          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
  77          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
  78          BA    .039
  79          LG    .130    .250   5.700    .189  14.400
  80          UC    .242    .247
  81          UA       0       5      16      30      65      77      84      90      94      97
  82          UA     100

  83          KK    *CP2
  84          KM   CYPRUS POINT WASH CONCENTRATION POIT *2 - RCP1, 130F
  85          HC       2

  86          KK    130E
  87          KM   SUB-BASIN 130E
  88          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
  89          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
  90          BA    .004
  91          LG    .050    .250   5.700    .170  27.000
  92          UC    .150    .389
  93          UA       0       5      16      30      65      77      84      90      94      97
  94          UA     100
```

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

  95          KK     CP2
  96          KM   CYPRUS POINT WASH CONC. POINT 2 - (RCP1, 130F), 130E
  97          HC       2

  98          KK    RCP2
  99          KM   ROUTE CP2 THROUGH SUB-BASIN 131A TO CON. POINT CP3
 100          RS       1    FLOW       0
 101          RC     .04     .04     .04     553    .026
 102          RX    9820    9840    9910    9965   10050   10120   10160   10190
 103          RY    1546    1544    1534  1530.5  1530.5    1534    1538    1542

 104          KK    131A
 105          KM   SUB-BASIN 131A
 106          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 107          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 108          BA    .049
 109          LG    .121    .250   5.700    .189  17.600
 110          UC    .237    .229
 111          UA       0       5      16      30      65      77      84      90      94      97
 112          UA     100

 113          KK     CP3
 114          KM   CYPRUS POINT WASH CONC. POINT 3 - RCP2, 131A
 115          HC       2

 116          KK    SCP3
 117          KM   ROUTE CP3 THROUGH CULVERT UNDER SAGUARO BLVD.
 118          RS       1    STOR       0
 119          SQ       0      14      50      60     202    1075
 120          SE    1522    1523    1524  1524.5    1525    1526
 121          SV       0    .002    .009    .017
 122          SE    1522    1523    1524    1525

 123          KK    RCP3
 124          KM   ROUTE CP3 THROUGH SUB-BASIN 130G TO CON. POINT CP4
 125          RS       2    FLOW       0
 126          RC    0.04    0.04    0.04     768   0.029
 127          RX    9915    9950    9980    9998   10002   10025   10030   10090
 128          RY    1519    1518    1516   15122    1512    1520    1522    1530

 129          KK    130G
 130          KM   SUB-BASIN 130G
 131          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 132          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 133          BA    .011
 134          LG    .150    .250   5.300    .222   1.300
 135          UC    .129    .121
 136          UA       0       3       5       8      12      20      43      75      90      96
 137          UA     100
```

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

 138          KK   CP4
 139          KM   CYPRUS POINT WASH CONC. POINT 4 - RCP3, 130G
 140          HC       2
 141          ZZ
```

SCHEMATIC DIAGRAM OF STREAM NETWORK

```
LINE      (V) ROUTING          (--->) DIVERSION OR PUMP FLOW

 NO.      (.) CONNECTOR        (<---) RETURN OF DIVERTED OR PUMPED FLOW

 23        130A
              .
              .
 32           .        130B
              .           .
              .           .
 41           .           .       130C
              .           .          V
              .           .          V
 50           .           .      R130C
              .           .          .
              .           .          .
 56           .           .          .       130D
              .           .          .          .
              .           .          .          .
 65         CP1.................................
              V
              V
 68        RCP1
              .
              .
 74           .        130F
              .           .
              .           .
 83        *CP2............
              .
              .
 86           .        130E
              .           .
              .           .
 95         CP2............
              V
              V
 98        RCP2
              .
              .
104           .        131A
              .           .
              .           .
113         CP3............
              V
              V
116        SCP3
              V
              V
123        RCP3
              .
              .
129           .        130G
              .           .
              .           .
138        CP4 ............
```

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

```
*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*             MAY   1991                *
*           VERSION 4.0.1E              *
*     Lahey F77L-EM/32 version 5.01     *
*       Dodson & Associates, Inc.       *
*  RUN DATE  04/05/95  TIME  14:07:50   *
*****************************************
```

```
*****************************************
*                                       *
*    U.S. ARMY CORPS OF ENGINEERS       *
*    HYDROLOGIC ENGINEERING CENTER      *
*          609 SECOND STREET            *
*       DAVIS, CALIFORNIA 95616         *
*           (916) 551-1748              *
*                                       *
*****************************************
```

```
                    CYPRUS POINT WASH - EXISTING CONDITIOS, AGK ENGINEERS, 04-05-95
                    First routing 5-6-93
                    Time steps at 2 minutes
                    6-Hour 100-year storm
                    File:  130-6CE.DAT

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

   IT         HYDROGRAPH TIME DATA
                     NMIN          2  MINUTES IN COMPUTATION INTERVAL
                    IDATE      1   0  STARTING DATE
                    ITIME       0000  STARTING TIME
                       NQ        180  NUMBER OF HYDROGRAPH ORDINATES
                   NDDATE      1   0  ENDING DATE
                   NDTIME       0558  ENDING TIME
                    ICENT         19  CENTURY MARK

             COMPUTATION INTERVAL    0.03 HOURS
                  TOTAL TIME BASE    5.97 HOURS

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

 10 JD        INDEX STORM NO. 1
                   STRM        3.20  PRECIPITATION DEPTH
                   TRDA        0.01  TRANSPOSITION DRAINAGE AREA

 11 PI          PRECIPITATION PATTERN
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.01      0.01      0.01
                  0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                  0.02      0.02      0.04      0.06      0.06      0.06      0.06      0.06      0.06      0.06
                  0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

   JD         INDEX STORM NO. 2
```

```
                STRM        3.18  PRECIPITATION DEPTH
                TRDA        0.50  TRANSPOSITION DRAINAGE AREA

 0 PI         PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                0.02      0.02      0.04      0.06      0.06      0.06      0.06      0.06      0.06      0.06
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

15 JD         INDEX STORM NO. 3
                STRM        3.14  PRECIPITATION DEPTH
                TRDA        2.80  TRANSPOSITION DRAINAGE AREA

16 PI         PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.03      0.03      0.03      0.03      0.03
                0.03      0.03      0.03      0.03      0.03      0.03      0.03      0.03      0.03      0.03
                0.02      0.02      0.02      0.02      0.02      0.02      0.02      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

19 JD         INDEX STORM NO. 4
                STRM        2.95  PRECIPITATION DEPTH
                TRDA       16.00  TRANSPOSITION DRAINAGE AREA

20 PI         PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                0.02      0.02      0.02      0.03      0.03      0.03      0.03      0.03      0.03      0.03
                0.02      0.02      0.02      0.02      0.02      0.02      0.02      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.01      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
```

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

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	130A	14.	4.07	2.	2.	2.	0.01		
+	HYDROGRAPH AT	130B	87.	4.03	6.	6.	6.	0.03		
+	HYDROGRAPH AT	130C	10.	4.07	1.	1.	1.	0.00		
+	ROUTED TO	R130C	10.	4.13	1.	1.	1.	0.00		
+	HYDROGRAPH AT	130D	7.	4.07	1.	1.	1.	0.00		
+	4 COMBINED AT	CP1	115.	4.03	10.	10.	10.	0.05		
+	ROUTED TO	RCP1	110.	4.13	10.	10.	10.	0.05		
+	HYDROGRAPH AT	130F	86.	4.07	9.	9.	9.	0.04		
+	2 COMBINED AT	*CP2	193.	4.10	19.	19.	19.	0.09		
+	HYDROGRAPH AT	130E	8.	4.07	1.	1.	1.	0.00		
+	2 COMBINED AT	CP2	200.	4.10	20.	20.	20.	0.09		
+	ROUTED TO	RCP2	197.	4.13	20.	20.	20.	0.09		
+	HYDROGRAPH AT	131A	113.	4.07	11.	11.	11.	0.05		
+	2 COMBINED AT	CP3	303.	4.10	31.	31.	31.	0.14		
+	ROUTED TO	SCP3	303.	4.10	31.	31.	31.	0.14		
+	ROUTED TO	RCP3	303.	4.10	31.	31.	31.	0.14		
+	HYDROGRAPH AT	130G	32.	4.07	2.	2.	2.	0.01		
+	2 COMBINED AT	CP4	331.	4.10	33.	33.	33.	0.15		

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

J.4

JACKLIN WASH

```
*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*              MAY   1991               *
*            VERSION 4.0.1E             *
*     Lahey F77L-EM/32 version 5.01     *
*       Dodson & Associates, Inc.       *
*  RUN DATE  04/05/95  TIME  14:39:38   *
*****************************************
```

```
*****************************************
*                                       *
*    U.S. ARMY CORPS OF ENGINEERS       *
*    HYDROLOGIC ENGINEERING CENTER      *
*          609 SECOND STREET            *
*       DAVIS, CALIFORNIA 95616         *
*           (916) 551-1748              *
*                                       *
*****************************************
```

```
X     X  XXXXXXX   XXXXX          X
X     X  X        X     X        XX
X     X  X        X              X
XXXXXXX  XXXX     X        XXXXX  X
X     X  X        X              X
X     X  X        X     X        X
X     X  XXXXXXX   XXXXX         XXX
```

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

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

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

  1           ID   JACKLIN WASH - EXISTING CONDITIONS, AGK ENGINEERS, 04-05-95
  2           ID   100-Year 6-Hour Storm
  3           ID   time steps at 2 minutes
  4           ID   File:150-6CE.DAT
  5           ID
  6           IT      2                    200
  7           IO      5
              *DIAGRAM
  8           IN     15
  9           JD   3.20    0.01
 10           PC    .000    .008    .016    .025    .033    .041    .050    .058    .066    .074
 11           PC    .087    .099    .118    .138    .216    .377    .834    .911    .931    .950
 12           PC    .962    .972    .983    .991   1.000
 13           JD   3.18    0.50
 14           JD   3.14    2.80
 15           PC    .000    .009    .016    .025    .034    .042    .051    .059    .067    .076
 16           PC    .087    .100    .120    .163    .252    .451    .694    .837    .900    .938
 17           PC    .950    .963    .975    .988   1.000
 18           JD   2.95    16.0
 19           PC    .000    .015    .020    .030    .048    .063    .076    .090    .105    .119
 20           PC    .135    .152    .175    .222    .304    .472    .670    .796    .868    .912
 21           PC    .946    .960    .973    .987   1.000

 22           KK    151A
 23           KM   SUB-BASIN 151A
 24           KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 25           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 26           BA    .003
 27           LG    .050    .250   5.700    .170  30.020
 28           UC    .096    .156
 29           UA       0       5      16      30      65      77      84      90      94      97
 30           UA     100

 31           KK   D151A
 32           KM   DIVERSION AT INTERSECTION OF KINGSTREE AND KEOTA
 33           DT  DO151A
 34           DI       0      10     100    1000
 35           DQ       0     2.5      25     250

 36           KK   R151A
 37           KM   ROUTE 151A THROUGH SUB-BASIN 151B TO POINT OF CON. KGT1
 38           RS       2    FLOW       0
 39           RC    0.02    0.02    0.02     775    .021
 40           RX    9975    9980    9985    9986   10014   10015   10020   10025
 41           RY  1774.5  1774.5  1774.5    1774    1774  1774.5  1774.5  1774.5

 42           KK    151B
 43           KM   SUB-BASIN 151B
 44           KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 45           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 46           BA    .005
 47           LG    .050    .250   5.700    .170  25.000
 48           UC    .125    .272
 49           UA       0       5      16      30      65      77      84      90      94      97
 50           UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  51          KK   D151B
  52          KM   DIVERTION AT INTERSECTION OF KINGSTREE AND FRISCO
  53          DT  DO151B
  54          DI       1      10     100    1000
  55          DQ     0.5       5      50     500

  56          KK    KGT1
  57          KM   KINGSTREE DRAIN CONCENTRATION POINT 1 - COMBINE R151A WITH D151B
  58          HC       2

  59          KK   RKGT1
  60          KM   ROUTE KGT1 THROUGH SUB-BASIN 151C TO POINT OF CON. KGT2
  61          RS       4    FLOW       0
  62          RC    0.02    0.02    0.02    2023   0.026
  63          RX  9956.5  9961.5  9966.5  9966.5 10033.5 10033.5 10038.5 10043.5
  64          RY  1740.5  1740.5  1740.5    1740    1740  1740.5  1740.5  1740.5

  65          KK    151C
  66          KM   SUB-BASIN 151C
  67          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
  68          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
  69          BA    .005
  70          LG    .050    .250   5.700    .170  25.000
  71          UC    .121    .247
  72          UA       0       5      16      30      65      77      84      90      94      97
  73          UA     100

  74          KK    KGT2
  75          KM   KINGSTREE DRAIN CONCENTRATION POINT 2 - COMBINE RKGT1 WITH 151C
  76          HC       2

  77          KK   RKGT2
  78          KM   ROUTE KGT2 THROUGH SUB-BASIN 151I TO POINT OF CON. KGT3
  79          RS       3    FLOW       0
  80          RC    0.02    0.02    0.02    1577    .082
  81          RX  9956.5  9961.5  9966.5  9966.5 10033.5 10033.5 10038.5 10043.5
  82          RY  1660.5  1660.5  1660.5    1660    1660  1660.5  1660.5  1660.5

  83          KK    151D
  84          KM   SUB-BASIN 151D
  85          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
  86          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
  87          BA    .039
  88          LG    .147    .250   5.700    .179  12.240
  89          UC    .188    .151
  90          UA       0       5      16      30      65      77      84      90      94      97
  91          UA     100

  92          KK    151F
  93          KM   SUB-BASIN 151F
  94          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
  95          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
  96          BA    .003
  97          LG    .050    .250   5.700    .170  25.000
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 98           UC    .142    .358
 99           UA       0       5      16      30      65      77      84      90      94      97
100           UA     100

101           KK   D151F
102           KM   DIVERSION AT INTERSECTION OF EMERALD AND FRISCO
103           DT  DO151F
104           DI       1      10     100    1000
105           DQ     0.5       5      50     500

106           KK  RD151F
107           KM   ROUTE THE D151F THROUGH SUB-BASIN 151E TO CON. POINT KGT3A
108           RS       1    FLOW       0
109           RC    0.02    0.02    0.02     400   0.065
110           RX    9975    9980    9985    9986   10014   10015   10020   10025
111           RY  1715.5  1715.5  1715.5    1715    1715  1715.5  1715.5  1715.5

112           KK   D151B
113           KM   FLOW FROM DIVERSION AT KINGSTREE AND FRISCO
114           DR  DO151B

115           KK  RD151B
116           KM   ROUTE DIVERTED FLOW THROUGH SUB-BASIN 151E TO CON. POINT KGT3A
117           RS       2    FLOW       0
118           RC    0.02    0.02    0.02     488    0.98
119           RX    9975    9980    9985    9986   10014   10015   10020   10025
120           RY  1730.5  1730.5  1730.5    1730    1730  1730.5  1730.5  1730.5

121           KK   KGT3A
122           KM   KENGSTREE CONCENTRATION POINT 3A - COMBINE RD151B,RD151F,151D
123           HC       3

124           KK   R151D
125           KM   ROUTE KGT3A THROUGH SUB-BASIN 151E TO POINT OF CON. KGT3
126           RS       7    FLOW       0
127           RC    0.04    0.04    0.04    3243    .033
128           RX    9830    9895    9970    9998   10002   10045   10055   10095
129           RY    1650    1636    1626    1620    1620    1638    1640    1650

130           KK   151E
131           KM   SUB-BASIN 151E
132           KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
133           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
134           BA    .066
135           LG    .150    .250   5.700    .179  12.500
136           UC    .217    .245
137           UA       0       5      16      30      65      77      84      90      94      97
138           UA     100

139           KK   *KGT3
140           KM   KINGSTREE DRAIN CONCENTRATION POINT *3 - RKGT3A, 151E, RKGT2
141           HC       3
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 142          KK    151I
 143          KM   SUB-BASIN 151I
 144          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 145          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 146          BA    .006
 147          LG    .050    .250   5.700    .170  22.500
 148          UC    .142    .298
 149          UA       0       5      16      30      65      77      84      90      94      97
 150          UA     100

 151          KK    KGT3
 152          KM   KINGSTREE DRAIN CONCENTRATION POINT 3 - COMBINE (RKGT2, RKGT3A, 151E), 151I
 153          HC       2

 154          KK   RKGT3
 155          KM   ROUTE KGT3 THROUGH SUB-BASIN 151I TO POINT OF CON. KGT4
 156          RS       1    FLOW       0
 157          RC    0.02    0.02    0.02     120   0.042
 158          RX  9956.5  9961.5  9966.5  9966.5 10033.5 10033.5 10038.5 10043.5
 159          RY  1583.5  1583.5  1583.5    1583    1583  1583.5  1583.5  1853.5

 160          KK    151J
 161          KM   SUB-BASIN 151J
 162          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 163          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 164          BA    .003
 165          LG    .064    .250   5.700    .170  24.850
 166          UC    .083    .102
 167          UA       0       5      16      30      65      77      84      90      94      97
 168          UA     100

 169          KK   *KGT4
 170          KM   KINGSTREE CONCENTRATION POINT *4 - RKGR3, 151J
 171          HC       2

 172          KK    151H
 173          KM   SUB-BASIN 151H
 174          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 175          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 176          BA    .005
 177          LG    .050    .250   5.700    .170  25.000
 178          UC    .179    .518
 179          UA       0       5      16      30      65      77      84      90      94      97
 180          UA     100

 181          KK   R151H
 182          KM   ROUTE 151H THROUGH SUB-BASIN 151J TO POINT OF CON. KGT4
 183          RS       1    FLOW       0
 184          RC    0.02    0.02    0.02     424   0.092
 185          RX  9956.5  9961.5  9966.5  9966.5 10033.5 10033.5 10038.5 10043.5
 186          RY  1660.5  1660.5  1660.5    1660    1660  1660.5  1660.5  1660.5
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 187          KK    KGT4
 188          KM   KINGSTREE DRAIN CONCENTRATION POINT 4 - COMBINE (RKGT3, 151J), 151H
 189          HC       2

 190          KK   RKGT4
 191          KM   ROUTE KGT4 THROUGH SUB-BASIN 151K TO POINT OF CON. KGT5
 192          RS       2    FLOW       0
 193          RC    0.02    0.02    0.02    1007    0.03
 194          RX    9765    9815    9930    9960   10010   10070   10185   10220
 195          RY    1546    1544    1540  1539.5  1539.5    1542    1546    1548

 196          KK    151K
 197          KM   SUB-BASIN 151K
 198          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 199          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 200          BA    .033
 201          LG    .100    .250   5.700    .171  23.550
 202          UC    .146    .101
 203          UA       0       5      16      30      65      77      84      90      94      97
 204          UA     100

 205          KK    KGT5
 206          KM   KINGSTREE DRAIN CONCENTRATION POINT 5 - COMBINE  RKGT4 AND 151K
 207          HC       2

 208          KK   RKGT5
 209          KM   ROUTE KGT5 THROUGH SUB-BASIN 151L TO POINT OF CON. JKL8
 210          RS       4    FLOW       0
 211          RC    0.02    0.02    0.02    1733   0.019
 212          RX  9956.5  9961.5  9966.5  9966.5 10033.5 10033.5 10038.5 10043.5
 213          RY  1540.7  1540.6  1540.5    1540    1540  1540.5  1540.6  1540.7

 214          KK    151L
 215          KM   SUB-BASIN 151L
 216          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 217          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 218          BA    .052
 219          LG    .063    .250   5.700    .170  35.790
 220          UC    .196    .166
 221          UA       0       5      16      30      65      77      84      90      94      97
 222          UA     100

 223          KK    KGT6
 224          KM   KINGSTREE DRAIN CONCENTRATION POINT 6 - RKGT5, 151L
 225          HC       2

 226          KK    152A
 227          KM   SUB-BASIN 152A
 228          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 229          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 230          BA    .040
 231          LG    .150    .250   5.700    .179   8.750
 232          UC    .204    .175
 233          UA       0       5      16      30      65      77      84      90      94      97
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 234          UA     100

 235          KK   R152A
 236          KM   ROUTE 152A THROUGH SUB-BASIN 152B TO POINT OF CON. MNG1
 237          RS       2    FLOW       0
 238          RC    0.04    0.04    0.04    1056   0.034
 239          RX    9920    9955    9972    9996   10004   10010   10020   10100
 240          RY    1630    1620    1614    1606    1606    1608    1610    1630

 241          KK    152B
 242          KM   SUB-BASIN 152B
 243          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 244          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 245          BA    .016
 246          LG    .150    .250   5.700    .179   5.000
 247          UC    .179    .197
 248          UA       0       5      16      30      65      77      84      90      94      97
 249          UA     100

 250          KK   *MNG1
 251          KM   MANGRUM DRAIN CONCENTRATION POINT *1 - 152A, 152B
 252          HC       2

 253          KK    152C
 254          KM   SUB-BASIN 152C
 255          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 256          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 257          BA    .013
 258          LG    .150    .250   5.700    .179   5.000
 259          UC    .167    .186
 260          UA       0       5      16      30      65      77      84      90      94      97
 261          UA     100

 262          KK    MNG1
 263          KM   MANGRUM DRAIN CONCENTRATION POINT 1 - COMBINE (R152A,152B), 152C
 264          HC       2

 265          KK   RMNG1
 266          KM   ROUTE RMNG1 THROUGH SUB-BASIN 152D TO POINT OF CON. MNG1
 267          RS       3    FLOW       0
 268          RC    0.04    0.04    0.04    1214   0.021
 269          RX    9870    9920    9945    9980   10020   10045   10060   10100
 270          RY    1610    1600    1594  1589.5  1589.5    1596    1600    1610

 271          KK    152D
 272          KM   SUB-BASIN 152D
 273          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 274          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 275          BA    .018
 276          LG    .150    .250   5.700    .179  12.140
 277          UC    .192    .223
 278          UA       0       5      16      30      65      77      84      90      94      97
 279          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 280          KK   *MNG2
 281          KM   MANGRUM DRAIN CONCENTRATION POINT *2 - RMNG1, 152D
 282          HC       2

 283          KK    152E
 284          KM   SUB-BASIN 152E
 285          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 286          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 287          BA    .017
 288          LG    .198    .250   5.700    .179   4.640
 289          UC    .196    .242
 290          UA       0       5      16      30      65      77      84      90      94      97
 291          UA     100

 292          KK    MNG2
 293          KM   MANGRUM DRAIN CONCENTRATION POINT 2 - COMBINE (RMNG1, 152D), 152E
 294          HC       2

 295          KK   RMNG2
 296          KM   ROUTE MNG2 THROUGH SUB-BASIN 152F TO POINT OF CON. JKL7
 297          RS       2     FLOW       0
 298          RC    0.04    0.04    0.04    1066   0.027
 299          RX    9885    9920    9950    9970   10050   10110   10150   10200
 300          RY    1560    1559    1558    1557    1557    1562    1566    1572

 301          KK    152F
 302          KM   SUB-BASIN 152F
 303          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 304          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 305          BA    .014
 306          LG    .154    .250   5.700    .179   6.090
 307          UC    .188    .231
 308          UA       0       5      16      30      65      77      84      90      94      97
 309          UA     100

 310          KK    MNG3
 311          KM   MANGRUM DRAIN CONCENTRATION POINT 3 - RMNG2, 152F
 312          HC       2

 313          KK    150A
 314          KM   SUB-BASIN 150A
 315          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 316          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 317          BA    .010
 318          LG    .096    .250   5.800    .168  27.440
 319          UC    .138    .192
 320          UA       0       5      16      30      65      77      84      90      94      97
 321          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 322          KK   S150A
 323          KM   ROUTE 150A THROUGH 3- 3'X2' GRATES AWAY FROM THE ROAD
 324          RS       1    ELEV    1746
 325          SQ       0       0      17      50      90
 326          SE    1746    1751  1751.5    1752  1752.5
 327          SA    0.03    0.06    0.35    0.59
 328          SE    1746    1748    1750  1753.5

 329          KK    150B
 330          KM   SUB-BASIN 150B
 331          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 332          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 333          BA    .003
 334          LG    .100    .250   5.700    .170  40.500
 335          UC    .117    .237
 336          UA       0       5      16      30      65      77      84      90      94      97
 337          UA     100

 338          KK   R150B
 339          KM   ROUTE 150B THROUGH SUB-BASIN 150C TO STREET CATCH BASIN
 340          RS       1    FLOW       0
 341          RC    0.04    0.04    0.04     287     0.1
 342          RX    9895    9925    9955    9995   10005   10020   10030   10080
 343          RY    1760    1756    1750    1742    1742    1749    1752    1752

 344          KK   S150B
 345          KM   ROUTE R150B THROUGH 36" CULVERT (STREET CATCH BASIN) TO JKL1
 346          RS       1    ELEV    1753
 347          SQ       0      10      27      39
 348          SE    1753  1753.2  1753.4  1753.5
 349          SA       0     0.1
 350          SE    1753  1753.5

 351          KK    JKL1
 352          KM   JACKLIN WASH CONCENTRATION POINT 1 - COMBINE S150A WITH S150B
 353          HC       2

 354          KK   RJKL1
 355          KM   ROUTE JKL1 THROUGH SUB-BASIN 150C TO POINT OF CON. JKL2
 356          RS       3    FLOW       0
 357          RC    0.04    0.04    0.04    1469   0.061
 358          RX    9900    9940    9975    9992   10008   10025   10050   10115
 359          RY    1720    1710    1700    1694    1694    1698    1704    1720

 360          KK    150C
 361          KM   SUB-BASIN 150C
 362          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 363          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 364          BA    .022
 365          LG    .150    .250   5.700    .179  15.000
 366          UC    .142    .146
 367          UA       0       5      16      30      65      77      84      90      94      97
 368          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 369          KK    150D
 370          KM   SUB-BASIN 150D
 371          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 372          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 373          BA    .055
 374          LG    .135    .250   5.700    .176  11.920
 375          UC    .283    .321
 376          UA       0       5      16      30      65      77      84      90      94      97
 377          UA     100

 378          KK    JKL2
 379          KM   JACKLIN WASH CONCENTRATION POINT 2 - COMBINE RJKL1 WITH 150D AND 150C
 380          HC       3

 381          KK   RJKL2
 382          KM   ROUTE JKL2 THROUGH SUB-BASIN 150E TO POINT OF CON. JKL3
 383          RS       1    FLOW       0
 384          RC    0.04    0.04    0.04     573    .003
 385          RX    9840    9920    9980    9992   10008   10045   10070   10165
 386          RY    1690    1668    1666    1664    1664    1668    1670    1690

 387          KK    150E
 388          KM   SUB-BASIN 150E
 389          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 390          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 391          BA    .020
 392          LG    .150    .250   5.700    .179  13.750
 393          UC    .108    .077
 394          UA       0       5      16      30      65      77      84      90      94      97
 395          UA     100

 396          KK    JKL3
 397          KM   JACKLIN WASH CONCENTRATION POINT 3 - COMBINE 150E WITH RJKL2
 398          HC       2

 399          KK   SJKL3
 400          KM   ROUTE JKL3 THROUGH CULVERT AT KEOTA DRIVE
 401          RS       1    ELEV    1664
 402          SQ       0      16      48      92     115
 403          SE    1664 1665.75  1667.5    1671    1674
 404          SA    0.17    1.42    4.15
 405          SE    1664    1668    1674

 406          KK    150F
 407          KM   SUB-BASIN 150F
 408          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 409          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 410          BA    .004
 411          LG    .150    .250   5.700    .179  15.000
 412          UC    .108    .169
 413          UA       0       5      16      30      65      77      84      90      94      97
 414          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 415          KK    150G
 416          KM   SUB-BASIN 150G
 417          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 418          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 419          BA    .005
 420          LG    .050    .250   5.700    .170  15.000
 421          UC    .154    .392
 422          UA       0       5      16      30      65      77      84      90      94      97
 423          UA     100

 424          KK   D151A
 425          KM   FLOW FROM DIVERSION AT KINGSTRE AND KEOTA
 426          DR  DO151A

 427          KK  RD151A
 428          KM   ROUTE DIVERTED FLOW THROUGH 150G TO CON. POINT JKL4
 429          RS       4    FLOW       0
 430          RC    0.02    0.02    0.02    1713   0.062
 431          RX    9975    9980    9985    9986   10014   10015   10020   10025
 432          RY  1750.5  1750.5  1750.5    1750    1750  1750.5  1750.5  1750.5

 433          KK    JKL4
 434          KM   JACKLIN WASH CONCENTRATION POINT 4 - COMBINE SJKL3, 150F, 150G, RD151A
 435          HC       4

 436          KK   RJKL4
 437          KM   ROUTE JKL4 THROUGH SUB-BASIN 150H TO POINT OF CON. JKL5
 438          RS       1    FLOW       0
 439          RC    0.04    0.04    0.04     119   0.067
 440          RX    9780    9835    9920    9990   10003   10010   10035   10045
 441          RY    1560    1550    1546    1536    1536    1540    1554    1560

 442          KK    150H
 443          KM   SUB-BASIN 150H
 444          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 445          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 446          BA    .032
 447          LG    .150    .250   5.700    .179  12.500
 448          UC    .146    .137
 449          UA       0       5      16      30      65      77      84      90      94      97
 450          UA     100

 451          KK    JKL5
 452          KM   JACKLIN WASH CONCENTRATION POINT 5 - COMBINE RJKL4 WITH 150H
 453          HC       2

 454          KK   RJKL5
 455          KM   ROUTE JKL5 THROUGH SUB-BASIN 150I TO POINT OF CON. JKL6
 456          RS       8    FLOW       0
 457          RC    0.04    0.04    0.04    4453    0.02
 458          RX    9795    9920    9955    9990   10010   10045   10090   10120
 459          RY    1626    1610    1604    1602    1602    1610    1622    1630
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 460          KK    150I
 461          KM   SUB-BASIN 150I
 462          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 463          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .998
 464          BA    .117
 465          LG    .162    .250   5.700    .178   8.790
 466          UC    .350    .351
 467          UA       0       5      16      30      65      77      84      90      94      97
 468          UA     100

 469          KK    JKL6
 470          KM   JACKLIN WASH CONCENTRATION POINT 6 - COMBINE RJKL5 WITH 150I
 471          HC       2

 472          KK   RJKL6
 473          KM   ROUTE JKL6 THROUGHT SUB-BASIN 150K TO POINT OF CON. JKL6
 474          RS       1    FLOW       0
 475          RC    0.04    0.04    0.04     345    0.02
 476          RX    9765    9815    9930    9960   10010   10070   10185   10220
 477          RY    1546    1544    1540  1539.5  1539.5    1542    1546    1548

 478          KK    150J
 479          KM   SUB-BASIN 150J
 480          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 481          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 482          BA    .010
 483          LG    .050    .250   5.700    .170  27.770
 484          UC    .225    .742
 485          UA       0       5      16      30      65      77      84      90      94      97
 486          UA     100

 487          KK   R150J
 488          KM   ROUTE 150J THROUGH SUB-BASIN 150K TO POINT OF CON. JKL7
 489          RS       1    FLOW       0
 490          RC    0.04    0.04    0.04     437   0.032
 491          RX    9765    9815    9930    9960   10010   10070   10185   10220
 492          RY    1546    1544    1540  1539.5  1539.5    1542    1546    1548

 493          KK    150K
 494          KM   SUB-BASIN 150K
 495          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 496          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 497          BA    .009
 498          LG    .100    .250   5.700    .170  27.000
 499          UC    .121    .149
 500          UA       0       5      16      30      65      77      84      90      94      97
 501          UA     100

 502          KK   *JKL7
 503          KM   JAKLIN WASH CONCENTRATION POINT *7 COMBINES RJKL6, 150J, 150K
 504          HC       3
```

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

 505          KK    JKL7
 506          KM   JACKLIN WASH CONCENTRATION POINT 7 - COMBINE (RJKL6, 150J, 150K), MNG3
 507          HC       2

 508          KK   RJKL7
 509          KM   ROUTE JKL7 THROUGH SUB-BASIN 150L TO POINT OF CON. JKL8
 510          RS       2    FLOW       0
 511          RC    0.04    0.04    0.04    1073    .020
 512          RX    9875    9895    9925    9965   10035   10070   10090   10112
 513          RY    1536    1536    1528    1525    1525    1528    1532    1537

 514          KK    150L
 515          KM   SUB-BASIN 150L
 516          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 517          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 518          BA    .010
 519          LG    .200    .250   5.700    .179   6.750
 520          UC    .171    .252
 521          UA       0       5      16      30      65      77      84      90      94      97
 522          UA     100

 523          KK   *JKL8
 524          KM   JACKLING WASH CONCENTRATION POINT *8 - COMBINE  RJKL7, 150L
 525          HC       2

 526          KK    JKL8
 527          KM   JACKLING WASH CONCENTRATION POINT 8 - COMBINE  (RJKL7, 150L), RKGT5
 528          HC       2

 529          KK   SJKL8
 530          KM   ROUTE JKL8 THROUGH 7x14 BOX CULVERT AT SAGUARO BLV.
 531          KO       3
 532          RS       1    ELEV  1514.3
 533          SQ       0     273     504     756    1190
 534          SE  1514.3  1517.8  1519.6  1521.3  1524.8
 535          SA       0    0.04    1.19
 536          SE  1514.3    1518    1525

 537          KK   RJKL8
 538          KM   ROUTE SJKL8 THROUGH SUB-BASIN 150M TO POINT OF CON. JKL9
 539          RS       2    FLOW       0
 540          RC     .04    0.04    0.04     603    0.02
 541          RX    9760    9820    9890    9975   10000   10060   10120   10220
 542          RY    1515    1514    1512    1508    1508    1512    1516    1520

 543          KK    150M
 544          KM   SUB-BASIN 150M
 545          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 546          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 547          BA    .023
 548          LG    .200    .250   5.100    .232   9.000
 549          UC    .150    .119
 550          UA       0       5      16      30      65      77      84      90      94      97
 551          UA     100
```

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

 552          KK    JKL9
 553          KM   JACKLING WASH CONCENTRATION POINT 9 - COMBINE  RJKL8, 150M
 554          HC       2

 555          KK   SJKL9
 556          KM   ROUTE JKL9 THROUGH CULVERT AT INDIAN WELLS DRIVE.
 557          RS       1    ELEV 1501.73
 558          SQ       0      74     224     440     640     800    1350
 559          SE  1501.7  1504.2  1506.7  1511.7  1512.2  1512.7  1513.2
 560          SA       0    0.03    1.03
 561          SE  501.73    1504    1511

 562          KK    150N
 563          KM   SUB-BASIN 150N
 564          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 565          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 566          BA    .001
 567          LG    .050    .250   5.600    .180  36.000
 568          UC    .100    .233
 569          UA       0       5      16      30      65      77      84      90      94      97
 570          UA     100

 571          KK    150O
 572          KM   SUB-BASIN 150O
 573          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 574          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 575          BA    .004
 576          LG    .050    .250   4.350    .330  29.250
 577          UC    .179    .380
 578          UA       0       5      16      30      65      77      84      90      94      97
 579          UA     100

 580          KK   JKL10
 581          KM   JACKLING WASH CONCENTRATION POINT 10 - COMBINE  SJKL9, 150N, 150O
 582          HC       3

 583          KK  RJKL10
 584          KM   ROUTE RJKL10 THROUGH SUB-BASIN 150P TO POINT OF CON. JKL11
 585          RS       1    FLOW       0
 586          RC    0.04    0.04    0.04     231    .022
 587          RX    9945    9950    9970    9995   10010   10025   10045   10170
 588          RY    1516    1514    1508  1499.5  1499.5    1504    1510    1511

 589          KK    150P
 590          KM   SUB-BASIN 150P
 591          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 592          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 593          BA    .001
 594          LG    .250    .250   4.800    .443   4.500
 595          UC    .112    .200
 596          UA       0       3       5       8      12      20      43      75      90      96
 597          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 598          KK   JKL11
 599          KM   JACKLING WASH CONCENTRATION POINT 11 - COMBINE  RJKL10, 150DP
 600          HC       2
 601          ZZ
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            SCHEMATIC DIAGRAM OF STREAM NETWORK
LINE     (V) ROUTING          (--->) DIVERSION OR PUMP FLOW

 NO.     (.) CONNECTOR        (<---) RETURN OF DIVERTED OR PUMPED FLOW

 22        151A
              .
              .
 33           .-------> DO151A
 31      D151A
              V
              V
 36      R151A
              .
              .
 42           .        151B
              .           .
              .           .
 53           .           .-------> DO151B
 51           .       D151B
              .           .
              .           .
 56       KGT1............
              V
              V
 59      RKGT1
              .
              .
 65           .        151C
              .           .
              .           .
 74       KGT2............
              V
              V
         RKGT2
              .
              .
 83           .        151D
              .           .
              .           .
 92           .           .        151F
              .           .           .
              .           .           .
103           .           .           .-------> DO151F
101           .           .       D151F
              .           .           V
              .           .           V
106           .           .      RD151F
              .           .           .
              .           .           .
114           .           .           .           .<------- DO151B
112           .           .           .       D151B
              .           .           .           V
              .           .           .           V
115           .           .           .      RD151B
              .           .           .           .
              .           .           .           .
121           .       KGT3A.......................
              .           V
              .           V
124           .       R151D
              .           .
              .           .
130           .           .       151E
              .           .           .
              .           .           .
139      *KGT3.......................
              .
              .
              .        151I
```

```
        .          .
        .          .
1     KGT3...........
        V
        V
154   RKGT3
        .
        .
160     .        151J
        .          .
        .          .
169   *KGT4...........
        .
        .
172     .        151H
        .          V
        .          V
181     .       R151H
        .          .
        .          .
187   KGT4...........
        V
        V
190   RKGT4
        .
        .
196     .        151K
        .          .
        .          .
205   KGT5...........
        V
        V
208   RKGT5
        .
        .
214     .        151L
        .          .
        .          .
223   KGT6...........
        .
        .
226     .        152A
        .          V
        .          V
235     .       R152A
        .          .
        .          .
241     .          .        152B
        .          .          .
        .          .          .
250     .       *MNG1...........
        .          .
        .          .
253     .          .        152C
        .          .          .
        .          .          .
262     .        MNG1...........
        .          V
        .          V
265     .       RMNG1
        .          .
        .          .
271     .          .        152D
        .          .          .
        .          .          .
280     .       *MNG2...........
        .          .
        .          .
283     .          .        152E
        .          .          .
        .          .          .
2       .        MNG2...........
```

```
                V
                V
            RMNG2
                .
                .
301             .       152F
                .          .
                .          .
310         MNG3............
                .
                .
313             .       150A
                .          V
                .          V
322             .      S150A
                .          .
                .          .
329             .          .       150B
                .          .          V
                .          .          V
338             .          .      R150B
                .          .          V
                .          .          V
344             .          .      S150B
                .          .          .
                .          .          .
351             .       JKL1............
                .          V
                .          V
354             .      RJKL1
                .          .
                .          .
360             .          .       150C
                .          .          .
                .          .          .
369             .          .          .       150D
                .          .          .          .
                .          .          .          .
378             .       JKL2......................
                .          V
                .          V
381             .      RJKL2
                .          .
                .          .
387             .          .       150E
                .          .          .
                .          .          .
396             .       JKL3............
                .          V
                .          V
399             .      SJKL3
                .          .
                .          .
406             .          .       150F
                .          .          .
                .          .          .
415             .          .          .       150G
                .          .          .          .
                .          .          .          .
426             .          .          .          .          .<-------  DO151A
424             .          .          .          .      D151A
                .          .          .          .          V
                .          .          .          .          V
427             .          .          .          .     RD151A
                .          .          .          .          .
                .          .          .          .          .
433             .       JKL4................................
                .          V
                .          V
436             .      RJKL4
                .          .
                .          .
```

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442          .          .          .       150H
             .          .          .          .
             .          .          .          .
451          .          .       JKL5...........
             .          .          V
             .          .          V
454          .          .      RJKL5
             .          .          .
             .          .          .
460          .          .          .       150I
             .          .          .          .
             .          .          .          .
469          .          .       JKL6...........
             .          .          V
             .          .          V
472          .          .      RJKL6
             .          .          .
             .          .          .
478          .          .          .       150J
             .          .          .          V
             .          .          .          V
487          .          .          .      R150J
             .          .          .          .
             .          .          .          .
493          .          .          .          .       150K
             .          .          .          .          .
             .          .          .          .          .
502          .          .      *JKL7......................
             .          .          .
             .          .          .
505          .       JKL7...........
             .          V
             .          V
508          .      RJKL7
             .          .
             .          .
4            .          .       150L
             .          .          .
             .          .          .
523          .      *JKL8...........
             .          .
             .          .
526       JKL8...........
             V
             V
529      SJKL8
             V
             V
537      RJKL8
             .
             .
543          .       150M
             .          .
             .          .
552       JKL9...........
             V
             V
555      SJKL9
             .
             .
562          .       150N
             .          .
             .          .
571          .          .       1500
             .          .          .
             .          .          .
580      JKL10......................
             V
             V
583     RJKL10
             .
             .
```

```
589          .        150P
             .          .
             .          .
598       JKL11.............
```

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

```
****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*             MAY   1991               *
*           VERSION 4.0.1E             *
*     Lahey F77L-EM/32 version 5.01    *
*       Dodson & Associates, Inc.      *
*  RUN DATE  04/05/95  TIME  14:39:38  *
****************************************
```

```
****************************************
*                                      *
*    U.S. ARMY CORPS OF ENGINEERS      *
*    HYDROLOGIC ENGINEERING CENTER     *
*          609 SECOND STREET           *
*       DAVIS, CALIFORNIA 95616        *
*           (916) 551-1748             *
*                                      *
****************************************
```

```
                    JACKLIN WASH - EXISTING CONDITIONS, AGK ENGINEERS, 04-05-95
                    100-Year 6-Hour Storm
                    time steps at 2 minutes
                    File:150-6CE.DAT

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

    IT        HYDROGRAPH TIME DATA
                     NMIN          2  MINUTES IN COMPUTATION INTERVAL
                    IDATE      1   0  STARTING DATE
                    ITIME       0000  STARTING TIME
                       NQ        200  NUMBER OF HYDROGRAPH ORDINATES
                   NDDATE      1   0  ENDING DATE
                   NDTIME       0638  ENDING TIME
                    ICENT         19  CENTURY MARK

              COMPUTATION INTERVAL    0.03 HOURS
                   TOTAL TIME BASE    6.63 HOURS

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

  9 JD        INDEX STORM NO. 1
                    STRM       3.20  PRECIPITATION DEPTH
                    TRDA       0.01  TRANSPOSITION DRAINAGE AREA

 10 PI          PRECIPITATION PATTERN
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.01      0.01      0.01
                  0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                  0.02      0.02      0.04      0.06      0.06      0.06      0.06      0.06      0.06      0.06
                  0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

    JD        INDEX STORM NO. 2
                    STRM       3.18  PRECIPITATION DEPTH
```

TRDA 0.50 TRANSPOSITION DRAINAGE AREA

PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02
0.02	0.02	0.04	0.06	0.06	0.06	0.06	0.06	0.06	0.06
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

14 JD INDEX STORM NO. 3

STRM 3.14 PRECIPITATION DEPTH

TRDA 2.80 TRANSPOSITION DRAINAGE AREA

15 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

18 JD INDEX STORM NO. 4

STRM 2.95 PRECIPITATION DEPTH

TRDA 16.00 TRANSPOSITION DRAINAGE AREA

19 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02
0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	151A	9.	4.00	1.	1.	1.	0.00		
+	DIVERSION TO	DO151A	2.	4.00	0.	0.	0.	0.00		
+	HYDROGRAPH AT	D151A	6.	4.00	1.	1.	1.	0.00		
+	ROUTED TO	R151A	6.	4.07	1.	1.	1.	0.00		
+	HYDROGRAPH AT	151B	11.	4.03	1.	1.	1.	0.00		
+	DIVERSION TO	DO151B	6.	4.03	1.	1.	1.	0.00		
+	HYDROGRAPH AT	D151B	6.	4.03	1.	0.	0.	0.00		
+	2 COMBINED AT	KGT1	12.	4.07	1.	1.	1.	0.01		
+	ROUTED TO	RKGT1	10.	4.23	1.	1.	1.	0.01		
+	HYDROGRAPH AT	151C	12.	4.03	1.	1.	1.	0.00		
+	2 COMBINED AT	KGT2	18.	4.17	2.	2.	2.	0.01		
+	ROUTED TO	RKGT2	18.	4.23	2.	2.	2.	0.01		
+	HYDROGRAPH AT	151D	107.	4.03	8.	8.	8.	0.04		
+	HYDROGRAPH AT	151F	6.	4.07	1.	1.	1.	0.00		
+	DIVERSION TO	DO151F	3.	4.07	0.	0.	0.	0.00		
+	HYDROGRAPH AT	D151F	3.	4.07	0.	0.	0.	0.00		
+	ROUTED TO	RD151F	3.	4.07	0.	0.	0.	0.00		
+	HYDROGRAPH AT	D151B	6.	4.03	1.	1.	1.	0.00		
+	ROUTED TO	RD151B	6.	4.07	1.	1.	1.	0.00		
+	3 COMBINED AT	KGT3A	115.	4.03	9.	8.	8.	0.04		
+	ROUTED TO	R151D	113.	4.13	9.	8.	8.	0.04		

	HYDROGRAPH AT	151E	148.	4.07	14.	13.	13.	0.07
+	3 COMBINED AT	*KGT3	263.	4.13	26.	23.	23.	0.12
+	HYDROGRAPH AT	151I	13.	4.03	1.	1.	1.	0.01
+	2 COMBINED AT	KGT3	274.	4.13	27.	25.	25.	0.13
+	ROUTED TO	RKGT3	274.	4.13	27.	25.	25.	0.13
+	HYDROGRAPH AT	151J	10.	4.00	1.	1.	1.	0.00
+	2 COMBINED AT	*KGT4	279.	4.13	28.	25.	25.	0.13
+	HYDROGRAPH AT	151H	8.	4.07	1.	1.	1.	0.00
+	ROUTED TO	R151H	8.	4.10	1.	1.	1.	0.00
+	2 COMBINED AT	KGT4	286.	4.13	29.	26.	26.	0.13
+	ROUTED TO	RKGT4	286.	4.13	29.	26.	26.	0.13
+	HYDROGRAPH AT	151K	104.	4.03	8.	7.	7.	0.03
+	2 COMBINED AT	KGT5	357.	4.07	37.	33.	33.	0.17
+	ROUTED TO	RKGT5	356.	4.13	37.	33.	33.	0.17
+	HYDROGRAPH AT	151L	142.	4.03	13.	12.	12.	0.05
+	2 COMBINED AT	KGT6	480.	4.10	50.	45.	45.	0.22
+	HYDROGRAPH AT	152A	103.	4.07	8.	8.	8.	0.04
+	ROUTED TO	R152A	101.	4.10	8.	8.	8.	0.04
+	HYDROGRAPH AT	152B	39.	4.03	3.	3.	3.	0.02
+	2 COMBINED AT	*MNG1	138.	4.07	12.	11.	11.	0.06
+	HYDROGRAPH AT	152C	33.	4.03	3.	2.	2.	0.01
+	2 COMBINED AT	MNG1	171.	4.07	14.	13.	13.	0.07
+	ROUTED TO	RMNG1	165.	4.13	14.	13.	13.	0.07
+	HYDROGRAPH AT	152D	42.	4.07	4.	4.	4.	0.02

	2 COMBINED AT	*MNG2	202.	4.13	18.	16.	16.	0.09
+	HYDROGRAPH AT	152E	38.	4.07	3.	3.	3.	0.02
+	2 COMBINED AT	MNG2	237.	4.10	22.	20.	20.	0.10
+	ROUTED TO	RMNG2	237.	4.17	22.	20.	20.	0.10
+	HYDROGRAPH AT	152F	32.	4.07	3.	3.	3.	0.01
+	2 COMBINED AT	MNG3	262.	4.17	24.	22.	22.	0.12
+	HYDROGRAPH AT	150A	27.	4.03	2.	2.	2.	0.01
+	ROUTED TO	S150A	8.	4.37	1.	1.	1.	0.01
+	HYDROGRAPH AT	150B	7.	4.03	1.	1.	1.	0.00
+	ROUTED TO	R150B	7.	4.03	1.	1.	1.	0.00
+	ROUTED TO	S150B	7.	4.03	1.	1.	1.	0.00
+	2 COMBINED AT	JKL1	11.	4.33	2.	1.	1.	0.01
+	ROUTED TO	RJKL1	11.	4.37	2.	1.	1.	0.01
+	HYDROGRAPH AT	150C	63.	4.03	5.	4.	4.	0.02
+	HYDROGRAPH AT	150D	105.	4.10	12.	11.	11.	0.05
+	3 COMBINED AT	JKL2	168.	4.07	18.	16.	16.	0.09
+	ROUTED TO	RJKL2	161.	4.10	18.	16.	16.	0.09
+	HYDROGRAPH AT	150E	66.	4.00	4.	4.	4.	0.02
+	2 COMBINED AT	JKL3	208.	4.07	22.	20.	20.	0.11
+	ROUTED TO	SJKL3	71.	4.50	22.	20.	20.	0.11
+	HYDROGRAPH AT	150F	11.	4.03	1.	1.	1.	0.00
+	HYDROGRAPH AT	150G	9.	4.07	1.	1.	1.	0.00
+	HYDROGRAPH AT	D151A	2.	4.00	0.	0.	0.	0.00
+	ROUTED TO	RD151A	2.	4.13	0.	0.	0.	0.00

	4 COMBINED AT	JKL4	80.	4.27	24.	22.	22.	0.12
+	ROUTED TO	RJKL4	80.	4.27	24.	22.	22.	0.12
+	HYDROGRAPH AT	150H	92.	4.03	7.	6.	6.	0.03
+	2 COMBINED AT	JKL5	166.	4.03	31.	28.	28.	0.15
+	ROUTED TO	RJKL5	147.	4.27	31.	28.	28.	0.15
+	HYDROGRAPH AT	150I	206.	4.13	25.	22.	22.	0.12
+	2 COMBINED AT	JKL6	329.	4.20	55.	50.	50.	0.27
+	ROUTED TO	RJKL6	329.	4.23	55.	50.	50.	0.27
+	HYDROGRAPH AT	150J	12.	4.10	2.	2.	2.	0.01
+	ROUTED TO	R150J	12.	4.17	2.	2.	2.	0.01
+	HYDROGRAPH AT	150K	26.	4.03	2.	2.	2.	0.01
+	3 COMBINED AT	*JKL7	352.	4.20	60.	54.	54.	0.29
+	2 COMBINED AT	JKL7	607.	4.20	84.	76.	76.	0.41
+	ROUTED TO	RJKL7	603.	4.23	84.	76.	76.	0.41
+	HYDROGRAPH AT	150L	22.	4.07	2.	2.	2.	0.01
+	2 COMBINED AT	*JKL8	617.	4.23	86.	78.	78.	0.41
+	2 COMBINED AT	JKL8	994.	4.17	134.	121.	121.	0.63
+	ROUTED TO	SJKL8	960.	4.23	134.	121.	121.	0.63
+	ROUTED TO	RJKL8	957.	4.27	134.	121.	121.	0.63
+	HYDROGRAPH AT	150M	67.	4.03	5.	4.	4.	0.02
+	2 COMBINED AT	JKL9	971.	4.23	138.	125.	125.	0.66
+	ROUTED TO	SJKL9	969.	4.27	138.	125.	125.	0.66
+	HYDROGRAPH AT	150N	3.	4.03	0.	0.	0.	0.00
+	HYDROGRAPH AT	150O	7.	4.07	1.	1.	1.	0.00

	3 COMBINED AT							
		JKL10	973.	4.27	139.	126.	126.	0.66
	ROUTED TO							
+		RJKL10	976.	4.27	139.	126.	126.	0.66
	HYDROGRAPH AT							
+		150P	2.	4.07	0.	0.	0.	0.00
	2 COMBINED AT							
+		JKL11	977.	4.27	139.	126.	126.	0.66

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

J.5

EMERALD WASH

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****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*              MAY   1991              *
*           VERSION 4.0.1E             *
*     Lahey F77L-EM/32 version 5.01    *
*       Dodson & Associates, Inc.      *
*  RUN DATE  04/05/95  TIME  14:49:42  *
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****************************************
*                                      *
*    U.S. ARMY CORPS OF ENGINEERS      *
*    HYDROLOGIC ENGINEERING CENTER     *
*          609 SECOND STREET           *
*       DAVIS, CALIFORNIA 95616        *
*           (916) 551-1748             *
*                                      *
****************************************
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X     X  XXXXXXX   XXXXX          X
X     X  X        X     X        XX
X     X  X        X              X
XXXXXXX  XXXX     X        XXXXX X
X     X  X        X              X
X     X  X        X     X        X
X     X  XXXXXXX   XXXXX         XXX
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THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

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

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

  1           ID   EMERALD WASH - EXISTING CONDITIONS, AGK ENGINEERS, 04-05-95
  2           ID   100 Year 6-Hour Storm
  3           ID   Time step at 2 minutes
  4           ID   File: 160-6CE.DAT
  5           ID
  6           IT      2                    200
  7           IO      5
              *DIAGRAM
  8           IN     15
  9           JD   3.20    0.01
 10           PC    .000    .008    .016    .025    .033    .041    .050    .058    .066    .074
 11           PC    .087    .099    .118    .138    .216    .377    .834    .911    .931    .950
 12           PC    .962    .972    .983    .991   1.000
 13           JD   3.18    0.50
 14           JD   3.14    2.80
 15           PC    .000    .009    .016    .025    .034    .042    .051    .059    .067    .076
 16           PC    .087    .100    .120    .163    .252    .451    .694    .837    .900    .938
 17           PC    .950    .963    .975    .988   1.000
 18           JD   2.95    16.0
 19           PC    .000    .015    .020    .030    .048    .063    .076    .090    .105    .119
 20           PC    .135    .152    .175    .222    .304    .472    .670    .796    .868    .912
 21           PC    .946    .960    .973    .987   1.000

 22           KK    160V
 23           KM   SUB-BASIN 160V
 24           KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 25           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 26           BA    .005
 27           LG    .050    .250   5.700    .170  20.000
 28           UC    .108    .192
 29           UA       0       5      16      30      65      77      84      90      94      97
 30           UA     100

 31           KK   R160V
 32           KM   ROUTE 160V THROUGH SUB-BASIN 160W TO POINT OF CON. EMR13A
 33           RS       1    FLOW       0
 34           RC    0.02    0.02    0.02     550   0.022
 35           RX    9975    9980    9985    9986   10014   10015   10020   10025
 36           RY  1730.5  1730.5  1730.5    1730    1730  1730.5  1730.5  1730.5

 37           KK    160W
 38           KM   SUB-BASIN 160W
 39           KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 40           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 41           BA    .002
 42           LG    .050    .250   5.700    .170  22.500
 43           UC    .083    .139
 44           UA       0       5      16      30      65      77      84      90      94      97
 45           UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  46          KK  EMR13A
  47          KM   EMERAL WASH CONCENTRATION POIT 13A - COMBINE  R160V, 160W
  48          HC       2

  49          KK   D160W
  50          KM   DIVERSION AT INCA AV. AND BARON DR.
  51          DT  DO160W
  52          DI       1      10     100    1000
  53          DQ     0.2       2      20     200

  54          KK  REM13A
  55          KM   ROUTE EMR13A THROUGH SUB-BASIN 160X TO POINT OF CON. EMR13B
  56          RS       3    FLOW       0
  57          RC    0.02    0.02    0.02    1678   0.046
  58          RX    9975    9980    9985    9986   10014   10015   10020   10025
  59          RY  1660.5  1660.5  1660.5    1660    1660  1660.5  1660.5  1660.5

  60          KK    160X
  61          KM   SUB-BASIN 160X
  62          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
  63          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
  64          BA    .029
  65          LG    .150    .250   5.700    .196  11.050
  66          UC    .204    .192
  67          UA       0       5      16      30      65      77      84      90      94      97
  68          UA     100

  69          KK  EMR13B
  70          KM   EMERAL WASH CONCENTRATION POIT 13B - COMBINE REM13A, 160X
  71          HC       2

  72          KK  REM13B
  73          KM   ROUTE EMR13B THROUGH SUB-BASIN 160Z TO POINT OF CON. EMR13C
  74          RS       7    FLOW       0
  75          RC    0.02    0.02    0.02    4072   0.029
  76          RX    9975    9980    9985    9986   10014   10015   10020   10025
  77          RY  1560.5  1560.5  1560.5    1560    1560  1560.5  1560.5  1560.5

  78          KK    160Y
  79          KM   SUB-BASIN 160Y
  80          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
  81          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
  82          BA    .004
  83          LG    .100    .250   5.700    .189  27.000
  84          UC    .117    .183
  85          UA       0       5      16      30      65      77      84      90      94      97
  86          UA     100

  87          KK   R160Y
  88          KM   ROUTE 160Y THROUGH SUB-BASIN 160Z TO POINT OF CON. EMR13C
  89          RS       1    FLOW       0
  90          RC    0.02    0.02    0.02     347   0.046
  91          RX    9975    9980    9985    9986   10014   10015   10020   10025
  92          RY  1560.5  1560.5  1560.5    1560    1560  1560.5  1560.5  1560.5
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  93          KK    160Z
  94          KM   SUB-BASIN 160Z
  95          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
  96          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
  97          BA    .061
  98          LG    .099    .250   5.700    .178  22.830
  99          UC    .254    .350
 100          UA       0       5      16      30      65      77      84      90      94      97
 101          UA     100

 102          KK   EMR13C
 103          KM   EMERAL WASH CONCENTRATION POIT 13C - COMBINE REM13C, R160Y, 160Z
 104          HC       3

 105          KK    160G
 106          KM   SUB-BASIN 160G
 107          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 108          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 109          BA    .023
 110          LG    .100    .250   5.700    .170  33.750
 111          UC    .229    .373
 112          UA       0       5      16      30      65      77      84      90      94      97
 113          UA     100

 114          KK   R160G
 115          KM   ROUTE 160G THROUGH SUB-BASIN 160H TO POINT OF CON. EMR1
 116          RS       6    FLOW       0
 117          RC    0.02    0.02    0.02    3056    0.29
 118          RX    9975    9980    9985    9986   10014   10015   10020   10025
 119          RY  1910.5  1910.5  1910.5    1910    1910  1910.5  1910.5  1910.5

 120          KK    160H
 121          KM   SUB-BASIN 160H
 122          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 123          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 124          BA    .020
 125          LG    .086    .250   5.700    .170  34.240
 126          UC    .162    .308
 127          UA       0       5      16      30      65      77      84      90      94      97
 128          UA     100

 129          KK    EMR1
 130          KM   EMERAL WASH CONCENTRATION POIT 1 - COMBINE R160G AND 160H
 131          HC       2

 132          KK   REMR1
 133          KM   ROUTE EMR1 THROUGH SUB-BASIN 160I TO POINT OF CON. EMR2
 134          RS       2    FLOW       0
 135          RC    0.02    0.02    0.02     695   0.058
 136          RX    9975    9980    9985    9986   10014   10015   10020   10025
 137          RY  1830.5  1830.5  1830.5    1830    1830  1830.5  1830.5  1830.5
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 138          KK    160I
 139          KM   SUB-BASIN 160I
 140          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 141          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 142          BA    .005
 143          LG    .085    .250   5.700    .170  22.710
 144          UC    .150    .234
 145          UA       0       5      16      30      65      77      84      90      94      97
 146          UA     100

 147          KK    160J
 148          KM   SUB-BASIN 160J
 149          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 150          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 151          BA    .008
 152          LG    .093    .250   5.700    .170  23.940
 153          UC    .083    .058
 154          UA       0       5      16      30      65      77      84      90      94      97
 155          UA     100

 156          KK    EMR2
 157          KM   EMERAL WASH CONCENTRATION POIT 2 - COMBINE REMR1, 160I, 160J
 158          HC       3

 159          KK   REMR2
 160          KM   ROUTE EMR2 THROUGH SUB-BASIN 160K TO POINT OF CON. EMR3
 161          RS       2    FLOW       0
 162          RC    0.04    0.04    0.04    1113    .073
 163          RX    9860    9930    9975    9980   10030   10055   10095   10130
 164          RY    1764    1750    1744    1742    1742    1748    1756    1760

 165          KK    160K
 166          KM   SUB-BASIN 160K
 167          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 168          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 169          BA    .028
 170          LG    .150    .250   5.800    .195  18.500
 171          UC    .171    .132
 172          UA       0       5      16      30      65      77      84      90      94      97
 173          UA     100

 174          KK    EMR3
 175          KM   EMERAL WASH CONCENTRATION POIT 3 - COMBINE REMR2, 160K
 176          HC       2

 177          KK   REMR3
 178          KM   ROUTE EMR3 THROUGH SUB-BASIN 160M TO POINT OF CON. EMR4
 179          RS       3    FLOW       0
 180          RC    0.04    0.04    0.04    1604    .032
 181          RX    9885    9920    9945    9980   10010   10040   10060   10075
 182          RY    1730    1720    1714    1712    1710    1720    1726    1730
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 183          KK    160M
 184          KM   SUB-BASIN 160M
 185          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 186          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 187          BA    .059
 188          LG    .150    .250   5.800    .195  10.220
 189          UC    .225    .184
 190          UA       0       5      16      30      65      77      84      90      94      97
 191          UA     100

 192          KK   *EMR4
 193          KM   EMERALD WASH CONCENTRATION POINT *4 - REMR3, 160M
 194          HC       2

 195          KK    160L
 196          KM   SUB-BASIN 160L
 197          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 198          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 199          BA    .008
 200          LG    .091    .250   5.700    .170  39.890
 201          UC    .142    .219
 202          UA       0       5      16      30      65      77      84      90      94      97
 203          UA     100

 204          KK   R160L
 205          KM   ROUTE 160L THROUGH SUB-BASIN 160M TO POINT OF CON. EMR4
 206          RS       2    FLOW       0
 207          RC    0.04    0.04    0.04    1059   0.097
 208          RX    9885    9920    9945    9980   10010   10040   10060   10075
 209          RY    1730    1720    1714    1712    1710    1720    1726    1730

 210          KK    160N
 211          KM   SUB-BASIN 160N
 212          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 213          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 214          BA    .022
 215          LG    .150    .250   5.700    .207  15.000
 216          UC    .121    .096
 217          UA       0       5      16      30      65      77      84      90      94      97
 218          UA     100

 219          KK    EMR4
 220          KM   EMERAL WASH CONCENTRATION POIT 4 - COMBINE (REMR3, 160M), R160L, 160N
 221          HC       3

 222          KK   SEMR4
 223          KM   ROUTE EMR4 THROUGH 60" CMP CULVERT AT FOUNTAIN HILS BLV TO EMR5
 224          KO       3
 225          RS       1    ELEV 1689.28
 226          SQ       0      33      98     190     290
 227          SE  1689.3  1691.6  1693.9  1698.5  1708.2
 228          SA       0   0.004    3.72
 229          SE  1689.3    1690    1710
```

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

  230         KK   160B
  231         KM   SUB-BASIN 160B
  232         KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
  233         KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
  234         BA    .007
  235         LG    .100    .250   5.700    .170  40.500
  236         UC    .117    .178
  237         UA       0       5      16      30      65      77      84      90      94      97
  238         UA     100

  239         KK   R160B
  240         KM   ROUTE 160B THROUGH SUB-BASIN 160D TO POINT OF CON. EMR5A
  241         RS       7    FLOW       0
  242         RC    0.02    0.02    0.02    4084    .041
  243         RX  9950.5  9955.5  9960.5  9960.5 10039.5 10039.5 10044.5 10049.5
  244         RY  1820.5  1820.5  1820.5    1820    1820  1820.5  1820.5  1820.5

  245         KK   160C
  246         KM   SUB-BASIN 160C
  247         KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
  248         KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
  249         BA    .016
  250         LG    .100    .250   5.700    .170  32.360
  251         UC    .125    .160
  252         UA       0       5      16      30      65      77      84      90      94      97
  253         UA     100

  254         KK   R160C
  255         KM   ROUTE 160C THROUGH SUB-BASIN 160D TO POINT OF CON. EMR5A
  256         RS       4    FLOW       0
  257         RC    0.02    0.02    0.02    1943    .058
  258         RX  9950.5  9955.5  9960.5  9960.5 10039.5 10039.5 10044.5 10049.5
  259         RY  1820.5  1820.5  1820.5    1820    1820  1820.5  1820.5  1820.5

  260         KK   EMR5A
  261         KM   EMERAL WASH CONCENTRATION POIT 5A - COMBINE R160C, R160B
  262         HC       2

  263         KK   160D
  264         KM   SUB-BASIN 160D
  265         KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
  266         KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
  267         BA    .041
  268         LG    .102    .250   5.700    .170  25.580
  269         UC    .329    .551
  270         UA       0       5      16      30      65      77      84      90      94      97
  271         UA     100

  272         KK   160F
  273         KM   SUB-BASIN 160F
  274         KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
  275         KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
  276         BA    .018
  277         LG    .100    .250   5.700    .170  20.430
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 278          UC    .217    .526
 279          UA       0       5      16      30      65      77      84      90      94      97
 280          UA     100

 281          KK    EMR5
 282          KM   EMERAL WASH CONCENTRATION POIT 5 - COMBINE REMR5A, SEMR4, 160F, 160D
 283          HC       4

 284          KK   REMR5
 285          KM   ROUTE EMR5 THROUGH SUB-BASIN 1600 TO POINT OF CON. EMR6
 286          RS       4    FLOW       0
 287          RC    0.04    0.04    0.04    2176    .034
 288          RX    9805    9850    9920    9993   10010   10035   10075   10110
 289          RY    1670    1660    1652    1646    1646    1650    1660    1670

 290          KK    1600
 291          KM   SUB-BASIN 1600
 292          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 293          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 294          BA    .065
 295          LG    .150    .250   5.700    .207  10.000
 296          UC    .237    .191
 297          UA       0       5      16      30      65      77      84      90      94      97
 298          UA     100

 299          KK   *EMR6
 300          KM   EMERALD WASH CONCENTRATION POINT *6 - REMR5, 1600
 301          HC       2

 302          KK    151F
 303          KM   SUB-BASIN 151F
 304          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 305          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 306          BA    .003
 307          LG    .050    .250   5.700    .170  25.000
 308          UC    .142    .358
 309          UA       0       5      16      30      65      77      84      90      94      97
 310          UA     100

 311          KK   D151F
 312          KM   DIVERSION AT INTERSECTION OF EMERAL AND FRISCO
 313          DT  DO151F
 314          DI       1      10     100    1000
 315          DQ     0.5       5      50     500

 316          KK   R151F
 317          KM   ROUTE 151F THROUGH SUB-BASIN 151G TO POINT OF CON. EMR6A
 318          RS       2    FLOW       0
 319          RC    0.02    0.02    0.20    1011    .016
 320          RX    9975    9980    9985    9986   10014   10015   10020   10025
 321          RY  1730.5  1730.5  1730.5    1730    1730  1730.5  1730.5  1730.5
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 322          KK    151G
 323          KM   SUB-BASIN 151G
 324          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASINT
 325          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 326          BA    .003
 327          LG    .100    .250   5.700    .170  25.000
 328          UC    .179    .589
 329          UA       0       5      16      30      65      77      84      90      94      97
 330          UA     100

 331          KK   EMR6A
 332          KM   EMERAL WASH CONCENTRATION POINT 6A - COMBINES R151F, 151G
 333          HC       2

 334          KK  REMR6A
 335          KM   ROUTE 151G THROUGH SUB-BASIN 1600 TO  CON. POINT EMR6
 336          RS       1    FLOW       0
 337          RC    0.04    0.04    0.04     350   0.062
 338          RX    9960    9980    9995  9997.5 10002.5   10005   10030   10050
 339          RY    1672    1672    1672    1668    1668    1672    1672    1672

 340          KK    EMR6
 341          KM   EMERAL WASH CONCENTRATION POIT 6 - COMBINE (REMR5, 1600), REMR6A
 342          HC       2

 343          KK   REMR6
 344          KM   ROUTE EMR6 THROUGH SUB-BASIN 160P TO POINT OF CON. EMR7
 345          RS       2    FLOW       0
 346          RC    0.04    0.04    0.04     855    .007
 347          RX    9760    9820    9870    9980   10020   10045   10065   10080
 348          RY    1650    1640    1636    1634    1634    1640    1646    1650

 349          KK    160P
 350          KM   SUB-BASIN 160P
 351          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 352          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 353          BA    .023
 354          LG    .150    .250   5.700    .207  10.000
 355          UC    .179    .160
 356          UA       0       5      16      30      65      77      84      90      94      97
 357          UA     100

 358          KK    EMR7
 359          KM   EMERAL WASH CONCENTRATION POIT 7 - COMBINE REMR6, 160P
 360          HC       2

 361          KK   SEMR7
 362          KM   ROUTE EMR7 THROUGH CULVERT AT BARON DRIVE TO POINT OF CON. EMR7
 363          KO       3
 364          RS       1    ELEV  1628.0
 365          SQ       0      37     115     130     222
 366          SE    1628  1630.5    1633  1633.6  1638.0
 367          SA       0     .02    2.09
 368          SE    1628    1632    1635
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 369          KK    160Q
 370          KM   SUB-BASIN 160Q
 371          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 372          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 373          BA    .006
 374          LG    .050    .250   5.700    .170  20.000
 375          UC    .112    .160
 376          UA       0       5      16      30      65      77      84      90      94      97
 377          UA     100

 378          KK   D160W
 379          KM   FLOW FROM DIVERSION AT BARON AND INCA
 380          DR  DO160W

 381          KK  RD160W
 382          KM   ROUTE DIVERION INFLOW THROUGH SUB-BASIN 160Q
 383          RS       3    FLOW       0
 384          RC    0.02    0.02    0.02     980   0.087
 385          RX    9975    9980    9985    9986   10014   10015   10020   10025
 386          RY  1670.5  1617.5  1617.5    1617    1617  1617.5  1617.5  1617.5

 387          KK    EMR8
 388          KM   EMERAL WASH CONCENTRATION POIT 8 - COMBINE SEMR7, 160Q, RD160W
 389          HC       3

 390          KK   REMR8
 391          KM   ROUTE EMR8 THROUGH SUB-BASIN 160R TO POINT OF CON. EMR9
 392          RS       3    FLOW       0
 393          RC    0.04    0.04    0.04    1264   0.029
 394          RX    9780    9900    9960    9974   10045   10065   10120   10165
 395          RY    1630    1616    1614  1607.5  1607.5    1616    1624    1636

 396          KK    160R
 397          KM   SUB-BASIN 160R
 398          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 399          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 400          BA    .053
 401          LG    .150    .250   5.700    .207   7.500
 402          UC    .217    .174
 403          UA       0       5      16      30      65      77      84      90      94      97
 404          UA     100

 405          KK    EMR9
 406          KM   EMERAL WASH CONCENTRATION POIT 9 - COMBINE REMR8, 160R
 407          HC       2

 408          KK   REMR9
 409          KM   ROUTE EMR9 THROUGH SUB-BASIN 160S TO POINT OF CON. EMR10
 410          RS       1    FLOW       0
 411          RC    0.04    0.04    0.04     510    0.02
 412          RX    9830    9910    9940    9986   10008   10063   10135   10195
 413          RY    1610    1592    1590  1585.5  1585.5    1597    1602    1610
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 414          KK    160S
 415          KM   SUB-BASIN 160S
 416          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 417          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 418          BA    .011
 419          LG    .150    .250   5.700    .207  13.910
 420          UC    .100    .082
 421          UA       0       5      16      30      65      77      84      90      94      97
 422          UA     100

 423          KK   EMR10
 424          KM   EMERAL WASH CONCENTRATION POIT 10 - COMBINE REMR9, 160S
 425          HC       2

 426          KK  SEMR10
 427          KM   ROUTE EMR10 THROUGH CULVERT AT INCA AV. TO POINT OF CON. EMR11
 428          KO       3
 429          RS       1    ELEV    1583
 430          SQ       0      37     115     222     235
 431          SE    1583  1585.5    1588    1593  1593.7
 432          SA       0    .003     1.3
 433          SE    1583    1584    1595

 434          KK    160T
 435          KM   SUB-BASIN 160T
 436          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 437          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 438          BA    .009
 439          LG    .100    .250   5.700    .179  26.360
 440          UC    .112    .127
 441          UA       0       5      16      30      65      77      84      90      94      97
 442          UA     100

 443          KK   EMR11
 444          KM   EMERAL WASH CONCENTRATION POIT 11 - COMBINE SEMR10, 160T
 445          HC       2

 446          KK  REMR11
 447          KM   ROUTE EMR11 THROUGH SUB-BASIN 160U TO POINT OF CON. EMR12
 448          RS       6    FLOW       0
 449          RC    0.04    0.04    0.04    3300   0.021
 450          RX    9835    9945    9955    9995   10005   10030   10080   10145
 451          RY    1564    1561    1556    1550    1550    1558    1558    1568

 452          KK    160U
 453          KM   SUB-BASIN 160U
 454          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 455          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 456          BA    .077
 457          LG    .104    .250   5.700    .188  23.100
 458          UC    .233    .247
 459          UA       0       5      16      30      65      77      84      90      94      97
 460          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

461           KK  *EMR12
462           KM   EMERALD WASH CONCENTRATION POINT *12 - REMR11, 160U
463           HC       2

464           KK   EMR12
465           KM   EMERAL WASH CONCENTRATION POIT 12 - COMBINE (REMR11, 160U), EMR13C
466           HC       2

467           KK  SEMR12
468           KM   ROUTE EMR12 THROUGH CULVERT  AT SAGUARO BLV.
469           KO       3
470           RS       1    ELEV 1514.86
471           SQ       0      74     230     410     459     700    1370
472           SE  1514.9  1517.4  1519.9 1523.75    1524    1525    1526
473           SA       0     .02     .87
474           SE  1514.9    1516    1526

475           KK  REMR12
476           KM   ROUTE EMR12 THROUGH SUB-BASIN 160AA TO POINT OF CON. EMR13
477           RS       1  FLOW 0
478           RC    0.04    0.04    0.04     290    .021
479           RX    9810    9880    9920    9950   10030   10050   10100   10150
480           RY    1524    1522    1514    1512    1512    1520    1521    1522

481           KK   160AA
482           KM   SUB-BASIN 160AA
483           KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
484           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
485           BA    .005
486           LG    .083    .250   5.700    .192  33.650
487           UC    .125    .174
488           UA       0       5      16      30      65      77      84      90      94      97
489           UA     100

490           KK   EMR13
491           KM   EMERAL WASH CONCENTRATION POIT 13 - COMBINE SEMR12, 160AA
492           HC       2
493           ZZ
```

SCHEMATIC DIAGRAM OF STREAM NETWORK

```
LINE     (V) ROUTING          (--->) DIVERSION OR PUMP FLOW

NO.      (.) CONNECTOR        (<---) RETURN OF DIVERTED OR PUMPED FLOW

 22        160V
              V
              V
 31       R160V
              .
              .
 37           .        160W
              .           .
              .           .
 46     EMR13A............
              .
              .
 51           .-------> DO160W
 49       D160W
              V
              V
 54     REM13A
              .
              .
 60           .        160X
              .           .
              .           .
 69     EMR13B............
              V
              V
 72     REM13B
              .
              .
              .        160Y
              .           V
              .           V
 87           .       R160Y
              .           .
              .           .
 93           .           .        160Z
              .           .           .
              .           .           .
102      EMR13........................
              .
              .
105           .        160G
              .           V
              .           V
114           .       R160G
              .           .
              .           .
120           .           .        160H
              .           .           .
              .           .           .
129           .        EMR1............
              .           V
              .           V
132           .       REMR1
              .           .
              .           .
138           .           .        160I
              .           .           .
              .           .           .
147           .           .           .        160J
              .           .           .           .
              .           .           .           .
156           .        EMR2........................
              .           V
              .           V
```

```
159   .     REMR2
      .       .
      .       .
165   .       .        160K
      .       .          .
      .       .          .
174   .     EMR3............
      .       V
      .       V
177   .     REMR3
      .       .
      .       .
183   .       .        160M
      .       .          .
      .       .          .
192   .     *EMR4...........
      .       .
      .       .
195   .       .        160L
      .       .          V
      .       .          V
204   .       .      R160L
      .       .          .
      .       .          .
210   .       .          .        160N
      .       .          .          .
      .       .          .          .
219   .     EMR4......................
      .       V
      .       V
222   .     SEMR4
      .       .
      .       .
230   .       .        160B
      .       .          V
      .       .          V
      .       .      R160B
      .       .          .
      .       .          .
245   .       .          .        160C
      .       .          .          V
      .       .          .          V
254   .       .          .      R160C
      .       .          .          .
      .       .          .          .
260   .       .      EMR5A...........
      .       .          .
      .       .          .
263   .       .          .        160D
      .       .          .          .
      .       .          .          .
272   .       .          .          .        160F
      .       .          .          .          .
      .       .          .          .          .
281   .     EMR5.................................
      .       V
      .       V
284   .     REMR5
      .       .
      .       .
290   .       .        160O
      .       .          .
      .       .          .
299   .     *EMR6...........
      .       .
      .       .
302   .       .        151F
      .       .          .
      .       .          .
      .       .          .-------> D0151F
      .       .      D151F
```

```
                V
                V
            R151F
                .
                .
322             .        151G
                .          .
                .          .
331         EMR6A............
                V
                V
334         REMR6A
                .
                .
340     EMR6............
            V
            V
343     REMR6
            .
            .
349             160P
                .
                .
358     EMR7............
            V
            V
361     SEMR7
            .
            .
369             160Q
                .
                .
380             .          .<-------  D0160W
378             .      D160W
                .          V
                .          V
                .     RD160W
                .          .
                .          .
387     EMR8........................
            V
            V
390     REMR8
            .
            .
396             160R
                .
                .
405     EMR9............
            V
            V
408     REMR9
            .
            .
414             160S
                .
                .
423     EMR10...........
            V
            V
426     SEMR10
            .
            .
434             160T
                .
                .
443     EMR11...........
            V
            V
    REMR11
            .
```

```
          .          .
          .          .       160U
          .          .         .
          .          .         .
461       .     *EMR12............
          .          .
          .          .
464     EMR12............
          V
          V
467    SEMR12
          V
          V
475    REMR12
          .
          .
481       .      160AA
          .          .
          .          .
490     EMR13............
```

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

```
*****************************************
*                                       *
*  FLOOD HYDROGRAPH PACKAGE  (HEC-1)    *
*            MAY   1991                 *
*          VERSION 4.0.1E               *
*    Lahey F77L-EM/32 version 5.01      *
*      Dodson & Associates, Inc.        *
* RUN DATE  04/05/95  TIME  14:49:42    *
*****************************************
```

```
*****************************************
*                                       *
*    U.S. ARMY CORPS OF ENGINEERS       *
*    HYDROLOGIC ENGINEERING CENTER      *
*          609 SECOND STREET            *
*        DAVIS, CALIFORNIA 95616        *
*           (916) 551-1748              *
*                                       *
*****************************************
```

```
                    EMERALD WASH - EXISTING CONDITIONS, AGK ENGINEERS, 04-05-95
                    100 Year 6-Hour Storm
                    Time step at 2 minutes
                    File: 160-6CE.DAT

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

    IT        HYDROGRAPH TIME DATA
                     NMIN          2  MINUTES IN COMPUTATION INTERVAL
                    IDATE      1   0  STARTING DATE
                    ITIME       0000  STARTING TIME
                       NQ        200  NUMBER OF HYDROGRAPH ORDINATES
                   NDDATE      1   0  ENDING DATE
                   NDTIME       0638  ENDING TIME
                    ICENT         19  CENTURY MARK

              COMPUTATION INTERVAL    0.03 HOURS
                   TOTAL TIME BASE    6.63 HOURS

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

  9 JD        INDEX STORM NO. 1
                    STRM       3.20  PRECIPITATION DEPTH
                    TRDA       0.01  TRANSPOSITION DRAINAGE AREA

 10 PI          PRECIPITATION PATTERN
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.01      0.01      0.01
                   0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                   0.02      0.02      0.04      0.06      0.06      0.06      0.06      0.06      0.06      0.06
                   0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

    JD        INDEX STORM NO. 2
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                STRM        3.18  PRECIPITATION DEPTH
                TRDA        0.50  TRANSPOSITION DRAINAGE AREA

0 PI          PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                0.02      0.02      0.04      0.06      0.06      0.06      0.06      0.06      0.06      0.06
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

14 JD         INDEX STORM NO. 3
                STRM        3.14  PRECIPITATION DEPTH
                TRDA        2.80  TRANSPOSITION DRAINAGE AREA

15 PI         PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.03      0.03      0.03      0.03      0.03
                0.03      0.03      0.03      0.03      0.03      0.03      0.03      0.03      0.03      0.03
                0.02      0.02      0.02      0.02      0.02      0.02      0.02      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

18 JD         INDEX STORM NO. 4
                STRM        2.95  PRECIPITATION DEPTH
                TRDA       16.00  TRANSPOSITION DRAINAGE AREA

19 PI         PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                0.02      0.02      0.02      0.03      0.03      0.03      0.03      0.03      0.03      0.03
                0.02      0.02      0.02      0.02      0.02      0.02      0.02      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.01      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
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RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	160V	13.	4.03	1.	1.	1.	0.00		
+	ROUTED TO	R160V	13.	4.07	1.	1.	1.	0.00		
+	HYDROGRAPH AT	160W	6.	4.00	0.	0.	0.	0.00		
+	2 COMBINED AT	EMR13A	19.	4.03	2.	1.	1.	0.01		
+	DIVERSION TO	DO160W	4.	4.03	0.	0.	0.	0.01		
+	HYDROGRAPH AT	D160W	15.	4.03	1.	1.	1.	0.01		
+	ROUTED TO	REM13A	14.	4.10	1.	1.	1.	0.01		
+	HYDROGRAPH AT	160X	72.	4.07	6.	6.	6.	0.03		
+	2 COMBINED AT	EMR13B	85.	4.07	7.	7.	7.	0.04		
+	ROUTED TO	REM13B	82.	4.17	7.	7.	7.	0.04		
+	HYDROGRAPH AT	160Y	11.	4.03	1.	1.	1.	0.00		
+	ROUTED TO	R160Y	11.	4.03	1.	1.	1.	0.00		
+	HYDROGRAPH AT	160Z	115.	4.10	14.	13.	13.	0.06		
+	3 COMBINED AT	EMR13	200.	4.13	22.	20.	20.	0.10		
+	HYDROGRAPH AT	160G	43.	4.10	6.	5.	5.	0.02		
+	ROUTED TO	R160G	43.	4.13	6.	5.	5.	0.02		
+	HYDROGRAPH AT	160H	43.	4.07	5.	5.	5.	0.02		
+	2 COMBINED AT	EMR1	83.	4.10	11.	10.	10.	0.04		
+	ROUTED TO	REMR1	83.	4.10	11.	10.	10.	0.04		
+	HYDROGRAPH AT	160I	12.	4.03	1.	1.	1.	0.00		
+	HYDROGRAPH AT	160J	28.	4.00	2.	2.	2.	0.01		

+	3 COMBINED AT	EMR2	111.	4.03	14.	12.	12.	0.06
+	ROUTED TO	REMR2	109.	4.07	14.	12.	12.	0.06
+	HYDROGRAPH AT	160K	81.	4.03	6.	6.	6.	0.03
+	2 COMBINED AT	EMR3	186.	4.07	20.	18.	18.	0.08
+	ROUTED TO	REMR3	185.	4.10	20.	18.	18.	0.08
+	HYDROGRAPH AT	160M	147.	4.07	12.	11.	11.	0.06
+	2 COMBINED AT	*EMR4	326.	4.10	32.	29.	29.	0.14
+	HYDROGRAPH AT	160L	20.	4.03	2.	2.	2.	0.01
+	ROUTED TO	R160L	20.	4.07	2.	2.	2.	0.01
+	HYDROGRAPH AT	160N	69.	4.00	5.	4.	4.	0.02
+	3 COMBINED AT	EMR4	402.	4.07	39.	35.	35.	0.17
+	ROUTED TO	SEMR4	207.	4.30	39.	35.	35.	0.17
+	HYDROGRAPH AT	160B	20.	4.03	2.	2.	2.	0.01
+	ROUTED TO	R160B	16.	4.30	2.	2.	2.	0.01
+	HYDROGRAPH AT	160C	46.	4.03	4.	4.	4.	0.02
+	ROUTED TO	R160C	44.	4.10	4.	4.	4.	0.02
+	2 COMBINED AT	EMR5A	49.	4.13	6.	5.	5.	0.02
+	HYDROGRAPH AT	160D	59.	4.13	10.	9.	9.	0.04
+	HYDROGRAPH AT	160F	27.	4.10	4.	4.	4.	0.02
+	4 COMBINED AT	EMR5	335.	4.17	58.	53.	53.	0.25
+	ROUTED TO	REMR5	334.	4.20	58.	53.	53.	0.25
+	HYDROGRAPH AT	160O	158.	4.07	13.	12.	12.	0.06
+	2 COMBINED AT	*EMR6	463.	4.10	72.	65.	65.	0.32
+	HYDROGRAPH AT	151F	6.	4.07	1.	1.	1.	0.00

+	DIVERSION TO	DO151F	3.	4.07	0.	0.	0.	0.00
+	HYDROGRAPH AT	D151F	3.	4.07	0.	0.	0.	0.00
+	ROUTED TO	R151F	3.	4.17	0.	0.	0.	0.00
+	HYDROGRAPH AT	151G	4.	4.07	1.	1.	1.	0.00
+	2 COMBINED AT	EMR6A	7.	4.13	1.	1.	1.	0.01
+	ROUTED TO	REMR6A	7.	4.17	1.	1.	1.	0.01
+	2 COMBINED AT	EMR6	470.	4.10	73.	66.	66.	0.33
+	ROUTED TO	REMR6	460.	4.20	73.	66.	66.	0.33
+	HYDROGRAPH AT	160P	61.	4.03	5.	4.	4.	0.02
+	2 COMBINED AT	EMR7	495.	4.17	77.	70.	70.	0.35
+	ROUTED TO	SEMR7	213.	4.90	77.	70.	70.	0.35
+	HYDROGRAPH AT	160Q	17.	4.03	1.	1.	1.	0.01
+	HYDROGRAPH AT	D160W	4.	4.03	0.	0.	0.	0.01
+	ROUTED TO	RD160W	4.	4.03	0.	0.	0.	0.01
+	3 COMBINED AT	EMR8	214.	4.90	79.	72.	72.	0.36
+	ROUTED TO	REMR8	214.	4.93	79.	72.	72.	0.36
+	HYDROGRAPH AT	160R	134.	4.07	11.	10.	10.	0.05
+	2 COMBINED AT	EMR9	302.	4.10	90.	81.	81.	0.41
+	ROUTED TO	REMR9	302.	4.10	90.	81.	81.	0.41
+	HYDROGRAPH AT	160S	36.	4.00	2.	2.	2.	0.01
+	2 COMBINED AT	EMR10	325.	4.07	92.	83.	83.	0.42
+	ROUTED TO	SEMR10	236.	4.40	92.	83.	83.	0.42
+	HYDROGRAPH AT	160T	27.	4.03	2.	2.	2.	0.01
+	2 COMBINED AT	EMR11	242.	4.27	94.	85.	85.	0.43

+	ROUTED TO REMR11	242.	4.37	93.	85.	85.	0.43
+	HYDROGRAPH AT 160U	174.	4.07	18.	16.	16.	0.08
+	2 COMBINED AT *EMR12	357.	4.17	111.	101.	101.	0.51
+	2 COMBINED AT EMR12	539.	4.13	132.	120.	120.	0.61
+	ROUTED TO SEMR12	529.	4.20	132.	120.	120.	0.61
+	ROUTED TO REMR12	529.	4.20	132.	119.	119.	0.61
+	HYDROGRAPH AT 160AA	14.	4.03	1.	1.	1.	0.00
+	2 COMBINED AT EMR13	536.	4.20	133.	121.	121.	0.61

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

J.6

MALTA DRAIN

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****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*              MAY   1991              *
*           VERSION 4.0.1E             *
*     Lahey F77L-EM/32 version 5.01    *
*       Dodson & Associates, Inc.      *
*  RUN DATE  04/05/95  TIME  14:53:22  *
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*                                      *
*    U.S. ARMY CORPS OF ENGINEERS      *
*    HYDROLOGIC ENGINEERING CENTER     *
*          609 SECOND STREET           *
*       DAVIS, CALIFORNIA 95616        *
*           (916) 551-1748             *
*                                      *
****************************************
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X     X  XXXXXXX   XXXXX          X
X     X  X        X     X        XX
X     X  X        X              X
XXXXXXX  XXXX     X       XXXXX  X
X     X  X        X              X
X     X  X        X     X        X
X     X  XXXXXXX   XXXXX         XXX
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THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

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

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

  1           ID   MALTA DRAIN - EXISTING CONDITIONS, AGK ENGINEERS, 04-05-95
  2           ID   100-Year 6-Hour Storm
  3           ID   time steps at 2 minutes
  4           ID   File:  170-6CE.DAT
  5           ID
  6           ID
  7           IT       2                    200
  8           IO       5
              *DIAGRAM
  9           IN      15
 10           JD    3.20    0.01
 11           PC    .000    .008    .016    .025    .033    .041    .050    .058    .066    .074
 12           PC    .087    .099    .118    .138    .216    .377    .834    .911    .931    .950
 13           PC    .962    .972    .983    .991   1.000
 14           JD    3.18    0.50
 15           JD    3.14    2.80
 16           PC    .000    .009    .016    .025    .034    .042    .051    .059    .067    .076
 17           PC    .087    .100    .120    .163    .252    .451    .694    .837    .900    .938
 18           PC    .950    .963    .975    .988   1.000
 19           JD    2.95    16.0
 20           PC    .000    .015    .020    .030    .048    .063    .076    .090    .105    .119
 21           PC    .135    .152    .175    .222    .304    .472    .670    .796    .868    .912
 22           PC    .946    .960    .973    .987   1.000

 23           KK    160V
 24           KM   SUB-BASIN 160V
 25           KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 26           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 27           BA    .005
 28           LG    .050    .250   5.700    .170  20.000
 29           UC    .108    .192
 30           UA       0       5      16      30      65      77      84      90      94      97
 31           UA     100

 32           KK   R160V
 33           KM   ROUTE 160V THROUGH SUB-BASIN 160W TO POINT OF CON. EMR13A
 34           RS       1    FLOW       0
 35           RC    0.02    0.02    0.02     550   0.022
 36           RX    9975    9980    9985    9986   10014   10015   10020   10025
 37           RY  1730.5  1730.5  1730.5    1730    1730  1730.5  1730.5  1730.5

 38           KK    160W
 39           KM   SUB-BASIN 160W
 40           KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 41           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 42           BA    .002
 43           LG    .050    .250   5.700    .170  22.500
 44           UC    .083    .139
 45           UA       0       5      16      30      65      77      84      90      94      97
 46           UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  47          KK  EMR13A
  48          KM   EMERAL WASH CONCENTRATION POIT 13A - COMBINE  R160V, 160W
  49          HC       2

  50          KK   D160W
  51          KM   DIVERSION AT INCA AV. AND BARON DR.
  52          DT  DO160W
  53          DI       1      10     100    1000
  54          DQ     0.8       8      80     800

  55          KK   R160W
  56          KM   ROUTE 160W THROUGH SUB-BASIN 170B TO CON. POINT MLT1
  57          RS       1    FLOW       0
  58          RC    0.02    0.02    0.02     460   0.091
  59          RX    9975    9980    9985    9986   10014   10015   10020   10025
  60          RY  1700.5  1700.5  1700.5    1700    1700  1700.5  1700.5  1700.5

  61          KK    170A
  62          KM   SUB-BASIN 170A
  63          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
  64          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
  65          BA    .024
  66          LG    .150    .250   5.700    .207  13.750
  67          UC    .138    .120
  68          UA       0       5      16      30      65      77      84      90      94      97
  69          UA     100

  70          KK   170B
  71          KM   SUB-BASIN 170B
  72          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
  73          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
  74          BA    .004
  75          LG    .050    .250   5.700    .170  25.000
  76          UC    .083    .087
  77          UA       0       5      16      30      65      77      84      90      94      97
  78          UA     100

  79          KK    MLT1
  80          KM   MALTA DRAIN CONCENTRATION POINT 1 - COBINE R160W, 170A, 170B
  81          HC       3

  82          KK   RMLT1
  83          KM   ROUTE MLT1 THROUGH SUB-BASIN 170C TO POINT OF CON. MLT2
  84          RS       4    FLOW       0
  85          RC    0.04    0.04    0.04    1844   0.029
  86          RX    9850    9950    9975    9990   10005   10020   10055   10100
  87          RY    1680    1660    1658    1656    1656    1660    1670    1680

  88          KK    170C
  89          KM   SUB-BASIN 170C
  90          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
  91          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
  92          BA    .034
  93          LG    .150    .250   5.700    .207  12.500
```

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

  94          UC    .171    .179
  95          UA       0       5      16      30      65      77      84      90      94      97
  96          UA     100

  97          KK    MLT2
  98          KM   MALTA DRAIN CONCENTRATION POINT 2 - COBINE RMLT1, 170C
  99          HC       2

 100          KK    170D
 101          KM   SUB-BASIN 170D
 102          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 103          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 104          BA    .007
 105          LG    .050    .250   5.700    .170  17.500
 106          UC    .138    .250
 107          UA       0       5      16      30      65      77      84      90      94      97
 108          UA     100

 109          KK    MLT3
 110          KM   MALTA DRAIN CONCENTRATION POINT 3 - COBINE RMLT2, 170D
 111          HC       2

 112          KK   RMLT3
 113          KM   ROUTE MLT3 THROUGH SUB-BASIN 170E TO POINT OF CON. MLT4
 114          RS       7    FLOW       0
 115          RC    0.04    0.04    0.04    3852   0.023
 116          RX    9805    9890    9955    9990   10005   10010   10137   10180
 117          RY    1574    1573    1572    1562    1562    1564    1566    1580

 118          KK    170E
 119          KM   SUB-BASIN 170E
 120          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 121          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 122          BA    .095
 123          LG    .142    .250   5.700    .187  25.340
 124          UC    .246    .249
 125          UA       0       5      16      30      65      77      84      90      94      97
 126          UA     100

 127          KK    MLT4
 128          KM   MALTA DRAIN CONCENTRATION POINT 4 - COBINE RMLT3, 170E
 129          HC       2

 130          KK    170F
 131          KM   SUB-BASIN 170F
 132          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 133          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 134          BA    .018
 135          LG    .092    .250   5.700    .170  35.820
 136          UC    .162    .176
 137          UA       0       5      16      30      65      77      84      90      94      97
 138          UA     100
```

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

 139          KK   R170F
 140          KM   ROUTE 170F THROUGH SUB-BASIN 170G  TO POINT OF CON. MLT4A
 141          RS       1    FLOW       0
 142          RC    0.02    0.02    0.02     288   0.035
 143          RX    9975    9980    9985    9986   10014   10015   10020   10025
 144          RY  1540.5  1540.5  1540.5    1540    1540  1540.5  1540.5  1450.5

 145          KK    170G
 146          KM   SUB-BASIN 170G
 147          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 148          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 149          BA    .003
 150          LG    .050    .250   5.700    .170  50.110
 151          UC    .133    .334
 152          UA       0       5      16      30      65      77      84      90      94      97
 153          UA     100

 154          KK   MLT4A
 155          KM   MALTA DRAIN CONCENTRATION POINT 4A - COBINE RMLT4, 170G, 170F
 156          HC       3

 157          KK  RMLT4A
 158          KM   ROUTE MLT4A THROUGH SUB-BASIN 170H TO POINT OF CON. MLT5
 159          RS       2    FLOW       0
 160          RC    0.04    0.04    0.04     626   0.034
 161          RX    9825    9870    9955    9995   10005   10020   10140   10175
 162          RY    1556    1550  1547.5    1537    1537    1544  1545.5    1550

 163          KK    170H
 164          KM   SUB-BASIN 170H
 165          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 166          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 167          BA    .009
 168          LG    .114    .250   5.700    .178  22.730
 169          UC    .108    .090
 170          UA       0       5      16      30      65      77      84      90      94      97
 171          UA     100

 172          KK    MLT5
 173          KM   MALTA DRAIN CONCENTRATION POINT 5 - COBINE RMLT4A, 170H
 174          HC       2

 175          KK   SMLT5
 176          KM   ROUTE MLT5 THROUGH 2-48" CMP CULVERT AT SAGUARO BLV.
 177          RS       1    ELEV 1516.23
 178          SQ       0      44     132     240     560
 179          SE  1516.2  1518.2  1520.2  1523.8  1524.2
 180          SA    0.02     0.1
 181          SE    1516    1524
```

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

 182          KK   RMLT5
 183          KM   ROUTE MLT5 THROUGH SUB-BASIN 170I-3 TO POINT OF CON. MLT6
 184          RS       1    FLOW       0
 185          RC    0.04    0.04    0.04     296   0.017
 186          RX    9890   9930     9950    9995   10007   10035   10060   10110
 187          RY    1523    1522    1518    1514    1514    1516    1523    1524

 188          KK   17011
 189          KM   SUB-BASIN 170I-1
 190          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 191          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 192          BA    .022
 193          LG    .075    .250   5.700    .170  38.250
 194          UC    .192    .260
 195          UA       0       5      16      30      65      77      84      90      94      97
 196          UA     100

 197          KK  D17911
 198          KM   DIVERSION AT INTERSECTION OF SAGUARO AND PANORAME
 199          DT  DO180S
 200          DI       1      10     100    1000
 201          DQ     0.5       5      50     500

 202          KK  R17011
 203          KM   ROUTE 17011 (NON-DIVERTED) THROUGH SUB-BASIN 17012 TO MLT6A
 204          RS       4    FLOW       0
 205          RC    0.02    0.02    0.02    1738   0.025
 206          RX    9945    9952    9960  9960.5 10039.5   10040   10048   10055
 207          RY  1570.5  1570.5  1570.5    1570    1570  1570.5  1570.5  1570.5

 208          KK   17012
 209          KM   SUB-BASIN 170I-2
 210          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 211          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 212          BA    .012
 213          LG    .050    .250   5.700    .170  62.990
 214          UC    .125    .184
 215          UA       0       5      16      30      65      77      84      90      94      97
 216          UA     100

 217          KK   MLT6A
 218          KM   MALTA DRAIN CONCENTRATION POINT 6A - COBINE R17011, 17012
 219          HC       2

 220          KK  DMLT6A
 221          KM   DIVERSION AT INTERSECTION OF SAGUARO AND EL PUEBLO
 222          DT  DO180R
 223          DI       1      10     100    1000
 224          DQ     0.5       5      50     500
```

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

 225          KK  RMLT6A
 226          KM   ROUTE MLT6A (NON-DIVERDED) THROUGH SUB-BASIN 17013 TO MLT6
 227          RS       2    FLOW       0
 228          RC    0.02    0.02    0.02    1040   0.040
 229          RX    9945    9952    9960  9960.5 10039.5   10040   10048   10055
 230          RY  1576.5  1576.5  1576.5    1576    1576  1576.5  1576.5  1576.5

 231          KK   17013
 232          KM   SUB-BASIN 170I-3
 233          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 234          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 235          BA    .006
 236          LG    .066    .250   5.700    .170  46.990
 237          UC    .142    .241
 238          UA       0       5      16      30      65      77      84      90      94      97
 239          UA     100

 240          KK    MLT6
 241          KM   MALTA DRAIN CONCENTRATION POINT 6 - COBINE RMLT5, RMLT6A, 17013
 242          HC       3
 243          ZZ
```

SCHEMATIC DIAGRAM OF STREAM NETWORK

```
LINE    (V) ROUTING          (--->) DIVERSION OR PUMP FLOW

NO.     (.) CONNECTOR        (<---) RETURN OF DIVERTED OR PUMPED FLOW

 23       160V
             V
             V
 32      R160V
             .
             .
 38          .        160W
             .           .
             .           .
 47    EMR13A............
             .
             .
 52          .-------> DO160W
 50      D160W
             V
             V
 55      R160W
             .
             .
 61          .        170A
             .           .
             .           .
 70          .           .       170B
             .           .          .
             .           .          .
 79      MLT1........................
             V
             V
 82      RMLT1
             .
             .
 88          .        170C
             .           .
             .           .
 97      MLT2............
             .
             .
100          .        170D
             .           .
             .           .
109      MLT3............
             V
             V
112      RMLT3
             .
             .
118          .        170E
             .           .
             .           .
127      MLT4............
             .
             .
130          .        170F
             .           V
             .           V
139          .       R170F
             .           .
             .           .
145          .           .       170G
             .           .          .
             .           .          .
154      MLT4A.......................
             V
             V
       RMLT4A
```

```
            .
            .
            .        170H
            .          .
            .          .
172       MLT5............
            V
            V
175      SMLT5
            V
            V
182      RMLT5
            .
            .
188         .       170I1
            .          .
            .          .
199         .          .-------> DO180S
197         .      D179I1
            .          V
            .          V
202         .      R170I1
            .          .
            .          .
208         .          .       170I2
            .          .          .
            .          .          .
217         .      MLT6A...........
            .          .
            .          .
222         .          .-------> DO180R
220         .      DMLT6A
            .          V
            .          V
225         .      RMLT6A
            .          .
            .          .
            .          .       170I3
            .          .          .
            .          .          .
240      MLT6........................
```

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

```
*****************************************
*                                       *
*  FLOOD HYDROGRAPH PACKAGE  (HEC-1)    *
*              MAY   1991               *
*            VERSION 4.0.1E             *
*     Lahey F77L-EM/32 version 5.01     *
*       Dodson & Associates, Inc.       *
*  RUN DATE  04/05/95  TIME  14:53:22   *
*****************************************
```

```
*****************************************
*                                       *
*    U.S. ARMY CORPS OF ENGINEERS       *
*    HYDROLOGIC ENGINEERING CENTER      *
*          609 SECOND STREET            *
*       DAVIS, CALIFORNIA 95616         *
*           (916) 551-1748              *
*                                       *
*****************************************
```

```
                    MALTA DRAIN - EXISTING CONDITIONS, AGK ENGINEERS, 04-05-95
                    100-Year 6-Hour Storm
                    time steps at 2 minutes
                    File:  170-6CE.DAT


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

    IT        HYDROGRAPH TIME DATA
                     NMIN          2  MINUTES IN COMPUTATION INTERVAL
                    IDATE      1   0  STARTING DATE
                    ITIME       0000  STARTING TIME
                       NQ        200  NUMBER OF HYDROGRAPH ORDINATES
                   NDDATE      1   0  ENDING DATE
                   NDTIME       0638  ENDING TIME
                    ICENT         19  CENTURY MARK

             COMPUTATION INTERVAL    0.03 HOURS
                  TOTAL TIME BASE    6.63 HOURS

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

 10 JD        INDEX STORM NO. 1
                    STRM       3.20  PRECIPITATION DEPTH
                    TRDA       0.01  TRANSPOSITION DRAINAGE AREA

 11 PI          PRECIPITATION PATTERN
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.01      0.01      0.01
                  0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                  0.02      0.02      0.04      0.06      0.06      0.06      0.06      0.06      0.06      0.06
                  0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

 JD        INDEX STORM NO. 2
```

```
            STRM        3.18  PRECIPITATION DEPTH
            TRDA        0.50  TRANSPOSITION DRAINAGE AREA

 PI       PRECIPITATION PATTERN
            0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
            0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
            0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
            0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
            0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
            0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
            0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
            0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
            0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
            0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.01        0.01        0.01
            0.01        0.01        0.01        0.01        0.01        0.02        0.02        0.02        0.02        0.02
            0.02        0.02        0.04        0.06        0.06        0.06        0.06        0.06        0.06        0.06
            0.01        0.01        0.01        0.01        0.01        0.01        0.01        0.01        0.00        0.00
            0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
            0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
            0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
            0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
            0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00

15 JD     INDEX STORM NO. 3
            STRM        3.14  PRECIPITATION DEPTH
            TRDA        2.80  TRANSPOSITION DRAINAGE AREA

16 PI       PRECIPITATION PATTERN
            0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
            0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
            0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
            0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
            0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
            0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
            0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
            0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
            0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
            0.01        0.01        0.01        0.01        0.01        0.01        0.01        0.01        0.01        0.01
            0.01        0.01        0.01        0.01        0.01        0.03        0.03        0.03        0.03        0.03
            0.03        0.03        0.03        0.03        0.03        0.03        0.03        0.03        0.03        0.03
            0.02        0.02        0.02        0.02        0.02        0.02        0.02        0.01        0.01        0.01
            0.01        0.01        0.01        0.01        0.01        0.01        0.01        0.01        0.01        0.01
            0.01        0.01        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
            0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
            0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
            0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00

19 JD     INDEX STORM NO. 4
            STRM        2.95  PRECIPITATION DEPTH
            TRDA       16.00  TRANSPOSITION DRAINAGE AREA

20 PI       PRECIPITATION PATTERN
            0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
            0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
            0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
            0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
            0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
            0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
            0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
            0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
            0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
            0.01        0.01        0.01        0.01        0.01        0.01        0.01        0.01        0.01        0.01
            0.01        0.01        0.01        0.01        0.01        0.02        0.02        0.02        0.02        0.02
            0.02        0.02        0.02        0.03        0.03        0.03        0.03        0.03        0.03        0.03
            0.02        0.02        0.02        0.02        0.02        0.02        0.02        0.01        0.01        0.01
            0.01        0.01        0.01        0.01        0.01        0.01        0.01        0.01        0.01        0.01
            0.01        0.01        0.01        0.00        0.00        0.00        0.00        0.00        0.00        0.00
            0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
            0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
            0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
```

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

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	160V	13.	4.03	1.	1.	1.	0.00		
+	ROUTED TO	R160V	13.	4.07	1.	1.	1.	0.00		
+	HYDROGRAPH AT	160W	6.	4.00	0.	0.	0.	0.00		
+	2 COMBINED AT	EMR13A	19.	4.03	2.	1.	1.	0.01		
+	DIVERSION TO	DO160W	15.	4.03	1.	1.	1.	0.01		
+	HYDROGRAPH AT	D160W	4.	4.03	0.	0.	0.	0.01		
+	ROUTED TO	R160W	4.	4.07	0.	0.	0.	0.01		
+	HYDROGRAPH AT	170A	71.	4.03	5.	5.	5.	0.02		
+	HYDROGRAPH AT	170B	13.	4.00	1.	1.	1.	0.00		
+	3 COMBINED AT	MLT1	87.	4.03	6.	6.	6.	0.04		
+	ROUTED TO	RMLT1	83.	4.10	6.	6.	6.	0.04		
+	HYDROGRAPH AT	170C	87.	4.03	7.	6.	6.	0.03		
+	2 COMBINED AT	MLT2	167.	4.07	13.	12.	12.	0.07		
+	HYDROGRAPH AT	170D	16.	4.03	2.	1.	1.	0.01		
+	2 COMBINED AT	MLT3	183.	4.07	15.	14.	14.	0.08		
+	ROUTED TO	RMLT3	175.	4.17	15.	14.	14.	0.08		
+	HYDROGRAPH AT	170E	212.	4.07	22.	20.	20.	0.09		
+	2 COMBINED AT	MLT4	366.	4.13	37.	34.	34.	0.17		
+	HYDROGRAPH AT	170F	49.	4.03	5.	4.	4.	0.02		
+	ROUTED TO	R170F	49.	4.03	5.	4.	4.	0.02		
+	HYDROGRAPH AT	170G	6.	4.03	1.	1.	1.	0.00		

+	3 COMBINED AT	MLT4A	415.	4.10	42.	38.	38.	0.19
+	ROUTED TO	RMLT4A	414.	4.13	42.	38.	38.	0.19
+	HYDROGRAPH AT	170H	29.	4.00	2.	2.	2.	0.01
+	2 COMBINED AT	MLT5	431.	4.10	44.	40.	40.	0.20
+	ROUTED TO	SMLT5	440.	4.13	44.	40.	40.	0.20
+	ROUTED TO	RMLT5	429.	4.13	44.	40.	40.	0.20
+	HYDROGRAPH AT	170I1	51.	4.07	6.	5.	5.	0.02
+	DIVERSION TO	DO180S	25.	4.07	3.	3.	3.	0.02
+	HYDROGRAPH AT	D179I1	25.	4.07	3.	2.	2.	0.02
+	ROUTED TO	R170I1	24.	4.17	3.	2.	2.	0.02
+	HYDROGRAPH AT	170I2	34.	4.03	3.	3.	3.	0.01
+	2 COMBINED AT	MLT6A	51.	4.07	6.	6.	6.	0.03
+	DIVERSION TO	DO180R	26.	4.07	3.	3.	3.	0.03
+	HYDROGRAPH AT	DMLT6A	26.	4.07	3.	3.	3.	0.03
+	ROUTED TO	RMLT6A	25.	4.13	3.	3.	3.	0.03
+	HYDROGRAPH AT	170I3	15.	4.03	2.	1.	1.	0.01
+	3 COMBINED AT	MLT6	466.	4.13	49.	44.	44.	0.24

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

J.7

COLONY WASH

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*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*              MAY   1991               *
*            VERSION 4.0.1E             *
*     Lahey F77L-EM/32 version 5.01     *
*       Dodson & Associates, Inc.       *
*  RUN DATE  04/05/95  TIME  14:57:24   *
*****************************************
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*****************************************
*                                       *
*    U.S. ARMY CORPS OF ENGINEERS       *
*    HYDROLOGIC ENGINEERING CENTER      *
*          609 SECOND STREET            *
*       DAVIS, CALIFORNIA 95616         *
*           (916) 551-1748              *
*                                       *
*****************************************
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X     X  XXXXXXX   XXXXX          X
X     X  X        X     X        XX
X     X  X        X               X
XXXXXXX  XXXX     X        XXXXX  X
X     X  X        X               X
X     X  X        X     X         X
X     X  XXXXXXX   XXXXX         XXX
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THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

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

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

  1           ID   COLONY WASH - EXISTING CONDITIONS, AGK ENGINEERS, 04-05-95
  2           ID   100-Year 6-Hour storm
  3           ID   Time step at 2 minutes
  4           ID   File: 180-6CE.DAT
  5           ID
  6           IT      2                    200
  7           IO      5
              *DIAGRAM
  8           IN     15
  9           JD   3.20    0.01
 10           PC    .000    .008    .016    .025    .033    .041    .050    .058    .066    .074
 11           PC    .087    .099    .118    .138    .216    .377    .834    .911    .931    .950
 12           PC    .962    .972    .983    .991   1.000
 13           JD   3.18    0.50
 14           JD   3.14    2.80
 15           PC    .000    .009    .016    .025    .034    .042    .051    .059    .067    .076
 16           PC    .087    .100    .120    .163    .252    .451    .694    .837    .900    .938
 17           PC    .950    .963    .975    .988   1.000
 18           JD   2.95    16.0
 19           PC    .000    .015    .020    .030    .048    .063    .076    .090    .105    .119
 20           PC    .135    .152    .175    .222    .304    .472    .670    .796    .868    .912
 21           PC    .946    .960    .973    .987   1.000

 22           KK    185A
 23           KM   SUB-BASIN 185A
 24           KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 25           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 26           BA    .041
 27           LG    .100    .250   5.700    .189  22.500
 28           UC    .175    .193
 29           UA       0       5      16      30      65      77      84      90      94      97
 30           UA     100

 31           KK   R185A
 32           KM   ROUTE 185A THROUGH SUB-BASIN 185B TO CON. POINT IRW1
 33           RS       7    FLOW       0
 34           RC    0.04    0.04    0.04    4042    0.04
 35           RX    9885    9940    9980   10000   10015   10105   10120   10170
 36           RY    1710    1700    1696    1692    1692    1704    1710    1720

 37           KK    185B
 38           KM   SUB-BASIN 185B
 39           KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 40           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 41           BA    .081
 42           LG    .150    .250   5.700    .207   8.940
 43           UC    .313    .335
 44           UA       0       5      16      30      65      77      84      90      94      97
 45           UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  46          KK    IRW1
  47          KM   IRONWOOD WASH CONCENTRATION POINT 1 - COMBINES R185A, 185B
  48          HC       2

  49          KK   SIRW1
  50          KM   ROUTE THROUGH A 48" CMP CULVERT UNDER CHOLA DRIVE BY FOUNTAIN HILLS BLVD
  51          RS       1    ELEV  1663.5
  52          SQ       0      25      76     150     180
  53          SE  1663.5  1665.5  1667.5  1671.5    1674
  54          SA       0    0.11    0.69    1.70
  55          SE  1663.5    1664    1668    1676

  56          KK    180A
  57          KM   SUB-BASIN 180A
  58          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
  59          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
  60          BA    .025
  61          LG    .150    .250   5.700    .207  13.750
  62          UC    .158    .184
  63          UA       0       5      16      30      65      77      84      90      94      97
  64          UA     100

  65          KK   R180A
  66          KM   ROUTE 180A THROUGH SUB-BASIN 180B TO CON. POINT IRW2
  67          RS       1    FLOW       0
  68          RC    0.02    0.02    0.02     366   0.045
  69          RX    9975    9980    9985    9986   10014   10015   10020   10025
  70          RY  1680.5  1680.5  1680.5    1680    1680  1680.5  1680.5  1680.5

  71          KK    180B
  72          KM   SUB-BASIN 180B
  73          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
  74          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
  75          BA    .029
  76          LG    .067    .250   5.700    .183  26.710
  77          UC    .300    .858
  78          UA       0       5      16      30      65      77      84      90      94      97
  79          UA     100

  80          KK    IRW2
  81          KM   IRONWOOD WASH CONCENTRATION POINT 2 - COMBINE SIRW1, R108A, 180B
  82          HC       3

  83          KK   RIRW2
  84          KM   ROUTE IRW2 THROUGH SUB-BASIN 180F TO CON. POIT CLN1
  85          RS       1    FLOW       0
  86          RC    0.04    0.04    0.04     283   0.060
  87          RX    9870    9960    9980    9995   10010   10055   10085   10090
  88          RY    1668    1665    1664    1658    1658    1666    1670    1674
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  89          KK    186A
  90          KM   SUB-BASIN 186A
  91          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
  92          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
  93          BA    .099
  94          LG    .142    .250   5.700    .203   1.400
  95          UC    .267    .223
  96          UA       0       5      16      30      65      77      84      90      94      97
  97          UA     100

  98          KK    186B
  99          KM   SUB-BASIN 186B
 100          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 101          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 102          BA    .005
 103          LG    .149    .250   5.700    .207    .190
 104          UC    .142    .169
 105          UA       0       5      16      30      65      77      84      90      94      97
 106          UA     100

 107          KK   R186B
 108          KM   ROUTE R186B THROUGH SUB-BASIN 186D (PALISADES BLV)
 109          RS       3    FLOW       0
 110          RC    0.02    0.02    0.02    1349    0.08
 111          RX    9975    9980    9985    9986   10014   10015   10020   10025
 112          RY  1900.6  1900.5  1900.5    1900    1900  1900.5  1900.5  1900.6

 113          KK   SNB1A
 114          KM   SUNBURST CONCENTRATION POINT 1A - COMBINE 186A, R186B
 115          HC       2

 116          KK  RSNB1A
 117          KM   ROUTE SNB1A THROUGH SUB-BASIN 186D (WASH) TO CON. POINT SNB1
 118          RS       7    FLOW       0
 119          RC    0.04    0.04    0.04    3780   0.055
 120          RX    9850    9910    9970    9995   10005   10030   10060   10090
 121          RY    1920    1904    1899    1892    1892    1900    1910    1920

 122          KK    186C
 123          KM   SUB-BASIN 186C
 124          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 125          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 126          BA    .017
 127          LG    .081    .250   5.700    .175  25.670
 128          UC    .158    .225
 129          UA       0       5      16      30      65      77      84      90      94      97
 130          UA     100

 131          KK   R186C
 132          KM   ROUTE 186C THROUGH SUB-BASIN 186D (MANCHESTER DR.) TO CON. POINT SNB1
 133          RS       1    FLOW       0
 134          RC    0.02    0.02    0.02     407   0.125
 135          RX  9947.5  9952.5  9957.5    9960   10040 10042.5 10047.5 10052.5
 136          RY  2040.5  2040.5  2040.5    2040    2040  2040.5  2040.5  2040.5
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 137          KK    186D
 138          KM   SUB-BASIN 186D
 139          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 140          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 141          BA    .081
 142          LG    .150    .250   5.800    .195   9.320
 143          UC    .308    .334
 144          UA       0       5      16      30      65      77      84      90      94      97
 145          UA     100

 146          KK    SNB1
 147          KM   SUNBURST WASH CONSENTRATION POINT 1 - COMBINE RSNB1A, R186C, 186D
 148          HC       3

 149          KK   RSNB1
 150          KM   ROUTE SNB1 THROUGH SUB-BASIN 186F  TO CON. POINT SNB2
 151          RS       4    FLOW       0
 152          RC    0.04    0.04    0.04    1961   0.042
 153          RX    9935    9963    9985    9997   10003   10050   10090   10125
 154          RY    1840    1830    1820    1814    1814    1820    1830    1840

 155          KK    186E
 156          KM   SUB-BASIN 186E
 157          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 158          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 159          BA    .036
 160          LG    .144    .250   5.700    .205   1.920
 161          UC    .200    .178
 162          UA       0       5      16      30      65      77      84      90      94      97
 163          UA     100

 164          KK    186F
 165          KM   SUB-BASIN 186F
 166          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 167          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 168          BA    .029
 169          LG    .150    .250   5.800    .195   4.820
 170          UC    .221    .240
 171          UA       0       5      16      30      65      77      84      90      94      97
 172          UA     100

 173          KK    SNB2
 174          KM   SUNBURST WASH CONSENTRATION POINT 2 - COMBINE RSNB1, 186E, 186F
 175          HC       3

 176          KK   RSNB2
 177          KM   ROUTE SNB2 THROUGH SUB-BASIN 186G  TO CON. POINT SNB3
 178          RS       5    FLOW       0
 179          RC    0.04    0.04    0.04    2408   0.026
 180          RX    9865    9930    9960    9995   10005   10040   10060   10140
 181          RY    1790    1772    1766    1762    1762    1764    1772    1790
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 182          KK    186G
 183          KM   SUB-BASIN 186G
 184          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 185          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 186          BA    .066
 187          LG    .150    .250   5.700    .207   1.250
 188          UC    .262    .259
 189          UA       0       5      16      30      65      77      84      90      94      97
 190          UA     100

 191          KK    SNB3
 192          KM   SUNBURST WASH CONSENTRATION POINT 3 - COMBINE RSNB2, 186G
 193          HC       2

 194          KK   SSNB3
 195          KM   ROUTE SNB3 THROUGH CULVERT AT SYCAMORE DRIVE
 196          RS       1    ELEV  1746.4
 197          SQ       0      21      66     127     185
 198          SE  1746.4  1748.4  1750.4  1754.4  1761.1
 199          SA       0    0.02    2.03
 200          SE  1746.4    1722    1740

 201          KK    186H
 202          KM   SUB-BASIN 186H
 203          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 204          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 205          BA    .025
 206          LG    .050    .250   5.700    .170  20.540
 207          UC    .258    .575
 208          UA       0       5      16      30      65      77      84      90      94      97
 209          UA     100

 210          KK    160E
 211          KM   SUB-BASIN 160E
 212          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 213          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 214          BA    .004
 215          LG    .092    .250   5.700    .170  26.390
 216          UC    .129    .255
 217          UA       0       5      16      30      65      77      84      90      94      97
 218          UA     100

 219          KK   R160E
 220          KM   ROUTE 160E THROUGH SUB-BASIN 186H TO CON. POINT SNB4
 221          RS       2    FLOW       0
 222          RC    0.02    0.02    0.02     700   0.174
 223          RX    9975    9980    9985    9986   10014   10015   10020   10025
 224          RY  1733.5  1733.5  1733.5    1733    1733  1733.5  1733.5  1733.5
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 225          KK    SNB4
 226          KM    SUNBURST WASH CONSENTRATION POINT 4 - COMBINE SSNB3, 186H, R160E
 227          HC       3

 228          KK    RSNB4
 229          KM    ROUTE SNB4 THROUGH SUB-BASIN 186I  TO CON. POINT SNB5
 230          RS       2    FLOW       0
 231          RC    0.04    0.04    0.04    1004   0.023
 232          RX    9905    9945    9965    9990   10015   10070   10100   10140
 233          RY    1726    1716    1710    1702    1702    1704    1716    1724

 234          KK    186I
 235          KM    SUB-BASIN 186I
 236          KM    6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 237          KM    THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 238          BA     .029
 239          LG     .150    .250   5.700    .207   2.500
 240          UC     .200    .197
 241          UA       0       5      16      30      65      77      84      90      94      97
 242          UA     100

 243          KK    *SNB5
 244          KM    SUNBURST WASH CONCENTRATION POINT *5 - RSNB4, 186I
 245          HC       2

 246          KK    187A
 247          KM    SUB-BASIN 187A
 248          KM    6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 249          KM    THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 250          BA     .009
 251          LG     .150    .250   5.800    .195  10.810
 252          UC     .125    .092
 253          UA       0       5      16      30      65      77      84      90      94      97
 254          UA     100

 255          KK    R187A
 256          KM    ROUTE 187A THROUGHT SUB-BASIN 187B TO POINT OF CON. GRS1
 257          RS       1    FLOW       0
 258          RC    0.04    0.04    0.04     445   0.022
 259          RX    9785    9845    9940    9988   10010   10030   10125   10170
 260          RY    1870    1861    1858    1852    1852    1858    1872    1876

 261          KK    187B
 262          KM    SUB-BASIN 187B
 263          KM    6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 264          KM    THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 265          BA     .008
 266          LG     .150    .250   5.800    .195  12.740
 267          UC     .162    .204
 268          UA       0       5      16      30      65      77      84      90      94      97
 269          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 270          KK    GRS1
 271          KM    GREYSTONE WASH CONCENTRATION POINT 1 - COMBINE R187A, 187B
 272          HC       2

 273          KK   RGRS1
 274          KM   ROUTE GRS1 THROUGHT SUB-BASIN 187D TO POINT OF CON. GRS2
 275          RS       6    FLOW       0
 276          RC    0.04    0.04    0.04    3514    .044
 277          RX    9920    9955    9980    9995   10005   10040   40075   10110
 278          RY    1780    1770    1760    1754    1754    1760    1770    1780

 279          KK    187C
 280          KM   SUB-BASIN 187C
 281          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 282          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 283          BA    .012
 284          LG    .150    .250   5.700    .198  19.380
 285          UC    .125    .141
 286          UA       0       5      16      30      65      77      84      90      94      97
 287          UA     100

 288          KK   R187C
 289          KM   ROUTE 187C THROUGHT SUB-BASIN 187D TO POINT OF CON. GRS2
 290          RS       4    FLOW       0
 291          RC    0.04    0.04    0.04    2181    .061
 292          RX    9920    9955    9980    9995   10005   10040   40075   10110
 293          RY    1780    1770    1760    1754    1754    1760    1770    1780

 294          KK    187D
 295          KM   SUB-BASIN 187D
 296          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 297          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 298          BA    .070
 299          LG    .150    .250   5.700    .207   9.830
 300          UC    .313    .368
 301          UA       0       5      16      30      65      77      84      90      94      97
 302          UA     100

 303          KK   *GRS2
 304          KM   GREYSTONE WASH CONCENTRATION POINT *2 - RGRS1, R187C, 187D
 305          HC       3

 306          KK    188A
 307          KM   SUB-BASIN 188A
 308          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 309          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 310          BA    .009
 311          LG    .086    .250   5.700    .185  28.530
 312          UC    .129    .185
 313          UA       0       5      16      30      65      77      84      90      94      97
 314          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 315          KK   R188A
 316          KM   ROUTE 188A THROUGH SUB-BASIN 188B TO CON. POINT SYC1
 317          RS       2    FLOW       0
 318          RC    0.04    0.04    0.04     747   0.173
 319          RX    9770    9810    9940    9960   10020   10045   10120   10180
 320          RY    1716    1711    1708    1708    1709    1712    1720    1728

 321          KK    188B
 322          KM   SUB-BASIN 188B
 323          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 324          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 325          BA    .066
 326          LG    .149    .250   6.000    .183  13.070
 327          UC    .221    .175
 328          UA       0       5      16      30      65      77      84      90      94      97
 329          UA     100

 330          KK    188C
 331          KM   SUB-BASIN 188C
 332          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 333          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 334          BA    .022
 335          LG    .145    .250   5.800    .194   9.950
 336          UC    .200    .230
 337          UA       0       5      16      30      65      77      84      90      94      97
 338          UA     100

 339          KK    SYR1
 340          KM   SYCAMORE WASH CONCENTRATION POINT 1 - COMBINE SUB-BASINS R188A, 188B, 188C
 341          HC       3

 342          KK   RSYC1
 343          KM   ROUTE SYC1 THROUGH SUB-BASIN 188D TO CON. POINT SYC2
 344          RS       4    FLOW       0
 345          RC    0.04    0.04    0.04    2280   0.034
 346          RX    9915    9950    9985   10000   10008   10020   10055   10085
 347          RY    1850    1840    1830    1826    1826    1830    1840    1850

 348          KK    188D
 349          KM   SUB-BASIN 188D
 350          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 351          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 352          BA    .055
 353          LG    .150    .250   5.800    .195   8.640
 354          UC    .242    .248
 355          UA       0       5      16      30      65      77      84      90      94      97
 356          UA     100

 357          KK    188E
 358          KM   SUB-BASIN 188E
 359          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 360          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 361          BA    .052
 362          LG    .136    .250   5.700    .202   5.140
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 363          UC    .271    .328
 364          UA       0       5      16      30      65      77      84      90      94      97
 365          UA     100

 366          KK    SYR2
 367          KM   SYCAMORE WASH CONCENTRATION POINT 2 - COMBINE SUB-BASINS RSYC1, 188D, 188E
 368          HC       3

 369          KK   RSYC2
 370          KM   ROUTE SYC2 THROUGH SUB-BASIN 188F TO CON. POINT SYC3
 371          RS       6    FLOW       0
 372          RC    0.04    0.04    0.04    3003    0.02
 373          RX    9910    9935    9950    9980   10010   10060   10075   10110
 374          RY    1780    1770    1764    1760    1760    1766    1770    1780

 375          KK    188F
 376          KM   SUB-BASIN 188F
 377          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 378          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 379          BA    .072
 380          LG    .146    .250   5.700    .205   4.640
 381          UC    .271    .272
 382          UA       0       5      16      30      65      77      84      90      94      97
 383          UA     100

 384          KK    SYR3
 385          KM   SYCAMORE WASH CONCENTRATION POINT 3 - COMBINE SUB-BASINS RSYC2, 188F
 386          HC       2

 387          KK   SSYC3
 388          KM   ROUTE SYC3 THROUGH 60" CMP CULVERT AT GREYSTONE DRIVE
 389          RS       1    ELEV    1708
 390          SQ       0      37     115     222     280
 391          SE    1708  1710.5    1713    1718    1722
 392          SA    0.05    1.29
 393          SE    1708    1717

 394          KK   RSYC3
 395          KM   ROUTE SSYC3 THROUGH SUB-BASIN 188G TO CON. POINT SYC4
 396          RS       1    FLOW       0
 397          RC    0.04    0.04    0.04     249   0.024
 398          RX    9770    9810    9940    9960   10020   10045   10120   10180
 399          RY    1716    1711    1708    1702    1702    1712    1720    1728

 400          KK    188G
 401          KM   SUB-BASIN 188G
 402          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 403          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 404          BA    .001
 405          LG    .150    .250   5.700    .207    .000
 406          UC    .100    .176
 407          UA       0       3       5       8      12      20      43      75      90      96
 408          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 409          KK    SYR4
 410          KM   SYCAMORE WASH CONCENTRATION POINT 4 - COMBINE SUB-BASINS RSYC3, 188G
 411          HC       2

 412          KK    GRS2
 413          KM   GREYSTONE WASH POINT OF CONCENTRATION 2 - COMBINE (RGRS1,R187C,187D),SYR4
 414          HC       2

 415          KK   SGRS2
 416          KM   ROUTE GRS2 THROUGH 2-60" AND 48" CULVERT AT SYCAMORE DRIVE TO GRS3
 417          RS       1    ELEV  1595.5
 418          SQ       0     106     226     317     500     594
 419          SE  1595.5    1598  1599.5  1600.5  1603.5  1605.4
 420          SA       0    0.01    0.47    0.73
 421          SE  1595.5    1698    1700 1705.75

 422          KK    187E
 423          KM   SUB-BASIN 187E
 424          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 425          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 426          BA    .005
 427          LG    .050    .250   5.700    .170  33.620
 428          UC    .121    .292
 429          UA       0       5      16      30      65      77      84      90      94      97
 430          UA     100

 431          KK   R187E
 432          KM   ROUTE 187E THROUGHT SUB-BASIN 187F TO POINT OF CON. GRS3A
 433          RS       3    FLOW       0
 434          RC    0.02    0.02    0.02    1707   0.076
 435          RX    9975    9980    9985    9986   10014   10015   10020   10025
 436          RY  1780.5  1780.5  1780.5    1810    1810  1810.5  1780.5  1780.5

 437          KK    187F
 438          KM   SUB-BASIN 187F
 439          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 440          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 441          BA    .003
 442          LG    .050    .250   5.700    .170  25.000
 443          UC    .154    .524
 444          UA       0       5      16      30      65      77      84      90      94      97
 445          UA     100

 446          KK   GRS3A
 447          KM   GREYSTONE WASH POINT OF CONCENTRATION 3A - COMBINE R187E, 187F
 448          HC       2

 449          KK  RGRS3A
 450          KM   ROUTE GRS3A THROUGHT SUB-BASIN 187G TO POINT OF CON. GRS3
 451          RS       1    FLOW       0
 452          RC    0.02    0.02    0.02     337   0.033
 453          RX    9975    9980    9985    9986   10014   10015   10020   10025
 454          RY  1710.5  1710.5  1710.5    1710    1710  1710.5  1710.5  1710.5
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 455          KK   187G
 456          KM   SUB-BASIN 187G
 457          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 458          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 459          BA    .043
 460          LG    .100    .250   5.700    .189  18.020
 461          UC    .354    .652
 462          UA      0       5      16      30      65      77      84      90      94      97
 463          UA     100

 464          KK   GRS3
 465          KM   GREYSTONE WASH POINT OF CONCENTRATION 3 - COMBINE SGRS2, RGRS3A, 187G
 466          HC      3

 467          KK   RGRS3
 468          KM   ROUTE GRS3 THROUGHT SUB-BASIN 187H TO POINT OF CON. GRS4
 469          RS      4    FLOW       0
 470          RC   0.04    0.04    0.04     442   0.045
 471          RX   9705    9755    9965    9990   10030   10065   10085   10130
 472          RY   1708  1699.3  1699.3    1690    1690    1696    1700    1710

 473          KK   187H
 474          KM   SUB-BASIN 187H
 475          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 476          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 477          BA    .004
 478          LG    .150    .250   5.700    .207   3.750
 479          UC    .138    .186
 480          UA      0       5      16      30      65      77      84      90      94      97
 481          UA     100

 482          KK   *SNB5
 483          KM   SUNBURST WASH CONCENTRATION POINT *5 - RGRS3, 187H
 484          HC      2

 485          KK   SNB5
 486          KM   SUNBURST WASH CONSENTRATION POINT 5 - COMBINE (RSNB4, 186I),(RGRS3, 187H)
 487          HC      2

 488          KK   RSNB5
 489          KM   ROUTE SNB5 THROUGH SUB-BASIN 187I  TO CON. POINT SNB6
 490          RS      1    FLOW       0
 491          RC   0.04    0.04    0.04     295    0.02
 492          RX   9685    9760    9870    9950   10005   10035   10225   10255
 493          RY   1710  1691.5  1691.5    1682    1682    1692    1700    1710

 494          KK   187I
 495          KM   SUB-BASIN 187I
 496          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 497          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 498          BA    .024
 499          LG    .150    .250   5.700    .207   7.500
 500          UC    .171    .144
 501          UA      0       5      16      30      65      77      84      90      94      97
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 502          UA     100

 503          KK    SNB6
 504          KM   SUNBURST WASH CONSENTRATION POINT 6 - COMBINE RSNB5, 187I
 505          HC       2

 506          KK   SSNB6
 507          KM   ROUTE THROUGH 30" CMP UNDER DAM AT SUB-BASIN 187I
 508          RS       1    ELEV 1678.86
 509          SQ       0     7.2      22      45      85     100     379     886    1540
 510          SE  1678.9  1680.2  1681.4  1683.9  1693.9  1702.7  1703.7  1704.7  1705.7
 511          SA       0    0.01    0.93    3.47    8.55
 512          SE  1678.9    1680    1686    1694    1704

 513          KK   RSNB6
 514          KM   ROUTE SSNB6 THROUGH SUB-BASIN 180F TO CON. POINT CLN1
 515          RS       4    FLOW       0
 516          RC    0.04    0.04    0.04    1840   0.014
 517          RX    9870    9960    9980    9995   10010   10055   10085   10090
 518          RY    1668    1665    1664    1658    1658    1666    1670    1674

 519          KK    180F
 520          KM   SUB-BASIN 180F
 521          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 522          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 523          BA    .074
 524          LG    .150    .250   5.700    .207  10.070
 525          UC    .225    .165
 526          UA       0       5      16      30      65      77      84      90      94      97
 527          UA     100

 528          KK   *CLN1
 529          KM   COLONY WASH CONCENTRATION POINT *1 - RSNB6, 180F
 530          HC       2

 531          KK    CLN1
 532          KM   COLONY WASH CONCENTRATION POINT 1 - COMBINE RIRW2, (180F, RSNB6)
 533          HC       2

 534          KK   SCLN1
 535          KM   ROUTE CLN1 THROUGH 2-60" ONE WITH SEWER LINE CULVERTS AT FOUNTAIN HILL BLV.
 536          RS       1    ELEV 1649.63
 537          SQ       0      16      68     215     345     415
 538          SE  1649.6  1650.6  1652.1  1654.6  1657.1  1659.1
 539          SA       0    0.13    1.06    8.03
 540          SE  1649.6    1652    1654    1664

 541          KK    180C
 542          KM   SUB-BASIN 180C
 543          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 544          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 545          BA    .010
 546          LG    .098    .250   5.700    .179  15.220
 547          UC    .112    .125
 548          UA       0       5      16      30      65      77      84      90      94      97
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 549          UA     100

 550          KK   R180C
 551          KM   ROUTE 180C THROUGH SUB-BASIN 180D TO CON. POIT CLN2
 552          RS       3    FLOW       0
 553          RC    0.02    0.02    0.02    1228    0.05
 554          RX    9975    9980    9985    9986   10014   10015   10020   10025
 555          RY  1670.5  1670.5  1670.5    1670    1670  1670.5  1670.5  1670.5

 556          KK    180D
 557          KM   SUB-BASIN 180D
 558          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 559          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 560          BA    .003
 561          LG    .064    .250   5.700    .170  30.520
 562          UC    .138    .370
 563          UA       0       5      16      30      65      77      84      90      94      97
 564          UA     100

 565          KK    180E
 566          KM   SUB-BASIN 180E
 567          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 568          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 569          BA    .019
 570          LG    .100    .250   5.700    .183  18.770
 571          UC    .146    .168
 572          UA       0       5      16      30      65      77      84      90      94      97
 573          UA     100

 574          KK    CLN2
 575          KM   COLONY WASH CONCENTRATION POINT 2 - COMBINE SCLN1, R180C, 180D, 180E
 576          HC       4

 577          KK   RCLN2
 578          KM   ROUTE CLN2 THROUGH SUB-BASIN 180G TO CON. POIT CLN3
 579          RS       3    FLOW       0
 580          RC    0.04    0.04    0.04    1364   0.022
 581          RX    9840    9940    9958    9990   10010   10030   10120   10140
 582          RY    1640    1638    1634    1624    1624    1628    1628    1640

 583          KK    180G
 584          KM   SUB-BASIN 180G
 585          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 586          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 587          BA    .029
 588          LG    .150    .250   5.700    .207  15.200
 589          UC    .204    .187
 590          UA       0       5      16      30      65      77      84      90      94      97
 591          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 592          KK    CLN3
 593          KM   COLONY WASH CONCENTRATION POINT 3 - COMBINE RCLN2, 180G
 594          HC       2

 595          KK   SCLN3
 596          KM   ROUTE CLN1 THROUGH 2-60" CMP CULVERT AT ARROLLO VISTA DRIVE.
 597          RS       1    ELEV 1616.64
 598          SQ       0      74     230     444     470
 599          SE  1616.6  1619.1  1621.6  1626.6  1628.8
 600          SA       0    0.01    1.09    3.99
 601          SE  1616.6    1618    1622    1630

 602          KK    180H
 603          KM   SUB-BASIN 180H
 604          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 605          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 606          BA    .021
 607          LG    .150    .250   5.700    .207  26.000
 608          UC    .246    .352
 609          UA       0       5      16      30      65      77      84      90      94      97
 610          UA     100

 611          KK   R180H
 612          KM   ROUTE 180H THROUGH SUB-BASIN 180J TO CON. POIT CLN6B
 613          RS       1    FLOW       0
 614          RC    0.02    0.02    0.02     394   0.010
 615          RX    9975    9980    9985    9986   10014   10015   10020   10025
 616          RY  1670.5  1670.5  1670.5    1670    1670  1670.5  1670.5  1670.5

 617          KK    180I
 618          KM   SUB-BASIN 180I
 619          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 620          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 621          BA    .004
 622          LG    .050    .250   5.700    .170  48.750
 623          UC    .121    .190
 624          UA       0       5      16      30      65      77      84      90      94      97
 625          UA     100

 626          KK   R180I
 627          KM   ROUTE 180I THROUGH SUB-BASIN 180J TO CON. POIT CLN6B
 628          RS       2    FLOW       0
 629          RC    0.02    0.02    0.02    1161   0.051
 630          RX    9975    9980    9985    9986   10014   10015   10020   10025
 631          RY  1670.5  1670.5  1670.5    1670    1670  1670.5  1670.5  1670.5

 632          KK    180J
 633          KM   SUB-BASIN 180J
 634          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 635          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 636          BA    .034
 637          LG    .100    .250   5.700    .189  27.300
 638          UC    .204    .246
 639          UA       0       5      16      30      65      77      84      90      94      97
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 640          UA     100

 641          KK   CLN4B
 642          KM   COLONY WASH CONCENTRATION POINT 4B - COMBINE R180I, 180H, 180J
 643          HC       3

 644          KK  RCLN4B
 645          KM   ROUTE CLN4B THROUGH SUB-BASIN 180M TO CON. POINT CLN4
 646          RS       1    FLOW       0
 647          RC    0.02    0.02    0.02     217   0.010
 648          RX    9977    9980    9985    9986   10014   10015   10020   10027
 649          RY  1630.8  1630.5  1630.5    1630    1630  1630.5  1630.5  1630.8

 650          KK    180M
 651          KM   SUB-BASIN 180M
 652          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 653          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 654          BA    .005
 655          LG    .050    .250   5.700    .170  21.690
 656          UC    .150    .362
 657          UA       0       5      16      30      65      77      84      90      94      97
 658          UA     100

 659          KK    CLN4
 660          KM   COLONY WASH CONCENTRATION POINT 4 - COMBINE SCLN3, RCLN4A, 180M
 661          HC       3

 662          KK   RCLN4
 663          KM   ROUTE CLN4 THROUGH SUB-BASIN 180N TO CON. POIT CLN5
 664          RS       4    FLOW       0
 665          RC    0.04    0.04    0.04    1882   0.014
 666          RX    9890    9915    9940    9990   10010   10050   10080   10115
 667          RY    1610    1598    1596    1590    1590    1596    1598    1612

 668          KK    180N
 669          KM   SUB-BASIN 180N
 670          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 671          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 672          BA    .041
 673          LG    .142    .250   5.700    .205   7.030
 674          UC    .204    .153
 675          UA       0       5      16      30      65      77      84      90      94      97
 676          UA     100

 677          KK    184C
 678          KM   SUB-BASIN 184C
 679          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 680          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 681          BA    .014
 682          LG    .097    .250   5.700    .170  24.400
 683          UC    .133    .163
 684          UA       0       5      16      30      65      77      84      90      94      97
 685          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 686          KK    184D
 687          KM   SUB-BASIN 184D
 688          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 689          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 690          BA    .007
 691          LG    .050    .250   5.700    .170  23.860
 692          UC    .171    .440
 693          UA       0       5      16      30      65      77      84      90      94      97
 694          UA     100

 695          KK    NCL1
 696          KM   NORTH COLONY WASH CONCENTRATION POINT 1 - COMBINES 184C, 184D
 697          HC       2

 698          KK   RNCL1
 699          KM   ROUTE NCL1 THROUGH SUB-BASIN 184E TO CON. POINT NCL2
 700          RS       1    FLOW       0
 701          RC    0.04    0.04    0.04     321    .097
 702          RX    9795    9850    9925    9970   10010   10055   10080   10115
 703          RY    1566    1562    1558    1544    1544    1552    1560    1570

 704          KK    184E
 705          KM   SUB-BASIN 184E
 706          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 707          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 708          BA    .109
 709          LG    .148    .250   5.700    .206   7.710
 710          UC    .396    .494
 711          UA       0       5      16      30      65      77      84      90      94      97
 712          UA     100

 713          KK    NCL2
 714          KM   NORTH COLONY WASH CONCENTRATION POINT 2 - COMBINES RNCL1, 184E
 715          HC       2

 716          KK   SNCL2
 717          KM   ROUTE THROUGH 60" CMP CULVER AT MIMOSA DRIVE
 718          RS       1    ELEV 1739.67
 719          SQ       0      37     115     222     350
 720          SE  1739.7  1742.2  1744.7  1749.7  1759.9
 721          SA   0.001    0.04     1.4
 722          SE    1742    1744    1758

 723          KK    184F
 724          KM   SUB-BASIN 184F
 725          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 726          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 727          BA    .007
 728          LG    .050    .250   5.700    .170  29.320
 729          UC    .162    .384
 730          UA       0       5      16      30      65      77      84      90      94      97
 731          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 732          KK   R184F
 733          KM   ROUTE 184F THROUGH SUB-BASIN 184G TO CON. POINT NCL3
 734          RS       1    FLOW       0
 735          RC    0.04    0.04    0.04     349   0.136
 736          RX    9975    9980    9985    9986   10014   10015   10020   10025
 737          RY  1725.5  1725.5  1725.5    1725    1725  1725.5  1725.5  1725.5

 738          KK    NCL3
 739          KM   NORTH COLONY WASH CONCENTRATION POINT 3 - COMBINES SNCL2, R184F
 740          HC       2

 741          KK   RNCL3
 742          KM   ROUTE NCL3 THROUGH SUB-BASIN 184G TO MOUNTAIN SITE CULVERT INLET
 743          RS       1    FLOW       0
 744          RC    0.04    0.04    0.04     365   0.016
 745          RX    9875    9950    9970    9995   10010   10020   10055   10130
 746          RY    1756    1752    1740    1736    1736    1738    1758    1762

 747          KK   SNCL3
 748          KM   ROUTE THROUGH 60" CMP CULVER AT MOUNTAIN SIDE DRIVE
 749          RS       1    ELEV 1732.65
 750          SQ       0      37     115     222     255
 751          SE  1732.7  1735.2  1737.7  1742.7  1744.7
 752          SA       0    0.03    0.32
 753          SE    1732    1734    1746

 754          KK    184A
 755          KM   SUB-BASIN 184A
 756          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 757          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 758          BA    .019
 759          LG    .051    .250   5.700    .170  32.210
 760          UC    .162    .213
 761          UA       0       5      16      30      65      77      84      90      94      97
 762          UA     100

 763          KK   R184A
 764          KM   ROUTE 184A THROUGH SUB-BASIN 184B TO CON. POINT NCL4A
 765          RS            FLOW       0
 766          RC    0.02    0.02    0.02    4359   0.037
 767          RX    9975    9980    9985    9986   10014   10015   10020   10025
 768          RY  1870.5  1870.5  1870.5    1870    1870  1870.5  1870.5  1870.5

 769          KK    184B
 770          KM   SUB-BASIN 184B
 771          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 772          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 773          BA    .023
 774          LG    .099    .250   5.700    .188  23.090
 775          UC    .204    .376
 776          UA       0       5      16      30      65      77      84      90      94      97
 777          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 778          KK   NCL4A
 779          KM   NORTH COLONY WASH CONCENTRATION POINT 4A - COMBINES R184A, 184B
 780          HC       2

 781          KK  RNCL4A
 782          KM   ROUTE NCL4A THROUGH SUB-BASIN 184G TO CON. POINT NCL4
 783          RS       3    FLOW       0
 784          RC    0.02    0.02    0.02     863   0.103
 785          RX    9975    9980    9985    9986   10014   10015   10020   10025
 786          RY  1810.5  1810.5  1810.5    1810    1810  1810.5  1810.5  1810.5

 787          KK    NCL4
 788          KM   NORTH COLONY WASH CONCENTRATION POINT 4 - COMBINES SNCL3, RNC4A
 789          HC       2

 790          KK   RNCL4
 791          KM   ROUTE NCL4 THROUGH SUB-BASIN 184G TO CON. POINT NCL5
 792          RS       3    FLOW       0
 793          RC    0.04    0.04    0.04    1350   0.027
 794          RX    9865    9930    9960    9995   10005   10020   10133   10200
 795          RY    1730    1720    1716    1708    1708    1710    1714    1730

 796          KK    184G
 797          KM   SUB-BASIN 184G
 798          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 799          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 800          BA    .053
 801          LG    .150    .250   5.700    .207   4.120
 802          UC    .221    .181
 803          UA       0       5      16      30      65      77      84      90      94      97
 804          UA     100

 805          KK    NCL5
 806          KM   NORTH COLONY WASH CONCENTRATION POINT 5 - COMBINES RNCL4, 184G
 807          HC       2

 808          KK   SNCL5
 809          KM   ROUTE THROUGH 60" CMP CULVER AT FOUNTAIN HILL BLV
 810          RS       1    ELEV 1691.39
 811          SQ       0      37     115     222     340
 812          SE  1691.4  1693.9  1696.4  1701.4    1706
 813          SA       0   0.005    2.15
 814          SE  1691.4    1694    1706

 815          KK    184H
 816          KM   SUB-BASIN 184H
 817          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 818          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 819          BA    .012
 820          LG    .100    .250   5.700    .179  35.750
 821          UC    .179    .295
 822          UA       0       5      16      30      65      77      84      90      94      97
 823          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 824          KK    183A
 825          KM    SUB-BASIN 183A
 826          KM    6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 827          KM    THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 828          BA     .043
 829          LG     .150     .250    5.700     .198   24.050
 830          UC     .146     .118
 831          UA        0        5       16       30       65       77       84       90       94       97
 832          UA      100

 833          KK    R183A
 834          KM    ROUTE 183A THROUGH SUB-BASIN 183B TO CON. POINT NCL6A
 835          RS        4     FLOW        0
 836          RC     0.04     0.04     0.04     1450     0.03
 837          RX     9870     9925     9960     9985    10040    10108    10155    10210
 838          RY     1750     1740     1734     1732     1732     1734     1742     1754

 839          KK    183B
 840          KM    SUB-BASIN 183B
 841          KM    6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 842          KM    THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 843          BA     .041
 844          LG     .150     .250    5.700     .207     .650
 845          UC     .217     .181
 846          UA        0        5       16       30       65       77       84       90       94       97
 847          UA      100

 848          KK    NCL6A
 849          KM    NORTH COLONY CONCENTRATION POINT 6A - COMBINE R183A, 183B
 850          HC        2

 851          KK   SNCL6A
 852          KM    STORAGE PONDING BY FOUNTAIN HILLS BLVD
 853          RS        1     ELEV     1722
 854          SQ        0        1      120     1030
 855          SE     1722     1729     1730     1731
 856          SA     0.99     3.14     3.24
 857          SE     1722     1729     1730

 858          KK   RNCL6A
 859          KM    ROUTE SNCL6A THROUGH SUB-BASIN 184H TO CON. POINT NCL6
 860          RS        2     FLOW        0
 861          RC     0.02     0.02     0.02      910    0.027
 862          RX     9975     9980     9985     9986    10014    10015    10020    10025
 863          RY   1716.5   1716.5   1716.5     1716     1716   1716.5   1716.5   1716.5

 864          KK     NCL6
 865          KM    NORTH COLONY WASH CONCENTRATION POINT 6 - COMBINES SNCL5, RNCL6A
 866          HC        3
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 867          KK   RNCL6
 868          KM   ROUTE NCL6 THROUGH SUB-BASIN 184I TO CON. POINT NCL7
 869          RS       3    FLOW       0
 870          RC    0.04    0.04    0.04    1492   0.032
 871          RX    9800    9865    9940    9975   10005   10040   10110   10190
 872          RY    1690    1680    1670    1666    1666    1676    1676    1690

 873          KK    184I
 874          KM   SUB-BASIN 184I
 875          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 876          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 877          BA    .031
 878          LG    .150    .250   5.700    .198  29.250
 879          UC    .179    .187
 880          UA       0       5      16      30      65      77      84      90      94      97
 881          UA     100

 882          KK    NCL7
 883          KM   NORTH COLONY WASH CONCENTRATION POINT 7 - COMBINES RNCL6, 184I
 884          HC       2

 885          KK   SNCL7
 886          KM   ROUTE THROUGH A 66" AND 60" CMP CULVER AT LA MONTANA DRIVE
 887          RS       1    ELEV  1656.9
 888          SQ       0      90     240     278     525
 889          SE  1656.9  1659.7  1661.9  1662.4  1667.9
 890          SA       0    0.06    1.11
 891          SE  1656.9    1660    1668

 892          KK   RNCL7
 893          KM   ROUTE SNCL7 THROUGH SUB-BASIN 184J TO CON. POINT NCL8
 894          RS       2    FLOW       0
 895          RC    0.04    0.04    0.04     885    0.02
 896          RX    9955    9963    9980    9995   10005   10040   10070   10240
 897          RY    1678    1674    1666    1660    1660    1674    1686    1688

 898          KK    184J
 899          KM   SUB-BASIN 184J
 900          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 901          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 902          BA    .008
 903          LG    .150    .250   5.700    .187  22.750
 904          UC    .162    .204
 905          UA       0       5      16      30      65      77      84      90      94      97
 906          UA     100

 907          KK    NCL8
 908          KM   NORTH COLONY WASH CONCENTRATION POINT 8 - COMBINES RNCL7, 184J
 909          HC       2
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 910          KK   SNCL8
 911          KM   ROUTE THROUGH 60" CMP CULVER AT CHANA
 912          RS       1    ELEV 1629.38
 913          SQ       0      37     115     195     952
 914          SE  1629.4  1631.9  1634.4  1637.8  1639.4
 915          SA       0   .0002     .08
 916          SE  1639.4    1632    1638

 917          KK   RNCL8
 918          KM   ROUTE SNCL8 THROUGH SUB-BASIN 184K TO CON. POINT NCL9
 919          RS       1    FLOW       0
 920          RC    0.04    0.04    0.04     448   0.084
 921          RX    9930    9945    9970    9990   10000   10035   10065   10080
 922          RY    1646    1640    1628    1618    1618    1622    1630    1632

 923          KK    184K
 924          KM   SUB-BASIN 184K
 925          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 926          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 927          BA    .004
 928          LG    .150    .250   5.700    .198  26.000
 929          UC    .121    .141
 930          UA       0       5      16      30      65      77      84      90      94      97
 931          UA     100

 932          KK    NCL9
 933          KM   NORTH COLONY WASH CONCENTRATION POINT 9 - COMBINES RNCL9, 184K
 934          HC       2

 935          KK   RNCL9
 936          KM   ROUTE NCL  THROUGH SUB-BASIN 180N
 937          RS       2    FLOW       0
 938          RC    0.04    0.04    0.04    1065   0.011
 939          RX    9890    9915    9940    9990   10010   10050   10080   10115
 940          RY    1610    1598    1596    1590    1590    1596    1598    1612

 941          KK    CLN5
 942          KM   COLONY WASH CONCENTRATION POINT 5 - COMBINE  RCLN4, 180N, RNCL9
 943          HC       3

 944          KK   SCLN5
 945          KM   ROUTE CLN5 THROUGH 72" CMP CULVERT AT SAGUARO BLV.
 946          RS       1    ELEV 1584.83
 947          SQ       0      45     145     310     345     755
 948          SE  1584.8  1587.3  1589.8  1594.8  1595.9    1598
 949          SA       0    0.18    2.09
 950          SE  1584.8    1588    1596

 951          KK    180K
 952          KM   SUB-BASIN 180K
 953          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 954          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 955          BA    .029
 956          LG    .050    .250   5.700    .170  46.930
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 957          UC    .183    .208
 958          UA       0       5      16      30      65      77      84      90      94      97
 959          UA     100

 960          KK   R180K
 961          KM   ROUTE 180K THROUGH SUB-BASIN 180L TO CON. POINT CLN6
 962          RS       1    FLOW       0
 963          RC    0.02    0.02    0.02     390  0.0018
 964          RX    9945    9952    9960  9960.5 10039.5   10040   10048   10055
 965          RY  1600.5  1600.5  1600.5    1600    1600  1600.5  1600.5  1600.5

 966          KK    180L
 967          KM   SUB-BASIN 180L
 968          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 969          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 970          BA    .013
 971          LG    .061    .250   5.700    .170  49.940
 972          UC    .112    .103
 973          UA       0       5      16      30      65      77      84      90      94      97
 974          UA     100

 975          KK    CLN6
 976          KM   COLONY WASH CONCENTRATION POINT 6 - COMBINE RCLN6A, SCLN5, 180L
 977          HC       3

 978          KK   RCLN6
 979          KM   ROUTE CLN6 THROUGH SUB-BASIN 1800 TO CON. POINT CLN7
 980          RS       3    FLOW       0
 981          RC    0.04    0.04    0.04    1427   0.018
 982          RX    9790    9900    9920    9993   10000   10045   10085   10100
 983          RY    1586    1584    1580    1572    1572    1586    1588    1590

 984          KK    1800
 985          KM   SUB-BASIN 1800
 986          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 987          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 988          BA    .019
 989          LG    .080    .250   5.700    .176  42.300
 990          UC    .162    .185
 991          UA       0       5      16      30      65      77      84      90      94      97
 992          UA     100

 993          KK   *CLN7
 994          KM   COLONY WASH CONCENTRATION POINT *7 - RCLN6, 1800
 995          HC       2

 996          KK    182G
 997          KM   SUB-BASIN 182G
 998          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 999          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
1000          BA    .048
1001          LG    .061    .250   5.700    .170  51.890
1002          UC    .279    .398
1003          UA       0       5      16      30      65      77      84      90      94      97
1004          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1005          KK    182I
1006          KM   SUB-BASIN 182I
1007          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1008          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
1009          BA    .040
1010          LG    .070    .250   5.700    .170  47.410
1011          UC    .271    .352
1012          UA       0       5      16      30      65      77      84      90      94      97
1013          UA     100

1014          KK     FC1
1015          KM   FOUNTAIN CHANNEL CONC. POINT 1 - COMBINE 182G, 182I
1016          HC       2

1017          KK    RFC1
1018          KM   ROUTE FC1 THROUGH SUB-BASIN 182E
1019          RS       1    FLOW       0
1020          RC     .02     .02     .02     570    .012
1021          RX    9958    9963    9968  9968.5 10031.5   10032   10037   10042
1022          RY  1610.6  1610.5  1610.5    1610    1610  1610.5  1610.5  1610.6

1023          KK    182D
1024          KM   SUB-BASIN 182D
1025          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1026          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
1027          BA    .094
1028          LG    .100    .250   5.700    .188  18.850
1029          UC    .221    .177
1030          UA       0       5      16      30      65      77      84      90      94      97
1031          UA     100

1032          KK   R182D
1033          KM   ROUTE 182D THROUGH SUB-BASIN 182E
1034          RS       4    FLOW       0
1035          RC     .02     .02     .02    1994    .021
1036          RX    9958    9963    9968  9968.5 10031.5   10032   10037   10042
1037          RY  1610.6  1610.5  1610.5    1610    1610  1610.5  1610.5  1610.6

1038          KK    182E
1039          KM   SUB-BASIN 182E
1040          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1041          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
1042          BA    .064
1043          LG    .091    .250   5.700    .170  40.860
1044          UC    .225    .191
1045          UA       0       5      16      30      65      77      84      90      94      97
1046          UA     100

1047          KK    182F
1048          KM   SUB-BASIN 182F
1049          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1050          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1051          BA    .015
1052          LG    .050    .250   5.700    .170  41.910
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1053          UC    .233    .448
1054          UA       0       5      16      30      65      77      84      90      94      97
1055          UA     100

1056          KK     FC2
1057          KM   FOUNTAIN CHANNEL CONC. POINT 2 - COMBINE RFC1, R182D, 182E, 182F
1058          HC       4

1059          KK    SFC2
1060          KM   CATCH BASIN (2X3 AND TRIANGULAR), CULVERT UNDER SAGUARO BLVD AND SPILLWAY
1061          RS       1    ELEV    1596
1062          SQ       0    10.4      41     181     482     913
1063          SE    1596  1596.2  1596.5    1597  1597.5    1598
1064          SA   0.001    0.48    0.80
1065          SE    1596  1596.5    1597

1066          KK    RFC2
1067          KM   ROUTE SFC2 TO THROUGH SUB-BASIN 182J TO FC3 IN MIDDLE OF 182J
1068          RS       2    FLOW       0
1069          RC     .04     .04     .04    1050    .011
1070          RX    9960    9970    9975    9980   10040   10090   10150   10220
1071          RY  1584.5    1584    1583    1582    1582    1590    1592    1594

1072          KK    DFC2
1073          KM   DIVERSION INTO FOUNTAIN LAKE
1074          DT   DOFC2
1075          DI       0     250     350     400     500     650     750     800
1076          DQ       0       0       4      19      63     184     274     320

1077          KK    182A
1078          KM   SUB-BASIN 182A
1079          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1080          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
1081          BA    .050
1082          LG    .150    .250   5.700    .189   4.500
1083          UC    .183    .143
1084          UA       0       5      16      30      65      77      84      90      94      97
1085          UA     100

1086          KK   R182A
1087          KM   ROUTE SUB-BASIN 182A THROUGH SUB-BASIN 182B
1088          RS       4    FLOW       0
1089          RC     .02     .02     .02    1950    .025
1090          RX    9975    9980    9985    9986   10014   10015   10020   10025
1091          RY  1620.6  1620.5  1620.5    1620    1620  1620.5  1620.5  1620.6

1092          KK    182B
1093          KM   SUB-BASIN 182B
1094          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1095          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
1096          BA    .039
1097          LG    .095    .250   5.700    .170  15.330
1098          UC    .217    .227
1099          UA       0       5      16      30      65      77      84      90      94      97
1100          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1101          KK    FC3A
1102          KM   FOUNTAIN CHANNEL CONC. POINT 3A - COMBINE R182A, 182B
1103          HC       2

1104          KK   SFC3A
1105          KM   CATCH BASIN AND SPILL WAY AT SAGUARO BLVD
1106          RS       1    ELEV    1596
1107          SQ       0     6.4    18.1    45.6    68.2     820    1450
1108          SE    1596  1596.2  1596.4  1596.7    1597    1598  1598.5
1109          SA       0     0.6
1110          SE    1596    1597

1111          KK    182C
1112          KM   SUB-BASIN 182C
1113          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1114          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1115          BA    .022
1116          LG    .078    .250   5.700    .170  35.710
1117          UC    .204    .279
1118          UA       0       5      16      30      65      77      84      90      94      97
1119          UA     100

1120          KK    FC3B
1121          KM   FOUNTAIN CHANNEL CONC. POINT 3B - COMBINE 182C, SFC3A
1122          HC       2

1123          KK   RFC3B
1124          KM   ROUTE FC3B THROUGH 182J TO MAIN CHANNEL IN MIDDLE OF 182J
1125          RS       3    FLOW       0
1126          RC     .03     .02     .03     210   0.067
1127          RX    9900    9950    9993    9996   10004   10007   10050   10100
1128          RY    1583    1582  1581.5    1580    1580  1581.5    1582    1583

1129          KK     FC3
1130          KM   FOUNTAIN CHANNEL CONC. POINT 3 - COMBINE RFC3B, DFC2
1131          HC       2

1132          KK    RFC4
1133          KM   ROUTE FC5 THROUGH REMAINDER OF 182J
1134          RS       1    FLOW       0
1135          RC     .04     .04     .04     572    .009
1136          RX    9960    9970    9975    9980   10040   10090   10150   10220
1137          RY  1584.5    1584    1583    1582    1582    1590    1592    1594

1138          KK    182J
1139          KM   SUB-BASIN 182J
1140          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1141          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1142          BA    .015
1143          LG    .134    .250   5.700    .193   3.680
1144          UC    .242    .337
1145          UA       0       5      16      30      65      77      84      90      94      97
1146          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1147          KK     FC4
1148          KM   FOUNTAIN CHANNEL CONC. POINT 4 - COMBINE RFC3, 182J
1149          HC       2

1150          KK    SFC4
1151          KM   ROUTE FC4 THROUGH 2-4'X10' BOX CULVERTS UNDER EL LAGO BLVD
1152          RS       1    ELEV  1577.4
1153          SQ       0     170     460     780    1110
1154          SE  1577.4  1579.4  1581.4  1583.8  1585.4
1155          SA       0     .34       2
1156          SE  1577.4    1580    1584

1157          KK    DFHN
1158          KM   DIVERTED FLOW FROM FOUNTAIN HILLS NORTH
1159          BA       1
1160          QI       0

1161          KK    183F
1162          KM   SUB-BASIN 183F
1163          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1164          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
1165          BA    .049
1166          LG    .150    .250   5.700    .207   6.500
1167          UC    .213    .236
1168          UA       0       5      16      30      65      77      84      90      94      97
1169          UA     100

1170          KK    183G
1171          KM   SUB-BASIN 183G
1172          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1173          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
1174          BA    .093
1175          LG    .150    .250   5.700    .207  13.810
1176          UC    .258    .237
1177          UA       0       5      16      30      65      77      84      90      94      97
1178          UA     100

1179          KK    183H
1180          KM   SUB-BASIN 183H
1181          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1182          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1183          BA    .018
1184          LG    .150    .250   5.700    .204  34.450
1185          UC    .133    .125
1186          UA       0       5      16      30      65      77      84      90      94      97
1187          UA     100

1188          KK     LC1
1189          KM   LAGO CHANNEL CONC. POINT 2 - COMBINE 183F, 183G, 183H, DFHN
1190          HC       4
```

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

1191          KK    RLC1
1192          KM   ROUTE LC1 THROUGH SUB-BASIN 183I
1193          RS       4    FLOW       0
1194          RC     .02     .02     .02    2002    .023
1195          RX    9958    9963    9968  9968.5 10031.5   10032   10037   10042
1196          RY  1620.7  1620.6  1620.5    1620    1620  1620.5  1620.6  1620.7

1197          KK    183I
1198          KM   SUB-BASIN 183I
1199          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1200          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
1201          BA    .057
1202          LG    .100    .250   5.700    .170  21.010
1203          UC    .225    .201
1204          UA       0       5      16      30      65      77      84      90      94      97
1205          UA     100

1206          KK    183J
1207          KM   SUB-BASIN 183J
1208          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1209          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1210          BA    .005
1211          LG    .050    .250   5.700    .170  86.820
1212          UC    .100    .122
1213          UA       0       5      16      30      65      77      84      90      94      97
1214          UA     100

1215          KK     LC2
1216          KM   LAGO CHANNEL CONC. POINT 2 - COMBINE RLC1, 183I, 183J
1217          HC       3

1218          KK    SLC2
1219          KM   ROUTE LC3 THROUGH ACROSS ROAD CATCH BASIN AT SAGUARO BLVD & EL LAGO BLVD
1220          RS       1    ELEV    1598
1221          SQ       0      27     110     300     966
1222          SE    1598  1598.2  1598.5    1599    1600
1223          SA   0.002    0.37
1224          SE    1598    1599

1225          KK    RLC2
1226          KM   ROUTE SLC2 THROUGH SUB-BASIN 183K
1227          RS       1    FLOW       0
1228          RC     .02     .02     .02     521    .029
1229          RX    9958    9963    9968  9968.5 10031.5   10032   10037   10042
1230          RY  1592.7  1592.6  1592.5    1592    1592  1592.5  1592.6  1592.7

1231          KK    183K
1232          KM   SUB-BASIN 183K
1233          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1234          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1235          BA    .002
1236          LG    .050    .250   5.700    .170  90.000
1237          UC    .083    .128
1238          UA       0       5      16      30      65      77      84      90      94      97
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1239          UA     100

1240          KK     LC3
1241          KM   LAGO CHANNEL CONC. POINT 3 - COMBINE SLC2, 183K
1242          HC       2

1243          KK   D183K
1244          KM   DIVERSION OF 183K INTO 181B
1245          DT  DO183K
1246          DI       1      10     100    1000
1247          DQ       0       0       5     100

1248          KK     FC5
1249          KM   FOUNTAIN CHANNEL CONC. POINT 5 - COMBINE SFC4, RFC5
1250          HC       2

1251          KK    RFC5
1252          KM   ROUTE FC5 THROUGH SUB-BASIN 182K TO CONC. POINT
1253          RS       1    FLOW       0
1254          RC     .04     .04     .04     502    .005
1255          RX    9930    9940    9960    9980   10015   10035   10085   10180
1256          RY    1586    1584    1580    1576    1576    1578    1588    1590

1257          KK    182K
1258          KM   SUB-BASIN 182K
1259          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1260          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1261          BA    .024
1262          LG    .093    .250   5.700    .170  19.840
1263          UC    .142    .094
1264          UA       0       5      16      30      65      77      84      90      94      97
1265          UA     100

1266          KK     FC6
1267          KM   FOUNTAIN CHANNEL CONC. POINT 6 - COMBINE RFC5, 182K
1268          HC       2

1269          KK    RFC6
1270          KM   ROUTE FC6 THROUGH SUB-BASIN 182L TO CONC. POINT FC7
1271          RS       2    FLOW       0
1272          RC     .04     .04     .04     670    .021
1273          RX    9880    9920    9960    9975   10025   10035   10045   10250
1274          RY    1582    1581    1580    1574    1574    1576    1578    1580

1275          KK    182L
1276          KM   SUB-BASIN 182L
1277          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1278          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1279          BA    .005
1280          LG    .111    .250   5.700    .174  51.380
1281          UC    .108    .126
1282          UA       0       5      16      30      65      77      84      90      94      97
1283          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1284          KK     FC7
1285          KM   FOUNTAIN CHANNEL CONC. POINT 7 - COMBINE RFC6, 182L
1286          HC       2

1287          KK    CLN7
1288          KM   COLONY WASH CONCENTRATION POINT 7 - COMBINE (RCLN6, 180O) FC7
1289          HC       2

1290          KK   RCLN7
1291          KM   ROUTE CLN7 THROUGH SUB-BASIN 180P TO CON. POINT CLN8
1292          RS       2    FLOW       0
1293          RC    0.04    0.04    0.04     631   0.022
1294          RX    9847    9860    9985    9995   10005   10040   10075   10125
1295          RY    1562    1554    1552    1550    1550    1552    1558    1556

1296          KK    180P
1297          KM   SUB-BASIN 180P
1298          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1299          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1300          BA    .011
1301          LG    .092    .250   5.400    .202  26.090
1302          UC    .133    .131
1303          UA       0       5      16      30      65      77      84      90      94      97
1304          UA     100

1305          KK   *CLN8
1306          KM   COLONY WASH CONCENTRATION POINT *8 - RCLN7, 180P
1307          HC       2

1308          KK    181A
1309          KM   SUB-BASIN 181A
1310          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1311          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
1312          BA    .079
1313          QI       0

1314          KK   R181A
1315          KM   ROUTE R181A THROUGH SUB-BASIN 181B
1316          RS       3    FLOW       0
1317          RC     .04     .04     .04    1268    .022
1318          RX    9960    9960    9970    9985   10005   10035   10110   10220
1319          RY    1574    1568    1568    1566    1566    1572    1574    1578

1320          KK    181B
1321          KM   SUB-BASIN 181B
1322          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1323          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1324          BA    .022
1325          LG    .063    .250   5.300    .204  31.650
1326          UC    .225    .311
1327          UA       0       5      16      30      65      77      84      90      94      97
1328          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1329          KK   D183K
1330          KM   FLOW FROM DIVERSION AT 183K THROUGH SUB-BASIN 181B
1331          DR  DO183K

1332          KK   R183K
1333          KM   ROUTE DIVERTED FLOW FROM 183K THROUGH SUB-BASIN 181B THROUGH STREET
1334          RS       2    FLOW       0
1335          RC    0.02    0.02    0.02    1145   0.011
1336          RX    9955    9963    9968  9968.5 10031.5   10032   10034   10045
1337          RY  1580.7  1580.6  1580.5    1580    1580  1580.5  1580.6  1580.7

1338          KK   R183K
1339          KM   ROUTE DIVERTED FLOW FROM STREET THROUGH 181B
1340          RS       3    FLOW       0
1341          RC    0.04   0.004    0.04    1145   0.023
1342          RX    9960    9960    9970    9985   10005   10035   10110   10220
1343          RY    1574    1574    1568    1566    1566    1572    1574    1578

1344          KK    CLN8
1345          KM   COLONY WASH CONCENTRATION POINT 8 - COMBINE (RCLN7,180P),R181A,180B,RD183K
1346          HC       4

1347          KK   SCLN8
1348          KM   ROUTE CLN8 THROUGH 4-6'X8' BOX CULVERT AT PANORAMA BLV.
1349          RS       1    ELEV 1546.44
1350          SQ       0     416    1184    2368
1351          SE  1546.4  1549.4  1552.4    1558
1352          SA       0     0.1    1.71
1353          SE  1546.4    1548    1555

1354          KK    180S
1355          KM   SUB-BASIN 180S
1356          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1357          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1358          BA    .035
1359          LG    .052    .250   5.600    .180  69.060
1360          UC    .129    .124
1361          UA       0       5      16      30      65      77      84      90      94      97
1362          UA     100

1363          KK   170I1
1364          KM   SUB-BASIN 170I-1
1365          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1366          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1367          BA    .022
1368          LG    .075    .250   5.700    .170  38.250
1369          UC    .192    .260
1370          UA       0       5      16      30      65      77      84      90      94      97
1371          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1372          KK  D170I1
1373          KM   DIVERSION AT INTERSECTION OF SAGUARO AND PANORAMA
1374          DT  D170I1
1375          DI       1      10     100    1000
1376          DQ     0.5       5      50     500

1377          KK  R170I1
1378          KM   ROUTE 170I1 (DIVERTED FLOW) THROUGH SUB-BASIN 180S TO CLN9
1379          RS       2    FLOW       0
1380          RC    0.02    0.02    0.02    1088   0.035
1381          RX    9975    9980    9985    9986   10014   10015   10020   10025
1382          RY  1575.5  1575.5  1575.5    1575    1575  1575.5  1575.5  1575.5

1383          KK    CLN9
1384          KM   COLONY WASH CONCENTRATION POINT 9 - COMBINE SCLN8, RD170I-1, 180S
1385          HC       3

1386          KK   RCLN9
1387          KM   ROUTE CLN9 THROUGH SUB-BASIN 180U TO CON. POINT CLN10
1388          RS       4    FLOW       0
1389          RC    0.04    0.04    0.04    1999   0.015
1390          RX    9790    9805    9945    9965   10035   10060   10100   10110
1391          RY    1534    1532    1532    1528    1528    1530    1538  1538.5

1392          KK    180U
1393          KM   SUB-BASIN 180U
1394          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1395          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1396          BA    .019
1397          LG    .145    .250   3.810    .540  12.120
1398          UC    .217    .299
1399          UA       0       5      16      30      65      77      84      90      94      97
1400          UA     100

1401          KK  *CLN10
1402          KM   COLONY WASH CONCENTRATION POIT *10 - COMBINE RCLN9, 180U
1403          HC       2

1404          KK    180Q
1405          KM   SUB-BASIN 180Q
1406          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1407          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1408          BA    .032
1409          LG    .107    .250   5.400    .190  37.820
1410          UC    .200    .233
1411          UA       0       5      16      30      65      77      84      90      94      97
1412          UA     100

1413          KK    180R
1414          KM   SUB-BASIN 180R
1415          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1416          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1417          BA    .027
1418          LG    .150    .250   4.800    .305   4.500
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1419          UC    .179    .173
1420          UA       0       5      16      30      65      77      84      90      94      97
1421          UA     100

1422          KK   170I2
1423          KM   SUB-BASIN 170I-2
1424          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1425          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1426          BA    .012
1427          LG    .050    .250   5.700    .170  62.990
1428          UC    .125    .184
1429          UA       0       5      16      30      65      77      84      90      94      97
1430          UA     100

1431          KK  D170I1
1432          KM   FLOW FROM SUB-BASIN 170I-1
1433          DR  D170I1

1434          KK  R170I1
1435          KM   ROUTED FLOW FROM 170I1 THROUGH 170I2 TO MLT6A
1436          RS       4    FLOW       0
1437          RC    0.02    0.02    0.02    1738   0.025
1438          RX    9945    9952    9960  9960.5 10039.5   10040   10048   10055
1439          RY  1570.5  1570.5  1570.5    1570    1570  1570.5  1570.5  1570.5

1440          KK   MLT6A
1441          KM   MALTA DRAIN CONCENTRATION POINT 6A - COBINE R170I1, 170I2
1442          HC       2

1443          KK  DMLT6A
1444          KM   DIVERSION AT INTERSECTION OF SAGUARO AND EL PUEBLO
1445          DT  D170I2
1446          DI       1      10     100    1000
1447          DQ     0.5       5      50     500

1448          KK  RMLT6A
1449          KM   ROUTE MLT6A (DIVERTED FLOW) THROUGH SUB-BASIN 180R TO CLN10A
1450          RS       2    FLOW       0
1451          RC    0.02    0.02    0.02    1050   0.020
1452          RX    9975    9980    9985    9986   10014   10015   10020   10025
1453          RY  1540.5  1540.5  1540.5    1540    1540  1540.5  1540.5  1540.5

1454          KK   CL10A
1455          KM   COLONY WASH CONCENTRATION POINT 10A - COMBINE 180Q, 180R, RMLT6A
1456          HC       3

1457          KK  RCL10A
1458          KM   ROUTE CLN10A THROUGH SUB-BASIN 180U TO CON. POINT CLN10
1459          RS       1    FLOW       0
1460          RC    0.04    0.04    0.04     572   0.026
1461          RX    9790    9805    9945    9965   10035   10060   10100   10110
1462          RY    1534    1532    1532    1528    1528    1530    1538  1538.5
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1463          KK  *CLN10
1464          KM   COLONY WASH CONCENTRATION POINT *10 - COMBINE (RCLN9, 180U), RCLN10A
1465          HC       2

1466          KK    180T
1467          KM   SUB-BASIN 180T
1468          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1469          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1470          BA    .023
1471          LG    .100    .250   5.000    .230  67.500
1472          UC    .158    .181
1473          UA       0       5      16      30      65      77      84      90      94      97
1474          UA     100

1475          KK   CLN10
1476          KM   COLONY WASH CONCENTRATION POINT 10 - COMBINE ((RCLN9,180U), RCLN10A), 180T
1477          HC       2
1478          ZZ
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SCHEMATIC DIAGRAM OF STREAM NETWORK

```
LINE    (V) ROUTING          (--->) DIVERSION OR PUMP FLOW
NO.     (.) CONNECTOR        (<---) RETURN OF DIVERTED OR PUMPED FLOW

 22       185A
             V
             V
 31      R185A
             .
             .
 37          .        185B
             .           .
             .           .
 46       IRW1............
             V
             V
 49      SIRW1
             .
             .
 56          .        180A
             .           V
             .           V
 65          .      R180A
             .           .
             .           .
 71          .           .        180B
             .           .           .
             .           .           .
 80       IRW2........................
             V
             V
 83      RIRW2
             .
             .
             .        186A
             .           .
             .           .
 98          .           .        186B
             .           .           V
             .           .           V
107          .           .      R186B
             .           .           .
             .           .           .
113          .      SNB1A............
             .           V
             .           V
116          .     RSNB1A
             .           .
             .           .
122          .           .        186C
             .           .           V
             .           .           V
131          .           .      R186C
             .           .           .
             .           .           .
137          .           .           .        186D
             .           .           .           .
             .           .           .           .
146          .       SNB1........................
             .           V
             .           V
149          .      RSNB1
             .           .
             .           .
155          .           .        186E
             .           .           .
             .           .           .
             .           .           .        186F
             .           .           .           .
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        .        .        .        .
        .      SNB2.......................
        .        V
        .        V
176     .      RSNB2
        .        .
        .        .
182     .        .       186G
        .        .        .
        .        .        .
191     .      SNB3............
        .        V
        .        V
194     .      SSNB3
        .        .
        .        .
201     .        .       186H
        .        .        .
        .        .        .
210     .        .        .       160E
        .        .        .         V
        .        .        .         V
219     .        .        .      R160E
        .        .        .        .
        .        .        .        .
225     .      SNB4.......................
        .        V
        .        V
228     .      RSNB4
        .        .
        .        .
234     .        .       186I
        .        .        .
        .        .        .
243     .      *SNB5............
        .        .
        .        .
[illegible]     .        .       187A
        .        .         V
        .        .         V
255     .        .      R187A
        .        .        .
        .        .        .
261     .        .        .       187B
        .        .        .        .
        .        .        .        .
270     .        .       GRS1............
        .        .         V
        .        .         V
273     .        .      RGRS1
        .        .        .
        .        .        .
279     .        .        .       187C
        .        .        .         V
        .        .        .         V
288     .        .        .      R187C
        .        .        .        .
        .        .        .        .
294     .        .        .        .       187D
        .        .        .        .         .
        .        .        .        .         .
303     .        .      *GRS2.......................
        .        .        .
        .        .        .
306     .        .        .       188A
        .        .        .         V
        .        .        .         V
315     .        .        .      R188A
        .        .        .        .
        .        .        .        .
        .        .        .        .       188B
        .        .        .        .         .
```

```
                                                  188C
339                    SYR1.......................
                          V
                          V
342                   RSYC1
                          .
                          .
348                       .          188D
                          .            .
                          .            .
357                       .            .          188E
                          .            .            .
                          .            .            .
366                    SYR2.......................
                          V
                          V
369                   RSYC2
                          .
                          .
375                       .          188F
                          .            .
                          .            .
384                    SYR3............
                          V
                          V
387                   SSYC3
                          V
                          V
394                   RSYC3
                          .
                          .
400                       .          188G
                          .            .
                          .            .
                       SYR4............
                          .
                          .
412                 GRS2............
                       V
                       V
415                SGRS2
                       .
                       .
422                    187E
                          V
                          V
431                   R187E
                          .
                          .
437                       .          187F
                          .            .
                          .            .
446                   GRS3A...........
                          V
                          V
449                  RGRS3A
                          .
                          .
455                       .          187G
                          .            .
                          .            .
464                 GRS3.......................
                       V
                       V
467                RGRS3
                       .
                       .
                    187H
                       .
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        .          .          .          .
        .          .      *SNB5...........
        .          .          .
        .          .          .
485     .       SNB5...........
        .          V
        .          V
488     .      RSNB5
        .          .
        .          .
494     .          .       187I
        .          .          .
        .          .          .
503     .       SNB6...........
        .          V
        .          V
506     .      SSNB6
        .          V
        .          V
513     .      RSNB6
        .          .
        .          .
519     .          .       180F
        .          .          .
        .          .          .
528     .      *CLN1...........
        .          .
        .          .
531   CLN1...........
        V
        V
534  SCLN1
        .
        .
541     .       180C
        .          V
        .          V
        .      R180C
        .          .
        .          .
556     .          .       180D
        .          .          .
        .          .          .
565     .          .          .       180E
        .          .          .          .
        .          .          .          .
574   CLN2.................................
        V
        V
577  RCLN2
        .
        .
583     .       180G
        .          .
        .          .
592   CLN3...........
        V
        V
595  SCLN3
        .
        .
602     .       180H
        .          V
        .          V
611     .      R180H
        .          .
        .          .
617     .          .       180I
        .          .          V
        .          .          V
        .          .      R180I
        .          .          .
```

```
                                                  180J
641                CLN4B.......................
                     V
                     V
644                RCLN4B
650                                 180M
659          CLN4.......................
               V
               V
662          RCLN4
668                180N
677                                 184C
686                                                 184D
695                                 NCL1............
                                      V
                                      V
698                                 RNCL1
704                                                 184E
                                    NCL2............
                                      V
                                      V
716                                 SNCL2
723                                                 184F
                                                      V
                                                      V
732                                                R184F
738                                 NCL3............
                                      V
                                      V
741                                 RNCL3
                                      V
                                      V
747                                 SNCL3
754                                                 184A
                                                      V
                                                      V
763                                                R184A
769                                                          184B
778                                                NCL4A...........
                                                      V
                                                      V
                                                   RNCL4A
```

```
          .       .       .       .
  7       .       .   NCL4.........
          .       .       V
          .       .       V
790       .       .  RNCL4
          .       .       .
          .       .       .
796       .       .       .    184G
          .       .       .       .
          .       .       .       .
805       .       .   NCL5.........
          .       .       V
          .       .       V
808       .       .  SNCL5
          .       .       .
          .       .       .
815       .       .       .    184H
          .       .       .       .
          .       .       .       .
824       .       .       .       .    183A
          .       .       .       .       V
          .       .       .       .       V
833       .       .       .       .   R183A
          .       .       .       .       .
          .       .       .       .       .
839       .       .       .       .       .    183B
          .       .       .       .       .       .
          .       .       .       .       .       .
848       .       .       .       .   NCL6A.........
          .       .       .       .       V
          .       .       .       .       V
851       .       .       .       .  SNCL6A
          .       .       .       .       V
          .       .       .       .       V
858       .       .       .       .  RNCL6A
          .       .       .       .       .
          .       .       .       .       .
  4       .       .   NCL6.................
          .       .       V
          .       .       V
867       .       .  RNCL6
          .       .       .
          .       .       .
873       .       .       .    184I
          .       .       .       .
          .       .       .       .
882       .       .   NCL7.........
          .       .       V
          .       .       V
885       .       .  SNCL7
          .       .       V
          .       .       V
892       .       .  RNCL7
          .       .       .
          .       .       .
898       .       .       .    184J
          .       .       .       .
          .       .       .       .
907       .       .   NCL8.........
          .       .       V
          .       .       V
910       .       .  SNCL8
          .       .       V
          .       .       V
917       .       .  RNCL8
          .       .       .
          .       .       .
923       .       .       .    184K
          .       .       .       .
          .       .       .       .
  2       .       .   NCL9.........
          .       .       V
```

```
          .          .          V
          .          .       RNCL9
          .          .          .
          .          .          .
941     CLN5.......................
          V
          V
944     SCLN5
          .
          .
951       .       180K
          .          V
          .          V
960       .      R180K
          .          .
          .          .
966       .          .       180L
          .          .          .
          .          .          .
975     CLN6.......................
          V
          V
978     RCLN6
          .
          .
984       .       180O
          .          .
          .          .
993     *CLN7............
          .
          .
996       .       182G
          .          .
          .          .
1005      .          .       182I
          .          .          .
          .          .          .
          .        FC1............
          .          V
          .          V
1017      .      RFC1
          .          .
          .          .
1023      .          .       182D
          .          .          V
          .          .          V
1032      .          .      R182D
          .          .          .
          .          .          .
1038      .          .          .       182E
          .          .          .          .
          .          .          .          .
1047      .          .          .          .       182F
          .          .          .          .          .
          .          .          .          .          .
1056      .        FC2.................................
          .          V
          .          V
1059      .      SFC2
          .          V
          .          V
1066      .      RFC2
          .          .
          .          .
1074      .          .-------->   DOFC2
1072      .      DFC2
          .          .
          .          .
1077      .          .       182A
          .          .          V
          .          .          V
          .          .      R182A
```

```
                                  182B
1101                        FC3A............
                               V
                               V
1104                        SFC3A
1111                                  182C
1120                        FC3B............
                               V
                               V
1123                        RFC3B
1129                  FC3............
                         V
                         V
1132                  RFC4
1138                        182J
1147                  FC4............
                         V
                         V
1150                  SFC4
1157                        DFHN
1161                                  183F
1170                                                183G
1179                                                          183H
1188                        LC1.................................
                               V
                               V
1191                        RLC1
1197                                  183I
1206                                                183J
1215                        LC2........................
                               V
                               V
1218                        SLC2
                               V
                               V
1225                        RLC2
1231                                  183K
                            LC3............
```

```
                                  .-------> DO183K
1243                        D183K
                                  .
                                  .
1248                  FC5............
                        V
                        V
1251                RFC5
                        .
                        .
1257                        182K
                                  .
                                  .
1266                  FC6............
                        V
                        V
1269                RFC6
                        .
                        .
1275                        182L
                                  .
                                  .
1284                  FC7............
                        .
                        .
1287            CLN7............
                  V
                  V
1290           RCLN7
                  .
                  .
1296                180P
                        .
                        .
               *CLN8............
                  .
                  .
1308                181A
                        V
                        V
1314               R181A
                        .
                        .
1320                        181B
                                  .
                                  .
1331                                  .<-------  DO183K
1329                                D183K
                                      V
                                      V
1332                                R183K
                                      V
                                      V
1338                                R183K
                                      .
                                      .
1344            CLN8.................................
                  V
                  V
1347           SCLN8
                  .
                  .
1354                180S
                        .
                        .
1363                        17011
                                  .
                                  .
                                  .-------> D17011
                            D17011
```

```
                .          .          V
                .          .          V
                .          .     R17011
                .          .          .
                .          .          .
1383        CLN9.......................
            V
            V
1386       RCLN9
            .
            .
1392        .        180U
            .          .
            .          .
1401     *CLN10............
            .
            .
1404        .        180Q
            .          .
            .          .
1413        .          .        180R
            .          .          .
            .          .          .
1422        .          .          .      17012
            .          .          .        .
            .          .          .        .
1433        .          .          .        .          .<-------  D17011
1431        .          .          .        .     D17011
            .          .          .        .          V
            .          .          .        .          V
1434        .          .          .        .     R17011
            .          .          .        .          .
            .          .          .        .          .
1440        .          .          .      MLT6A............
            .          .          .        .
            .          .          .        .
            .          .          .        .-------> D17012
            .          .          .     DMLT6A
            .          .          .        V
            .          .          .        V
1448        .          .          .     RMLT6A
            .          .          .        .
            .          .          .        .
1454        .       CL10A........................
            .          V
            .          V
1457        .      RCL10A
            .          .
            .          .
1463     *CLN10............
            .
            .
1466        .        180T
            .          .
            .          .
1475       CLN10............
```

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

```
*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*             MAY   1991                *
*          VERSION 4.0.1E               *
*    Lahey F77L-EM/32 version 5.01      *
*       Dodson & Associates, Inc.       *
* RUN DATE  04/05/95  TIME  14:57:24    *
*****************************************
```

```
*****************************************
*                                       *
*    U.S. ARMY CORPS OF ENGINEERS       *
*    HYDROLOGIC ENGINEERING CENTER      *
*          609 SECOND STREET            *
*       DAVIS, CALIFORNIA 95616         *
*           (916) 551-1748              *
*                                       *
*****************************************
```

```
                    COLONY WASH - EXISTING CONDITIONS, AGK ENGINEERS, 04-05-95
                    100-Year 6-Hour storm
                    Time step at 2 minutes
                    File: 180-6CE.DAT

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

   IT         HYDROGRAPH TIME DATA
                     NMIN          2  MINUTES IN COMPUTATION INTERVAL
                    IDATE      1   0  STARTING DATE
                    ITIME       0000  STARTING TIME
                       NQ        200  NUMBER OF HYDROGRAPH ORDINATES
                   NDDATE      1   0  ENDING DATE
                   NDTIME       0638  ENDING TIME
                    ICENT         19  CENTURY MARK

              COMPUTATION INTERVAL    0.03 HOURS
                   TOTAL TIME BASE    6.63 HOURS

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

  9 JD        INDEX STORM NO. 1
                    STRM       3.20  PRECIPITATION DEPTH
                    TRDA       0.01  TRANSPOSITION DRAINAGE AREA

 10 PI          PRECIPITATION PATTERN
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.01      0.01      0.01
                  0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                  0.02      0.02      0.04      0.06      0.06      0.06      0.06      0.06      0.06      0.06
                  0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

  JD        INDEX STORM NO. 2
                    STRM       3.18  PRECIPITATION DEPTH
```

```
                TRDA        0.50  TRANSPOSITION DRAINAGE AREA

PI            PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                0.02      0.02      0.04      0.06      0.06      0.06      0.06      0.06      0.06      0.06
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

14 JD         INDEX STORM NO. 3
                STRM        3.14  PRECIPITATION DEPTH
                TRDA        2.80  TRANSPOSITION DRAINAGE AREA

15 PI         PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.03      0.03      0.03      0.03      0.03
                0.03      0.03      0.03      0.03      0.03      0.03      0.03      0.03      0.03      0.03
                0.02      0.02      0.02      0.02      0.02      0.02      0.02      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

18 JD         INDEX STORM NO. 4
                STRM        2.95  PRECIPITATION DEPTH
                TRDA       16.00  TRANSPOSITION DRAINAGE AREA

19 PI         PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                0.02      0.02      0.02      0.03      0.03      0.03      0.03      0.03      0.03      0.03
                0.02      0.02      0.02      0.02      0.02      0.02      0.02      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.01      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
```

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

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	185A	105.	4.03	9.	9.	9.	0.04		
+	ROUTED TO	R185A	97.	4.20	9.	9.	9.	0.04		
+	HYDROGRAPH AT	185B	145.	4.13	16.	15.	15.	0.08		
+	2 COMBINED AT	IRW1	237.	4.13	26.	23.	23.	0.12		
+	ROUTED TO	SIRW1	140.	4.40	26.	23.	23.	0.12		
+	HYDROGRAPH AT	180A	64.	4.03	5.	5.	5.	0.03		
+	ROUTED TO	R180A	64.	4.03	5.	5.	5.	0.03		
+	HYDROGRAPH AT	180B	31.	4.17	7.	6.	6.	0.03		
+	3 COMBINED AT	IRW2	191.	4.27	38.	34.	34.	0.18		
+	ROUTED TO	RIRW2	191.	4.27	38.	34.	34.	0.18		
+	HYDROGRAPH AT	186A	218.	4.07	19.	17.	17.	0.10		
+	HYDROGRAPH AT	186B	13.	4.03	1.	1.	1.	0.00		
+	ROUTED TO	R186B	13.	4.07	1.	1.	1.	0.00		
+	2 COMBINED AT	SNB1A	231.	4.07	20.	18.	18.	0.10		
+	ROUTED TO	RSNB1A	230.	4.17	20.	18.	18.	0.10		
+	HYDROGRAPH AT	186C	42.	4.03	4.	4.	4.	0.02		
+	ROUTED TO	R186C	41.	4.07	4.	4.	4.	0.02		
+	HYDROGRAPH AT	186D	147.	4.10	17.	15.	15.	0.08		
+	3 COMBINED AT	SNB1	403.	4.13	41.	37.	37.	0.20		
+	ROUTED TO	RSNB1	400.	4.20	41.	37.	37.	0.20		
+	HYDROGRAPH AT	186E	90.	4.07	7.	6.	6.	0.04		

+	HYDROGRAPH AT	186F	64.	4.07	6.	5.	5.	0.03
+	3 COMBINED AT	SNB2	508.	4.17	54.	48.	48.	0.27
+	ROUTED TO	RSNB2	502.	4.23	54.	48.	48.	0.27
+	HYDROGRAPH AT	186G	136.	4.10	13.	11.	11.	0.07
+	2 COMBINED AT	SNB3	606.	4.20	66.	60.	60.	0.33
+	ROUTED TO	SSNB3	92.	4.90	33.	30.	30.	0.33
+	HYDROGRAPH AT	186H	35.	4.10	6.	5.	5.	0.03
+	HYDROGRAPH AT	160E	9.	4.03	1.	1.	1.	0.00
+	ROUTED TO	R160E	9.	4.07	1.	1.	1.	0.00
+	3 COMBINED AT	SNB4	107.	4.63	40.	36.	36.	0.36
+	ROUTED TO	RSNB4	107.	4.70	40.	36.	36.	0.36
+	HYDROGRAPH AT	186I	70.	4.07	6.	5.	5.	0.03
+	2 COMBINED AT	*SNB5	122.	4.37	45.	41.	41.	0.39
+	HYDROGRAPH AT	187A	28.	4.00	2.	2.	2.	0.01
+	ROUTED TO	R187A	28.	4.03	2.	2.	2.	0.01
+	HYDROGRAPH AT	187B	20.	4.03	2.	2.	2.	0.01
+	2 COMBINED AT	GRS1	48.	4.03	4.	3.	3.	0.02
+	ROUTED TO	RGRS1	44.	4.13	4.	3.	3.	0.02
+	HYDROGRAPH AT	187C	35.	4.03	3.	2.	2.	0.01
+	ROUTED TO	R187C	33.	4.07	3.	2.	2.	0.01
+	HYDROGRAPH AT	187D	120.	4.13	14.	13.	13.	0.07
+	3 COMBINED AT	*GRS2	194.	4.13	21.	19.	19.	0.10
+	HYDROGRAPH AT	188A	24.	4.03	2.	2.	2.	0.01
+	ROUTED TO	R188A	24.	4.07	2.	2.	2.	0.01

+	HYDROGRAPH AT	188B	169.	4.07	14.	13.	13.	0.07
+	HYDROGRAPH AT	188C	51.	4.07	5.	4.	4.	0.02
+	3 COMBINED AT	SYR1	243.	4.07	21.	19.	19.	0.10
+	ROUTED TO	RSYC1	236.	4.10	21.	19.	19.	0.10
+	HYDROGRAPH AT	188D	119.	4.07	11.	10.	10.	0.05
+	HYDROGRAPH AT	188E	96.	4.10	10.	9.	9.	0.05
+	3 COMBINED AT	SYR2	450.	4.10	42.	38.	38.	0.20
+	ROUTED TO	RSYC2	436.	4.20	42.	38.	38.	0.20
+	HYDROGRAPH AT	188F	146.	4.10	14.	13.	13.	0.07
+	2 COMBINED AT	SYR3	558.	4.17	57.	51.	51.	0.28
+	ROUTED TO	SSYC3	251.	4.50	57.	51.	51.	0.28
+	ROUTED TO	RSYC3	251.	4.50	57.	51.	51.	0.28
+	HYDROGRAPH AT	188G	3.	4.03	0.	0.	0.	0.00
+	2 COMBINED AT	SYR4	252.	4.50	57.	51.	51.	0.28
+	2 COMBINED AT	GRS2	396.	4.20	77.	70.	70.	0.38
+	ROUTED TO	SGRS2	396.	4.20	77.	70.	70.	0.38
+	HYDROGRAPH AT	187E	11.	4.03	1.	1.	1.	0.00
+	ROUTED TO	R187E	11.	4.07	1.	1.	1.	0.00
+	HYDROGRAPH AT	187F	5.	4.07	1.	1.	1.	0.00
+	2 COMBINED AT	GRS3A	16.	4.07	2.	2.	2.	0.01
+	ROUTED TO	RGRS3A	16.	4.07	2.	2.	2.	0.01
+	HYDROGRAPH AT	187G	53.	4.17	9.	9.	9.	0.04
+	3 COMBINED AT	GRS3	461.	4.20	89.	80.	80.	0.43
+	ROUTED TO	RGRS3	461.	4.20	89.	80.	80.	0.43

+	HYDROGRAPH AT	187H	10.	4.03	1.	1.	1.	0.00
+	2 COMBINED AT	*SNB5	467.	4.20	89.	81.	81.	0.43
+	2 COMBINED AT	SNB5	541.	4.20	130.	118.	118.	0.82
+	ROUTED TO	RSNB5	541.	4.23	130.	118.	118.	0.82
+	HYDROGRAPH AT	187I	66.	4.03	5.	4.	4.	0.02
+	2 COMBINED AT	SNB6	569.	4.20	135.	122.	122.	0.85
+	ROUTED TO	SSNB6	94.	5.87	45.	40.	40.	0.85
+	ROUTED TO	RSNB6	94.	5.97	43.	39.	39.	0.85
+	HYDROGRAPH AT	180F	191.	4.07	15.	14.	14.	0.07
+	2 COMBINED AT	*CLN1	217.	4.07	57.	52.	52.	0.92
+	2 COMBINED AT	CLN1	373.	4.10	93.	84.	84.	1.10
+	ROUTED TO	SCLN1	289.	4.47	92.	84.	84.	1.10
+	HYDROGRAPH AT	180C	30.	4.03	2.	2.	2.	0.01
+	ROUTED TO	R180C	29.	4.07	2.	2.	2.	0.01
+	HYDROGRAPH AT	180D	6.	4.07	1.	1.	1.	0.00
+	HYDROGRAPH AT	180E	52.	4.03	4.	4.	4.	0.02
+	4 COMBINED AT	CLN2	313.	4.30	99.	90.	90.	1.13
+	ROUTED TO	RCLN2	313.	4.33	98.	89.	89.	1.13
+	HYDROGRAPH AT	180G	72.	4.07	6.	6.	6.	0.03
+	2 COMBINED AT	CLN3	354.	4.13	104.	94.	94.	1.16
+	ROUTED TO	SCLN3	303.	4.63	103.	93.	93.	1.16
+	HYDROGRAPH AT	180H	39.	4.10	5.	4.	4.	0.02
+	ROUTED TO	R180H	39.	4.10	5.	4.	4.	0.02
+	HYDROGRAPH AT	180I	11.	4.03	1.	1.	1.	0.00

+	ROUTED TO	R180I	11.	4.07	1.	1.	1.	0.00
+	HYDROGRAPH AT	180J	78.	4.07	8.	7.	7.	0.03
+	3 COMBINED AT	CLN4B	126.	4.07	14.	13.	13.	0.06
+	ROUTED TO	RCLN4B	126.	4.10	14.	13.	13.	0.06
+	HYDROGRAPH AT	180M	10.	4.07	1.	1.	1.	0.00
+	3 COMBINED AT	CLN4	367.	4.17	117.	106.	106.	1.22
+	ROUTED TO	RCLN4	367.	4.27	115.	104.	104.	1.22
+	HYDROGRAPH AT	180N	108.	4.03	8.	7.	7.	0.04
+	HYDROGRAPH AT	184C	39.	4.03	3.	3.	3.	0.01
+	HYDROGRAPH AT	184D	12.	4.07	2.	2.	2.	0.01
+	2 COMBINED AT	NCL1	51.	4.03	5.	5.	5.	0.02
+	ROUTED TO	RNCL1	51.	4.03	5.	5.	5.	0.02
+	HYDROGRAPH AT	184E	151.	4.17	22.	20.	20.	0.11
+	2 COMBINED AT	NCL2	188.	4.13	27.	24.	24.	0.13
+	ROUTED TO	SNCL2	174.	4.23	27.	25.	25.	0.13
+	HYDROGRAPH AT	184F	13.	4.07	2.	2.	2.	0.01
+	ROUTED TO	R184F	13.	4.07	2.	2.	2.	0.01
+	2 COMBINED AT	NCL3	185.	4.23	29.	26.	26.	0.14
+	ROUTED TO	RNCL3	185.	4.23	29.	26.	26.	0.14
+	ROUTED TO	SNCL3	178.	4.33	29.	26.	26.	0.14
+	HYDROGRAPH AT	184A	48.	4.03	5.	4.	4.	0.02
+	ROUTED TO	R184A	37.	4.17	5.	4.	4.	0.02
+	HYDROGRAPH AT	184B	42.	4.07	5.	5.	5.	0.02
+	2 COMBINED AT	NCL4A	78.	4.10	10.	9.	9.	0.04

+	ROUTED TO RNCL4A	78.	4.13	10.	9.	9.	0.04
+	2 COMBINED AT NCL4	242.	4.27	39.	35.	35.	0.18
+	ROUTED TO RNCL4	242.	4.30	39.	35.	35.	0.18
+	HYDROGRAPH AT 184G	131.	4.07	10.	9.	9.	0.05
+	2 COMBINED AT NCL5	325.	4.13	49.	44.	44.	0.23
+	ROUTED TO SNCL5	246.	4.47	49.	44.	44.	0.23
+	HYDROGRAPH AT 184H	26.	4.07	3.	3.	3.	0.01
+	HYDROGRAPH AT 183A	130.	4.03	10.	9.	9.	0.04
+	ROUTED TO R183A	124.	4.10	10.	9.	9.	0.04
+	HYDROGRAPH AT 183B	101.	4.07	8.	7.	7.	0.04
+	2 COMBINED AT NCL6A	225.	4.07	18.	16.	16.	0.08
+	ROUTED TO SNCL6A	1.	6.10	0.	0.	0.	0.08
+	ROUTED TO RNCL6A	1.	6.17	0.	0.	0.	0.08
+	3 COMBINED AT NCL6	258.	4.40	52.	47.	47.	0.33
+	ROUTED TO RNCL6	257.	4.47	52.	47.	47.	0.33
+	HYDROGRAPH AT 184I	80.	4.03	7.	7.	7.	0.03
+	2 COMBINED AT NCL7	289.	4.23	59.	54.	54.	0.36
+	ROUTED TO SNCL7	283.	4.33	59.	54.	54.	0.36
+	ROUTED TO RNCL7	283.	4.37	59.	54.	54.	0.36
+	HYDROGRAPH AT 184J	20.	4.03	2.	2.	2.	0.01
+	2 COMBINED AT NCL8	291.	4.27	61.	55.	55.	0.37
+	ROUTED TO SNCL8	292.	4.23	61.	56.	56.	0.37
+	ROUTED TO RNCL8	291.	4.27	61.	56.	56.	0.37
+	HYDROGRAPH AT 184K	12.	4.03	1.	1.	1.	0.00

+	2 COMBINED AT	NCL9	295.	4.27	62.	57.	57.	0.37
+	ROUTED TO	RNCL9	294.	4.33	62.	56.	56.	0.37
+	3 COMBINED AT	CLN5	655.	4.30	180.	163.	163.	1.63
+	ROUTED TO	SCLN5	613.	4.60	179.	162.	162.	1.63
+	HYDROGRAPH AT	180K	74.	4.03	8.	7.	7.	0.03
+	ROUTED TO	R180K	72.	4.07	8.	7.	7.	0.03
+	HYDROGRAPH AT	180L	42.	4.00	4.	3.	3.	0.01
+	3 COMBINED AT	CLN6	635.	4.53	189.	172.	172.	1.67
+	ROUTED TO	RCLN6	635.	4.60	188.	170.	170.	1.67
+	HYDROGRAPH AT	180O	51.	4.03	5.	5.	5.	0.02
+	2 COMBINED AT	*CLN7	643.	4.57	193.	175.	175.	1.69
+	HYDROGRAPH AT	182G	89.	4.10	13.	12.	12.	0.05
+	HYDROGRAPH AT	182I	79.	4.10	11.	10.	10.	0.04
+	2 COMBINED AT	FC1	167.	4.10	24.	22.	22.	0.09
+	ROUTED TO	RFC1	166.	4.13	24.	22.	22.	0.09
+	HYDROGRAPH AT	182D	243.	4.07	21.	19.	19.	0.09
+	ROUTED TO	R182D	236.	4.10	21.	19.	19.	0.09
+	HYDROGRAPH AT	182E	167.	4.07	17.	15.	15.	0.06
+	HYDROGRAPH AT	182F	26.	4.10	4.	4.	4.	0.01
+	4 COMBINED AT	FC2	586.	4.10	65.	59.	59.	0.26
+	ROUTED TO	SFC2	579.	4.13	65.	59.	59.	0.26
+	ROUTED TO	RFC2	573.	4.17	65.	59.	59.	0.26
+	DIVERSION TO	DOFC2	122.	4.17	4.	4.	4.	0.26
+	HYDROGRAPH AT	DFC2	451.	4.17	61.	55.	55.	0.26

+	HYDROGRAPH AT	182A	138.	4.03	10.	9.	9.	0.05
+	ROUTED TO	R182A	134.	4.10	10.	9.	9.	0.05
+	HYDROGRAPH AT	182B	92.	4.07	9.	8.	8.	0.04
+	2 COMBINED AT	FC3A	223.	4.07	19.	17.	17.	0.09
+	ROUTED TO	SFC3A	222.	4.10	19.	17.	17.	0.09
+	HYDROGRAPH AT	182C	49.	4.07	6.	5.	5.	0.02
+	2 COMBINED AT	FC3B	269.	4.10	24.	22.	22.	0.11
+	ROUTED TO	RFC3B	269.	4.10	24.	22.	22.	0.11
+	2 COMBINED AT	FC3	713.	4.10	85.	77.	77.	0.37
+	ROUTED TO	RFC4	712.	4.13	85.	77.	77.	0.37
+	HYDROGRAPH AT	182J	28.	4.10	3.	3.	3.	0.01
+	2 COMBINED AT	FC4	738.	4.13	88.	80.	80.	0.39
+	ROUTED TO	SFC4	668.	4.23	88.	80.	80.	0.39
+	HYDROGRAPH AT	DFHN	0.	0.03	0.	0.	0.	1.00
+	HYDROGRAPH AT	183F	109.	4.07	10.	9.	9.	0.05
+	HYDROGRAPH AT	183G	204.	4.07	20.	18.	18.	0.09
+	HYDROGRAPH AT	183H	54.	4.03	4.	4.	4.	0.02
+	4 COMBINED AT	LC1	290.	4.07	32.	29.	29.	1.16
+	ROUTED TO	RLC1	285.	4.10	32.	29.	29.	1.16
+	HYDROGRAPH AT	183I	142.	4.07	13.	12.	12.	0.06
+	HYDROGRAPH AT	183J	16.	4.00	2.	1.	1.	0.00
+	3 COMBINED AT	LC2	399.	4.10	46.	42.	42.	1.22
+	ROUTED TO	SLC2	397.	4.10	46.	42.	42.	1.22
+	ROUTED TO	RLC2	397.	4.10	46.	42.	42.	1.22

+	HYDROGRAPH AT	183K	7.	4.00	1.	1.	1.	0.00
+	2 COMBINED AT	LC3	401.	4.10	47.	42.	42.	1.22
+	DIVERSION TO	DO183K	37.	4.10	3.	3.	3.	1.22
+	HYDROGRAPH AT	D183K	364.	4.10	43.	39.	39.	1.22
+	2 COMBINED AT	FC5	857.	4.17	129.	117.	117.	1.61
+	ROUTED TO	RFC5	854.	4.20	129.	117.	117.	1.61
+	HYDROGRAPH AT	182K	76.	4.03	6.	5.	5.	0.02
+	2 COMBINED AT	FC6	880.	4.17	134.	122.	122.	1.63
+	ROUTED TO	RFC6	880.	4.20	134.	122.	122.	1.63
+	HYDROGRAPH AT	182L	16.	4.03	1.	1.	1.	0.00
+	2 COMBINED AT	FC7	885.	4.20	136.	123.	123.	1.64
+	2 COMBINED AT	CLN7	1270.	4.37	317.	288.	288.	3.33
+	ROUTED TO	RCLN7	1269.	4.40	316.	287.	287.	3.33
+	HYDROGRAPH AT	180P	33.	4.03	3.	2.	2.	0.01
+	2 COMBINED AT	*CLN8	1276.	4.40	319.	289.	289.	3.35
+	HYDROGRAPH AT	181A	0.	0.03	0.	0.	0.	0.08
+	ROUTED TO	R181A	0.	0.03	0.	0.	0.	0.08
+	HYDROGRAPH AT	181B	45.	4.07	5.	5.	5.	0.02
+	HYDROGRAPH AT	D183K	37.	4.10	3.	3.	3.	1.22
+	ROUTED TO	R183K	35.	4.17	3.	3.	3.	1.22
+	ROUTED TO	R183K	35.	4.20	3.	3.	3.	1.22
+	4 COMBINED AT	CLN8	1312.	4.37	326.	295.	295.	3.45
+	ROUTED TO	SCLN8	1295.	4.43	326.	295.	295.	3.45
+	HYDROGRAPH AT	180S	111.	4.03	10.	9.	9.	0.04

+	HYDROGRAPH AT	170I1	51.	4.07	6.	5.	5.	0.02
+	DIVERSION TO	D170I1	25.	4.07	3.	3.	3.	0.02
+	HYDROGRAPH AT	D170I1	25.	4.07	3.	2.	2.	0.02
+	ROUTED TO	R170I1	25.	4.10	3.	2.	2.	0.02
+	3 COMBINED AT	CLN9	1327.	4.43	338.	306.	306.	3.50
+	ROUTED TO	RCLN9	1324.	4.47	334.	302.	302.	3.50
+	HYDROGRAPH AT	180U	34.	4.07	3.	3.	3.	0.02
+	2 COMBINED AT	*CLN10	1333.	4.47	336.	305.	305.	3.52
+	HYDROGRAPH AT	180Q	77.	4.07	8.	7.	7.	0.03
+	HYDROGRAPH AT	180R	67.	4.03	5.	4.	4.	0.03
+	HYDROGRAPH AT	170I2	34.	4.03	3.	3.	3.	0.01
+	HYDROGRAPH AT	D170I1	25.	4.07	3.	3.	3.	0.02
+	ROUTED TO	R170I1	24.	4.17	3.	3.	3.	0.02
+	2 COMBINED AT	MLT6A	51.	4.07	6.	6.	6.	0.01
+	DIVERSION TO	D170I2	26.	4.07	3.	3.	3.	0.01
+	HYDROGRAPH AT	DMLT6A	26.	4.07	3.	3.	3.	0.01
+	ROUTED TO	RMLT6A	25.	4.13	3.	3.	3.	0.01
+	3 COMBINED AT	CL10A	166.	4.07	16.	15.	15.	0.07
+	ROUTED TO	RCL10A	160.	4.10	16.	15.	15.	0.07
+	2 COMBINED AT	*CLN10	1385.	4.47	350.	317.	317.	3.59
+	HYDROGRAPH AT	180T	64.	4.03	7.	6.	6.	0.02
+	2 COMBINED AT	CLN10	1401.	4.47	356.	323.	323.	3.62

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

J.8

PANORAMA CHANNEL

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*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*              MAY   1991              *
*           VERSION 4.0.1E             *
*     Lahey F77L-EM/32 version 5.01    *
*       Dodson & Associates, Inc.      *
*  RUN DATE  04/05/95  TIME  14:59:23  *
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*                                      *
*    U.S. ARMY CORPS OF ENGINEERS      *
*    HYDROLOGIC ENGINEERING CENTER     *
*          609 SECOND STREET           *
*       DAVIS, CALIFORNIA 95616        *
*           (916) 551-1748             *
*                                      *
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X     X  XXXXXXX   XXXXX          X
X     X  X        X    X         XX
X     X  X        X               X
XXXXXXX  XXXX     X        XXXXX  X
X     X  X        X               X
X     X  X        X    X          X
X     X  XXXXXXX   XXXXX         XXX
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THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

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

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

  1           ID   PANORAMA CHANNEL - CURRENT CONDITIONS, AGK ENGINEERS, 04-05-95
  2           ID   First routing 06-29-93
  3           ID   100-Year 6-Hour storm
  4           ID   time steps at 2 minutes
  5           ID   File: 190-6CE.DAT
  6           ID
  7           IT       2                    200
  8           IO       5
              *DIAGRAM
  9           IN      15
 10           JD    3.20    0.01
 11           PC    .000    .008    .016    .025    .033    .041    .050    .058    .066    .074
 12           PC    .087    .099    .118    .138    .216    .377    .834    .911    .931    .950
 13           PC    .962    .972    .983    .991   1.000
 14           JD    3.18    0.50
 15           JD    3.14    2.80
 16           PC    .000    .009    .016    .025    .034    .042    .051    .059    .067    .076
 17           PC    .087    .100    .120    .163    .252    .451    .694    .837    .900    .938
 18           PC    .950    .963    .975    .988   1.000
 19           JD    2.95    16.0
 20           PC    .000    .015    .020    .030    .048    .063    .076    .090    .105    .119
 21           PC    .135    .152    .175    .222    .304    .472    .670    .796    .868    .912
 22           PC    .946    .960    .973    .987   1.000

 23           KK    182H
 24           KM   SUB-BASIN 182H
 25           KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 26           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 27           BA    .027
 28           LG    .150    .250   5.700    .207   6.500
 29           UC    .196    .181
 30           UA       0       5      16      30      65      77      84      90      94      97
 31           UA     100

 32           KK   S182H
 33           KM   STORAGE PONDED AREA ON SUB-BASIN 182H
 34           RS       1    ELEV    1601
 35           SQ       0       0       0      82     405
 36           SE    1601    1604    1606    1607    1608
 37           SA       0    0.01    0.06    0.25
 38           SE    1601    1602    1604    1606

 39           KK   R182H
 40           KM   ROUTE S82H THROUGH SUB-BASIN 190A TO CON. POINT PNR1A
 41           RS       1    FLOW       0
 42           RC    0.02    0.02    0.02     290   0.014
 43           RX    9958    9963    9968  9968.5 10031.5   10032   10037   10042
 44           RY  1598.5  1598.5  1598.5    1598    1598  1598.5  1598.5  1598.5

 45           KK    190A
 46           KM   SUB-BASIN 190A
 47           KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 48           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 49           BA    .019
 50           LG    .150    .250   5.700    .207   6.500
```

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

  51          UC    .179    .179
  52          UA       0       5      16      30      65      77      84      90      94      97
  53          UA     100

  54          KK   PNR1A
  55          KM   PANORAMA CONSENTRATION POINT 1A - COMBINE R182H, 190A
  56          HC       2

  57          KK  SPNR1A
  58          KM   STORAGE PONDED AREA ON SUB-BASIN 190A
  59          RS       1    ELEV    1594
  60          SQ       0       0      90    1051
  61          SE    1594    1601    1602    1603
  62          SA       0   0.005    0.08    0.44
  63          SE    1594    1596    1598    1601

  64          KK  RPNR1A
  65          KM   ROUTE SPNR1A THROUGH SUB-BASIN 190B TO CON. POINT PNR1
  66          RS       2    FLOW       0
  67          RC    0.02    0.02    0.02     567    0.02
  68          RX    9958    9963    9968  9968.5 10031.5   10032   10037   10042
  69          RY  1590.5  1590.5  1590.5    1590    1590  1590.5  1590.5  1590.5

  70          KK    190B
  71          KM   SUB-BASIN 190B
  72          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
  73          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
  74          BA    .007
  75          LG    .150    .250   5.700    .189  29.250
  76          UC    .158    .214
  77          UA       0       5      16      30      65      77      84      90      94      97
  78          UA     100

  79          KK    PNR1
  80          KM   PANORAMA CONSENTRATION POINT 1 - COMBINE RPNR1A, 190B
  81          HC       2

  82          KK   RPNR1
  83          KM   ROUTE PNR1 THROUGH SUB-BASIN 190C TO CON. POINT PNR2
  84          RS       2    FLOW       0
  85          RC    0.02    0.02    0.02     449    0.01
  86          RX    9958    9963    9968  9968.5 10031.5   10032   10037   10042
  87          RY  1588.5  1588.5  1588.5    1588    1588  1588.5  1588.5  1588.5

  88          KK    190C
  89          KM   SUB-BASIN 190C
  90          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
  91          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
  92          BA    .022
  93          LG    .150    .250   5.700    .189  26.000
  94          UC    .175    .160
  95          UA       0       5      16      30      65      77      84      90      94      97
  96          UA     100
```

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

 97           KK    PNR2
 98           KM   PANORAMA CONSENTRATION POINT 2 - COMBINE RPNR1, 190C
 99           HC       2

100           KK   RPNR2
101           KM   ROUTE PNR2 THROUGH SUB-BASIN 190I TO CON. POINT PNR3
102           RS       2    FLOW       0
103           RC    0.02    0.02    0.02     779   0.012
104           RX    9958    9963    9968  9968.5 10031.5   10032   10037   10042
105           RY  1578.5  1578.5  1578.5    1578    1578  1578.5  1578.5  1578.5

106           KK    190D
107           KM   SUB-BASIN 190D
108           KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
109           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
110           BA    .005
111           LG    .100    .250   5.700    .189    .000
112           UC    .092    .064
113           UA       0       3       5       8      12      20      43      75      90      96
114           UA     100

115           KK   R190D
116           KM   ROUTE 190D THROUGH SUB-BASIN 190F TO CON. POINT PNR3A
117           RS       3    FLOW       0
118           RC    0.04    0.04    0.04     722   0.059
119           RX    9890    9910    9955    9995   10005   10045   10185   10210
120           RY    1612    1608    1602    1588    1588    1602    1602    1606

121           KK    190E
122           KM   SUB-BASIN 190E
123           KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
124           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
125           BA    .003
126           LG    .050    .250   5.700    .170  32.500
127           UC    .112    .228
128           UA       0       5      16      30      65      77      84      90      94      97
129           UA     100

130           KK    190F
131           KM   SUB-BASIN 190F
132           KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
133           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
134           BA    .006
135           LG    .100    .250   5.700    .170   6.500
136           UC    .154    .208
137           UA       0       5      16      30      65      77      84      90      94      97
138           UA     100

139           KK    190G
140           KM   SUB-BASIN 190G
141           KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
142           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
143           BA    .006
144           LG    .100    .250   5.700    .170  16.250
```

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

 145          UC    .167    .279
 146          UA       0       5      16      30      65      77      84      90      94      97
 147          UA     100

 148          KK   PNR3A
 149          KM   PANORAMA CONSENTRATION POINT 3A - COMBINE R190D, 190E, 190F, 190G
 150          HC       4

 151          KK  RPNR3A
 152          KM   ROUTE PNR3A THROUGH SUB-BASIN 190J TO CON. POINT PNR3
 153          RS       1    FLOW       0
 154          RC    0.02    0.02    0.02     287   0.003
 155          RX    9980    9980    9985    9986   10014   10015   10020   10030
 156          RY  1576.7  1576.6  1576.5    1576    1576  1576.5  1576.6  1576.7

 157          KK    190H
 158          KM   SUB-BASIN 190H
 159          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 160          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 161          BA    .075
 162          LG    .150    .250   5.700    .207   3.250
 163          UC    .221    .157
 164          UA       0       5      16      30      65      77      84      90      94      97
 165          UA     100

 166          KK   R190H
 167          KM   ROUTE 190H THROUGH SUB-BASIN 190J TO CON. POINT PNR3
 168          RS       2    FLOW       0
 169          RC    0.02    0.02    0.02     660    0.01
 170          RX    9980    9980    9985    9986   10014   10015   10020   10030
 171          RY  1576.9  1576.6  1576.5    1576    1576  1576.5  1576.6  1576.9

 172          KK    190I
 173          KM   SUB-BASIN 190I
 174          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 175          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 176          BA    .012
 177          LG    .105    .250   5.700    .174  42.500
 178          UC    .121    .136
 179          UA       0       5      16      30      65      77      84      90      94      97
 180          UA     100

 181          KK    190J
 182          KM   SUB-BASIN 190J
 183          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 184          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 185          BA    .009
 186          LG    .140    .250   5.700    .196  16.250
 187          UC    .167    .221
 188          UA       0       5      16      30      65      77      84      90      94      97
 189          UA     100
```

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

 190          KK    PNR3
 191          KM   PANORAMA CONSENTRATION POINT 3 - COMBINE RPNR2, RPNR3A, R190H, 190J, 190I
 192          HC       5

 193          KK   RPNR3
 194          KM   ROUTE PNR3 THROUGH SUB-BASIN 190L TO CON. POINT *PNR4
 195          RS       3    FLOW       0
 196          RC    0.02    0.02    0.02    1048   0.022
 197          RX    9948    9963    9968  9968.5 10031.5   10032   10037   10052
 198          RY  1570.8  1570.6  1570.5    1570    1570  1570.5  1570.6  1570.8

 199          KK    190K
 200          KM   SUB-BASIN 190K
 201          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 202          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 203          BA    .008
 204          LG    .150    .250   5.700    .207    .000
 205          UC    .162    .221
 206          UA       0       3       5       8      12      20      43      75      90      96
 207          UA     100

 208          KK   R190K
 209          KM   ROUTE R910K THROUGH SUB-BASIN 190L TO CON. POINT *PNR4
 210          RS       2    FLOW       0
 211          RC    0.02    0.02    0.02     620   0.027
 212          RX    9958    9963    9968  9968.5 10031.5   10032   10037   10042
 213          RY  1570.5  1570.5  1570.5    1570    1570  1570.5  1570.5  1570.5

 214          KK    190L
 215          KM   SUB-BASIN 190L
 216          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 217          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 218          BA    .011
 219          LG    .102    .250   5.400    .218  30.130
 220          UC    .146    .176
 221          UA       0       5      16      30      65      77      84      90      94      97
 222          UA     100

 223          KK   *PNR4
 224          KM   PANORAMA CHANNEL CONC. POINT *4 - RPNR3, R190K, 190L
 225          HC       3

 226          KK    190M
 227          KM   SUB-BASIN 190M
 228          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 229          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 230          BA    .009
 231          LG    .116    .250   4.600    .311  24.800
 232          UC    .171    .244
 233          UA       0       5      16      30      65      77      84      90      94      97
 234          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 235          KK    190N
 236          KM   SUB-BASIN 190N
 237          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 238          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 239          BA    .018
 240          LG    .150    .250   5.700    .207    .000
 241          UC    .171    .164
 242          UA       0       3       5       8      12      20      43      75      90      96
 243          UA     100

 244          KK    PNR4
 245          KM   PANORAMA CONSENTRATION POINT 3 - COMBINE (RPNR3, R190K, 190L), 190M, 190N
 246          HC       3

 247          KK   RPNR4
 248          KM   ROUTE PNR4 THROUGH SUB-BASIN 190Q TO CON. POINT PNR5
 249          RS       3    FLOW       0
 250          RC    0.04    0.04    0.04    1232   0.015
 251          RX    9790    9855    9910    9990   10015   10045   10160   10220
 252          RY    1546    1544    1538    1536    1536    1540    1540    1558

 253          KK    1900
 254          KM   SUB-BASIN 1900
 255          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 256          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 257          BA    .006
 258          LG    .050    .250   4.400    .320  59.800
 259          UC    .121    .173
 260          UA       0       5      16      30      65      77      84      90      94      97
 261          UA     100

 262          KK   R1900
 263          KM   ROUTE 1900 THROUGH SUB-BASIN 190P TO CON. POINT PNR5A
 264          RS       2    FLOW       0
 265          RC    0.02    0.02    0.02     701   0.027
 266          RX    9958    9963    9968  9968.5 10031.5   10032   10037   10042
 267          RY  1570.5  1570.5  1570.5    1570  1570.5  1570.5  1570.5  1570.5

 268          KK    190P
 269          KM   SUB-BASIN 190P
 270          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 271          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 272          BA    .021
 273          LG    .080    .250   4.100    .380  57.200
 274          UC    .100    .075
 275          UA       0       5      16      30      65      77      84      90      94      97
 276          UA     100

 277          KK   PNR5A
 278          KM   PANORAMA CONSENTRATION POINT 5A - COMBINE R1900, 190P
 279          HC       2
```

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

 280          KK  RPNR5A
 281          KM   ROUTE PNR5A THROUGH SUB-BASIN 190Q TO CON. POINT PNR5
 282          RS       2    FLOW       0
 283          RC    0.04    0.04    0.04     625   0.019
 284          RX    9790    9855    9910    9990   10015   10045   10160   10220
 285          RY    1576    1544    1538    1536    1536    1540    1540    1558

 286          KK    190Q
 287          KM   SUB-BASIN 190Q
 288          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 289          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 290          BA    .012
 291          LG    .150    .250   4.000    .605    .000
 292          UC    .179    .239
 293          UA       0       3       5       8      12      20      43      75      90      96
 294          UA     100

 295          KK   *PNR5
 296          KM   PANORAMA CHANNEL CONCENTRATION POINT *5 - RPNR4, RPNR5A, 190Q
 297          HC       3

 298          KK    190R
 299          KM   SUB-BASIN 190R
 300          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 301          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 302          BA    .015
 303          LG    .150    .250   5.400    .232    .000
 304          UC    .179    .198
 305          UA       0       3       5       8      12      20      43      75      90      96
 306          UA     100

 307          KK    PNR5
 308          KM   PANORAMA CONSENTRATION POINT 5 - COMBINE (RPNR4, RPNR5A, 190Q), 190R
 309          HC       2

 310          KK   RPNR5
 311          KM   ROUTE PNR5 THROUGH SUB-BASIN 190S TO CON. POINT PNR6
 312          RS       2    FLOW       0
 313          RC    0.04    0.04    0.04     438   0.009
 314          RX    9785    9810    9845    9880   10060   10080   10100   10105
 315          RY    1550    1540    1528    1526    1526    1530    1536    1536

 316          KK    190S
 317          KM   SUB-BASIN 190S
 318          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 319          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 320          BA    .008
 321          LG    .150    .250   4.350    .512    .000
 322          UC    .167    .201
 323          UA       0       3       5       8      12      20      43      75      90      96
 324          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 325          KK   *PNR6
 326          KM   PANORAMA CHANNEL CONCENTRATION POINT *6 - RPNR5, 190S
 327          HC       2

 328          KK    190T
 329          KM   SUB-BASIN 190T
 330          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 331          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .998
 332          BA    .129
 333          LG    .150    .330   5.700    .207    .000
 334          UC    .308    .253
 335          UA       0       3       5       8      12      20      43      75      90      96
 336          UA     100

 337          KK    PNR6
 338          KM   PANORAMA CONSENTRATION POINT 5 - COMBINE (RPNR5, 190S), 190T
 339          HC       2

 340          KK   RPNR6
 341          KM   ROUTE PNR6 THROUGH SUB-BASIN 190V TO CON. POINT PNR7
 342          RS       2    FLOW       0
 343          RC    0.04    0.04    0.04     854   0.008
 344          RX    9775    9805    9840    9970   10040   10070   10115   10150
 345          RY    1540    1530    1520    1518    1518    1520    1526    1530

 346          KK    190V
 347          KM   SUB-BASIN 190V
 348          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 349          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 350          BA    .018
 351          LG    .150    .317   4.350    .385    .640
 352          UC    .196    .222
 353          UA       0       5      16      30      65      77      84      90      94      97
 354          UA     100

 355          KK   *PNR7
 356          KM   PANORAMA CHANNEL CONCENTRATION POINT *7 - RPNR6, 190V
 357          HC       2

 358          KK    190U
 359          KM   SUB-BASIN 190U
 360          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 361          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 362          BA    .021
 363          LG    .100    .250   4.150    .370  45.500
 364          UC    .158    .191
 365          UA       0       5      16      30      65      77      84      90      94      97
 366          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 367          KK   R190U
 368          KM   ROUTE 190U THROUGH SUB-BASIN 190V TO CON. POINT PNR7
 369          RS       1    FLOW       0
 370          RC    0.04    0.04    0.04     286   0.035
 371          RX    9775    9805    9840    9970   10040   10070   10115   10150
 372          RY    1540    1530    1520    1518    1518    1520    1526    1530

 373          KK    PNR7
 374          KM   PANORAMA CONSENTRATION POINT 7 - COMBINE (RPNR6, 190U), R190U
 375          HC       2
 376          ZZ
```

SCHEMATIC DIAGRAM OF STREAM NETWORK

```
LINE     (V) ROUTING          (--->) DIVERSION OR PUMP FLOW

NO.      (.) CONNECTOR        (<---) RETURN OF DIVERTED OR PUMPED FLOW

 23        182H
            V
            V
 32       S182H
            V
            V
 39       R182H
            .
            .
 45          .        190A
             .          .
             .          .
 54       PNR1A............
            V
            V
 57      SPNR1A
            V
            V
 64      RPNR1A
            .
            .
 70          .        190B
             .          .
             .          .
 79        PNR1............
            V
            V
 82       RPNR1
            .
            .
             .        190C
             .          .
             .          .
 97        PNR2............
            V
            V
100       RPNR2
            .
            .
106          .        190D
             .          V
             .          V
115          .       R190D
             .          .
             .          .
121          .          .       190E
             .          .         .
             .          .         .
130          .          .         .       190F
             .          .         .         .
             .          .         .         .
139          .          .         .         .       190G
             .          .         .         .         .
             .          .         .         .         .
148          .       PNR3A...................................
             .          V
             .          V
151          .      RPNR3A
             .          .
             .          .
157          .          .       190H
             .          .         V
             .          .         V
             .          .      R190H
             .          .         .
```

```
        .         .         .
        .         .         .      190I
        .         .         .        .
        .         .         .        .
181     .         .         .        .        190J
        .         .         .        .          .
        .         .         .        .          .
190   PNR3.......................................
        V
        V
193   RPNR3
        .
        .
199     .       190K
        .         V
        .         V
208     .      R190K
        .         .
        .         .
214     .         .       190L
        .         .         .
        .         .         .
223   *PNR4......................
        .
        .
226     .       190M
        .         .
        .         .
235     .         .       190N
        .         .         .
        .         .         .
244   PNR4......................
        V
        V
247   RPNR4
        .
        .
        .       1900
        .         V
        .         V
262     .      R1900
        .         .
        .         .
268     .         .       190P
        .         .         .
        .         .         .
277     .      PNR5A............
        .         V
        .         V
280     .     RPNR5A
        .         .
        .         .
286     .         .       190Q
        .         .         .
        .         .         .
295   *PNR5......................
        .
        .
298     .       190R
        .         .
        .         .
307   PNR5............
        V
        V
310   RPNR5
        .
        .
316     .       190S
        .         .
        .         .
      *PNR6............
        .
```

```
            .
            .        190T
            .          .
            .          .
337       PNR6............
            V
            V
340      RPNR6
            .
            .
346         .        190V
            .          .
            .          .
355      *PNR7............
            .
            .
358         .        190U
            .          V
            .          V
367         .       R190U
            .          .
            .          .
373       PNR7............
```

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

```
****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*             MAY   1991               *
*          VERSION 4.0.1E              *
*    Lahey F77L-EM/32 version 5.01     *
*       Dodson & Associates, Inc.      *
* RUN DATE  04/05/95  TIME  14:59:23   *
****************************************
```

```
****************************************
*                                      *
*    U.S. ARMY CORPS OF ENGINEERS      *
*    HYDROLOGIC ENGINEERING CENTER     *
*          609 SECOND STREET           *
*        DAVIS, CALIFORNIA 95616       *
*           (916) 551-1748             *
*                                      *
****************************************
```

```
                    PANORAMA CHANNEL - CURRENT CONDITIONS, AGK ENGINEERS, 04-05-95
                    First routing 06-29-93
                    100-Year 6-Hour storm
                    time steps at 2 minutes
                    File: 190-6CE.DAT

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

   IT        HYDROGRAPH TIME DATA
                   NMIN          2  MINUTES IN COMPUTATION INTERVAL
                  IDATE      1   0  STARTING DATE
                  ITIME       0000  STARTING TIME
                     NQ        200  NUMBER OF HYDROGRAPH ORDINATES
                 NDDATE      1   0  ENDING DATE
                 NDTIME       0638  ENDING TIME
                  ICENT         19  CENTURY MARK

             COMPUTATION INTERVAL    0.03 HOURS
                  TOTAL TIME BASE    6.63 HOURS

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

10 JD        INDEX STORM NO. 1
                  STRM       3.20  PRECIPITATION DEPTH
                  TRDA       0.01  TRANSPOSITION DRAINAGE AREA

11 PI          PRECIPITATION PATTERN
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.01      0.01      0.01
                 0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                 0.02      0.02      0.04      0.06      0.06      0.06      0.06      0.06      0.06      0.06
                 0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

JD           INDEX STORM NO. 2
```

```
                STRM        3.18  PRECIPITATION DEPTH
                TRDA        0.50  TRANSPOSITION DRAINAGE AREA

0 PI          PRECIPITATION PATTERN
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.01        0.01        0.01
                0.01        0.01        0.01        0.01        0.01        0.02        0.02        0.02        0.02        0.02
                0.02        0.02        0.04        0.06        0.06        0.06        0.06        0.06        0.06        0.06
                0.01        0.01        0.01        0.01        0.01        0.01        0.01        0.01        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00

15 JD         INDEX STORM NO. 3
                STRM        3.14  PRECIPITATION DEPTH
                TRDA        2.80  TRANSPOSITION DRAINAGE AREA

16 PI         PRECIPITATION PATTERN
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.01        0.01        0.01        0.01        0.01        0.01        0.01        0.01        0.01        0.01
                0.01        0.01        0.01        0.01        0.01        0.03        0.03        0.03        0.03        0.03
                0.03        0.03        0.03        0.03        0.03        0.03        0.03        0.03        0.03        0.03
                0.02        0.02        0.02        0.02        0.02        0.02        0.02        0.01        0.01        0.01
                0.01        0.01        0.01        0.01        0.01        0.01        0.01        0.01        0.01        0.01
                0.01        0.01        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00

19 JD         INDEX STORM NO. 4
                STRM        2.95  PRECIPITATION DEPTH
                TRDA       16.00  TRANSPOSITION DRAINAGE AREA

20 PI         PRECIPITATION PATTERN
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.01        0.01        0.01        0.01        0.01        0.01        0.01        0.01        0.01        0.01
                0.01        0.01        0.01        0.01        0.01        0.02        0.02        0.02        0.02        0.02
                0.02        0.02        0.02        0.03        0.03        0.03        0.03        0.03        0.03        0.03
                0.02        0.02        0.02        0.02        0.02        0.02        0.02        0.01        0.01        0.01
                0.01        0.01        0.01        0.01        0.01        0.01        0.01        0.01        0.01        0.01
                0.01        0.01        0.01        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
                0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
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RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	182H	67.	4.07	5.	5.	5.	0.03		
+	ROUTED TO	S182H	64.	4.10	5.	4.	4.	0.03		
+	ROUTED TO	R182H	64.	4.10	5.	4.	4.	0.03		
+	HYDROGRAPH AT	190A	48.	4.03	4.	3.	3.	0.02		
+	2 COMBINED AT	PNR1A	109.	4.07	9.	8.	8.	0.05		
+	ROUTED TO	SPNR1A	106.	4.13	7.	6.	6.	0.05		
+	ROUTED TO	RPNR1A	102.	4.17	7.	6.	6.	0.05		
+	HYDROGRAPH AT	190B	17.	4.03	2.	2.	2.	0.01		
+	2 COMBINED AT	PNR1	114.	4.17	9.	8.	8.	0.05		
+	ROUTED TO	RPNR1	112.	4.17	9.	8.	8.	0.05		
+	HYDROGRAPH AT	190C	60.	4.03	5.	5.	5.	0.02		
+	2 COMBINED AT	PNR2	151.	4.17	14.	12.	12.	0.08		
+	ROUTED TO	RPNR2	150.	4.17	14.	12.	12.	0.08		
+	HYDROGRAPH AT	190D	17.	4.00	1.	1.	1.	0.00		
+	ROUTED TO	R190D	17.	4.03	1.	1.	1.	0.00		
+	HYDROGRAPH AT	190E	8.	4.03	1.	1.	1.	0.00		
+	HYDROGRAPH AT	190F	15.	4.03	1.	1.	1.	0.01		
+	HYDROGRAPH AT	190G	13.	4.07	1.	1.	1.	0.01		
+	4 COMBINED AT	PNR3A	52.	4.03	4.	4.	4.	0.02		
+	ROUTED TO	RPNR3A	51.	4.07	4.	4.	4.	0.02		
+	HYDROGRAPH AT	190H	194.	4.07	15.	13.	13.	0.08		

+	ROUTED TO	R190H	192.	4.07	15.	13.	13.	0.08
+	HYDROGRAPH AT	190I	36.	4.03	3.	3.	3.	0.01
+	HYDROGRAPH AT	190J	22.	4.03	2.	2.	2.	0.01
+	5 COMBINED AT	PNR3	395.	4.10	38.	34.	34.	0.19
+	ROUTED TO	RPNR3	394.	4.13	38.	34.	34.	0.19
+	HYDROGRAPH AT	190K	19.	4.10	2.	1.	1.	0.01
+	ROUTED TO	R190K	18.	4.13	2.	1.	1.	0.01
+	HYDROGRAPH AT	190L	30.	4.03	3.	2.	2.	0.01
+	3 COMBINED AT	*PNR4	435.	4.13	42.	38.	38.	0.21
+	HYDROGRAPH AT	190M	20.	4.03	2.	2.	2.	0.01
+	HYDROGRAPH AT	190N	47.	4.10	3.	3.	3.	0.02
+	3 COMBINED AT	PNR4	494.	4.13	47.	43.	43.	0.24
+	ROUTED TO	RPNR4	490.	4.17	47.	43.	43.	0.24
+	HYDROGRAPH AT	190O	17.	4.03	2.	2.	2.	0.01
+	ROUTED TO	R190O	16.	4.07	2.	2.	2.	0.01
+	HYDROGRAPH AT	190P	71.	4.00	6.	5.	5.	0.02
+	2 COMBINED AT	PNR5A	86.	4.00	7.	7.	7.	0.03
+	ROUTED TO	RPNR5A	85.	4.03	7.	7.	7.	0.03
+	HYDROGRAPH AT	190Q	23.	4.10	2.	2.	2.	0.01
+	3 COMBINED AT	*PNR5	558.	4.13	56.	51.	51.	0.28
+	HYDROGRAPH AT	190R	36.	4.10	3.	3.	3.	0.01
+	2 COMBINED AT	PNR5	592.	4.13	59.	53.	53.	0.29
+	ROUTED TO	RPNR5	589.	4.17	59.	53.	53.	0.29
+	HYDROGRAPH AT	190S	17.	4.10	1.	1.	1.	0.01

+	2 COMBINED AT	*PNR6	602.	4.17	60.	54.	54.	0.30
+	HYDROGRAPH AT	190T	259.	4.17	23.	21.	21.	0.13
+	2 COMBINED AT	PNR6	860.	4.17	83.	75.	75.	0.43
+	ROUTED TO	RPNR6	847.	4.20	83.	75.	75.	0.43
+	HYDROGRAPH AT	190V	37.	4.07	3.	3.	3.	0.02
+	2 COMBINED AT	*PNR7	872.	4.20	86.	78.	78.	0.45
+	HYDROGRAPH AT	190U	54.	4.03	5.	5.	5.	0.02
+	ROUTED TO	R190U	54.	4.07	5.	5.	5.	0.02
+	2 COMBINED AT	PNR7	906.	4.20	91.	83.	83.	0.47

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

APPENDIX K

HEC-1 OUTPUT FOR 100-YEAR, 24-HOUR STORM (EXISTING CONDITION)

K.1

POWDER WASH

```
*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*              MAY   1991               *
*            VERSION 4.0.1E             *
*     Lahey F77L-EM/32 version 5.01     *
*       Dodson & Associates, Inc.       *
*  RUN DATE  04/11/95  TIME  13:02:12   *
*****************************************
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*****************************************
*                                       *
*    U.S. ARMY CORPS OF ENGINEERS       *
*    HYDROLOGIC ENGINEERING CENTER      *
*          609 SECOND STREET            *
*       DAVIS, CALIFORNIA 95616         *
*           (916) 551-1748              *
*                                       *
*****************************************
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X     X  XXXXXXX   XXXXX          X
X     X  X        X     X        XX
X     X  X        X              X
XXXXXXX  XXXX     X        XXXXX  X
X     X  X        X              X
X     X  X        X     X        X
X     X  XXXXXXX   XXXXX         XXX
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THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

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

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

  1           ID   POWDER WASH, EXISTING CONDITIONS, AGK ENGINEERS, 4-11-95
  2           ID   First routing 4-3-93
  3           ID   100-Year 24-Hour storm
  4           ID   24-Hour SCS Type II distribution
  5           ID   2 minutes time step
  6           ID   File:  110-24CE.DAT
  7           ID
  8           IT       2                    720
  9           IO       5
              *DIAGRAM
 10           IN      30
 11           JD     4.0
 12           PC    .000    .005    .011    .016    .022    .028    .035    .041    .048    .056
 13           PC    .063    .071    .080    .089    .098    .109    .120    .133    .147    .163
 14           PC    .181    .204    .235    .283    .663    .735    .772    .799    .820    .838
 15           PC    .854    .868    .880    .891    .902    .912    .921    .929    .937    .945
 16           PC    .952    .959    .965    .972    .978    .984    .989    .995   1.000

 17           KK    110A
 18           KM   SUB-BASIN 110A
 19           KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 20           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 21           BA    .022
 22           LG    .150    .156   7.300    .110  25.620
 23           UC    .192    .215
 24           UA       0       3       5       8      12      20      43      75      90      96
 25           UA     100

 26           KK    110B
 27           KM   SUB-BASIN 110B
 28           KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 29           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 30           BA    .036
 31           LG    .150    .170   6.800    .134  23.920
 32           UC    .204    .203
 33           UA       0       3       5       8      12      20      43      75      90      96
 34           UA     100

 35           KK     PW1
 36           KM   POWDER WASH CONSENTRATION POINT 1 - COMBINE BASINS 110A AND 110B
 37           HC       2

 38           KK    RPW1
 39           KM   ROUTE FLOWS THROUGH BASIN 110C
 40           RS       1    FLOW       0
 41           RC     .04     .04     .04     379    .026    1710
 42           RX    9895    9930    9957    9995   10005   10043   10073   10110
 43           RY    1710    1700    1692    1682    1682    1692    1700    1710

 44           KK    110C
 45           KM   SUB-BASIN 110C
 46           KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 47           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 48           BA    .004
 49           LG    .150    .190   6.600    .146  22.410
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  50          UC    .125    .167
  51          UA       0       3       5       8      12      20      43      75      90      96
  52          UA     100

  53          KK    110D
  54          KM   SUB-BASIN 110D
  55          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
  56          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
  57          BA    .071
  58          LG    .150    .150   7.300    .110  25.500
  59          UC    .200    .135
  60          UA       0       3       5       8      12      20      43      75      90      96
  61          UA     100

  62          KK     PW2
  63          KM   POWDER WASH CONCENTRASTION POINT 2 - COMBINE RPW1, 110C AND 110D
  64          HC       3

  65          KK    RPW2
  66          KM   NORMAL DEPTH ROUTING THROUGH BASIN 110E
  67          RS       2    FLOW      -1
  68          RC     .04     .04     .04    1128    .019    1710
  69          RX    9875    9905    9955   10000   10030   10085   10120   10140
  70          RY    1696    1690    1680    1668    1668    1680    1690  1694.5

  71          KK    110E
  72          KM   SUB-BASIN 110E
  73          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
  74          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
  75          BA    .025
  76          LG    .150    .230   6.200    .171  21.250
  77          UC    .167    .132
  78          UA       0       3       5       8      12      20      43      75      90      96
  79          UA     100

  80          KK    *PW3
  81          KM    UPSTREAM MAIN CHANNEL FLOW
  82          HC       2

  83          KK    110F
  84          KM   SUB-BASIN 110F
  85          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
  86          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
  87          BA    .008
  88          LG    .150    .230   6.200    .171  28.750
  89          UC    .146    .174
  90          UA       0       5      16      30      65      77      84      90      94      97
  91          UA     100

  92          KK    110G
  93          KM   SUB-BASIN 110G
  94          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
  95          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
  96          BA    .006
  97          LG    .150    .230   6.200    .171  22.750
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  98          UC    .117    .115
  99          UA       0       5      16      30      65      77      84      90      94      97
 100          UA     100

 101          KK     PW3
 102          KM   POWDER WASH CONSENTRATION POINT 3 - COMBINE (RPW2, 110E), 110F, 110G
 103          HC       3

 104          KK    RPW3
 105          KM   ROUTE PW3 THROUGH BASIN 110H
 106          RS       3    FLOW      -1
 107          RC     .04     .04     .04    1893    .021    1650
 108          RX    9810    9870    9955    9980   10050   10068   10100   10110
 109          RY    1648    1641    1642    1634    1634    1642    1650    1652

 110          KK    110H
 111          KM   SUB-BASIN 110H
 112          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 113          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 114          BA    .031
 115          LG    .120    .250   6.000    .173   8.720
 116          UC    .271    .302
 117          UA       0       5      16      30      65      77      84      90      94      97
 118          UA     100

 119          KK    *PW4
 120          KM   UPSTREAM MAIN CHANNEL FLOW
 121          HC       2

 122          KK    110I
 123          KM   SUB-BASIN 110I
 124          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 125          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 126          BA    .020
 127          LG    .150    .262   6.000    .183   5.400
 128          UC    .208    .242
 129          UA       0       5      16      30      65      77      84      90      94      97
 130          UA     100

 131          KK     PW4
 132          KM   POWDER WASH CONCENTRATION POINT 4 - COMBINES (RPW3, 110H), 110I
 133          HC       2

 134          KK    SPW4
 135          KM   ROUTE PW4 THROUGH 5 48" CMP CULVERT UNDER LEO DRIVE
 136          RS       1    STOR       0
 137          SQ       0     110     325     625     650
 138          SE  1612.6  1614.6  1616.6  1620.6  6121.0
 139          SA       0    0.07    1.51
 140          SE  1612.6    1614  1621.5
```

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

  141         KK    110J
  142         KM   SUB-BASIN 110J
  143         KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
  144         KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
  145         BA    .007
  146         LG    .150    .250   6.000    .183  19.530
  147         UC    .108    .129
  148         UA       0       5      16      30      65      77      84      90      94      97
  149         UA     100

  150         KK    110K
  151         KM   SUB-BASIN 110K
  152         KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
  153         KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
  154         BA    .012
  155         LG    .050    .250   6.000    .150  23.450
  156         UC    .083    .064
  157         UA       0       5      16      30      65      77      84      90      94      97
  158         UA     100

  159         KK   R110K
  160         KM   ROUTE 110K THROUGH SUB-BASIN 110L TO CON. POINT PW5
  161         RS       2    FLOW       0
  162         RC    0.04    0.04    0.04     900   0.013
  163         RX    9956    9961    9966  9966.5 10033.5   10034   10039   10044
  164         RY  1626.5  1626.5  1626.5    1626    1626  1626.5  1626.5  1626.5

  165         KK    110L
  166         KM   SUB-BASIN 110L
  167         KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
  168         KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
  169         BA    .024
  170         LG    .092    .250   6.000    .177   5.820
  171         UC    .158    .193
  172         UA       0       5      16      30      65      77      84      90      94      97
  173         UA     100

  174         KK     PW5
  175         KM   POWEDER WASH CONSENTRATION POINT 5 - COMBINNES SPW4, 110J, R110K
  176         HC       4

  177         KK    RPW5
  178         KM   ROUTE PW5 THROUGH BASIN 110M
  179         RS       3    FLOW      -1
  180         RC     .04     .04     .04    1728    .018    1610
  181         RX    9855    9910    9962    9995   10010   10060   10123   10190
  182         RY    1606    1604    1602    1598    1598    1602    1599    1610

  183         KK    110M
  184         KM   SUB-BASIN 110M
  185         KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
  186         KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
  187         BA    .031
  188         LG    .121    .250   6.000    .173  14.700
```

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

 189          UC    .183    .176
 190          UA       0       5      16      30      65      77      84      90      94      97
 191          UA     100

 192          KK    *PW6
 193          KM   UPSTREAM FLOW IN MAIN CHANNEL
 194          HC       2

 195          KK    110N
 196          KM   SUB-BASIN 110N
 197          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 198          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 199          BA    .015
 200          LG    .150    .250   6.000    .183   7.500
 201          UC    .167    .223
 202          UA       0       5      16      30      65      77      84      90      94      97
 203          UA     100

 204          KK    1100
 205          KM   SUB-BASIN 1100
 206          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 207          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 208          BA    .004
 209          LG    .120    .250   6.000    .173  18.750
 210          UC    .112    .121
 211          UA       0       5      16      30      65      77      84      90      94      97
 212          UA     100

 213          KK     PW6
 214          KM   POWDER WASH CONCENTRATION POINT 6 - COMBINE (RPW5, 110M), 100N, 1100
 215          HC       3
 216          ZZ
```

SCHEMATIC DIAGRAM OF STREAM NETWORK

```
LINE    (V) ROUTING          (--->) DIVERSION OR PUMP FLOW
NO.     (.) CONNECTOR        (<---) RETURN OF DIVERTED OR PUMPED FLOW

 17       110A
            .
            .
 26         .        110B
            .           .
            .           .
 35       PW1...........
            V
            V
 38      RPW1
            .
            .
 44         .        110C
            .           .
            .           .
 53         .           .        110D
            .           .           .
            .           .           .
 62       PW2........................
            V
            V
 65      RPW2
            .
            .
 71         .        110E
            .           .
            .           .
 80      *PW3...........
            .
            .
 [illegible]  .        110F
            .           .
            .           .
 92         .           .        110G
            .           .           .
            .           .           .
101       PW3........................
            V
            V
104      RPW3
            .
            .
110         .        110H
            .           .
            .           .
119      *PW4...........
            .
            .
122         .        110I
            .           .
            .           .
131       PW4...........
            V
            V
134      SPW4
            .
            .
141         .        110J
            .           .
            .           .
150         .           .        110K
            .           .           V
            .           .           V
[illegible] .           .       R110K
            .           .           .
```

```
                .          .          .
                .          .          .        110L
                .          .          .          .
                .          .          .          .
174           PW5.......................................
                V
                V
177          RPW5
                .
                .
183             .        110M
                .          .
                .          .
192          *PW6............
                .
                .
195             .        110N
                .          .
                .          .
204             .          .        1100
                .          .          .
                .          .          .
213           PW6........................
```

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

```
****************************************
*                                      *
*  FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*            MAY   1991                *
*         VERSION 4.0.1E               *
*    Lahey F77L-EM/32 version 5.01     *
*      Dodson & Associates, Inc.       *
* RUN DATE  04/11/95  TIME  13:02:12   *
****************************************
```

```
****************************************
*                                      *
*    U.S. ARMY CORPS OF ENGINEERS      *
*    HYDROLOGIC ENGINEERING CENTER     *
*          609 SECOND STREET           *
*       DAVIS, CALIFORNIA 95616        *
*           (916) 551-1748             *
*                                      *
****************************************
```

```
                    POWDER WASH, EXISTING CONDITIONS, AGK ENGINEERS, 4-11-95
                    First routing 4-3-93
                    100-Year 24-Hour storm
                    24-Hour SCS Type II distribution
                    2 minutes time step
                    File:  110-24CE.DAT

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

   IT        HYDROGRAPH TIME DATA
                   NMIN          2  MINUTES IN COMPUTATION INTERVAL
                  IDATE      1   0  STARTING DATE
                  ITIME       0000  STARTING TIME
                     NQ        720  NUMBER OF HYDROGRAPH ORDINATES
                 NDDATE      1   0  ENDING DATE
                 NDTIME       2358  ENDING TIME
                  ICENT         19  CENTURY MARK

             COMPUTATION INTERVAL    0.03 HOURS
                  TOTAL TIME BASE   23.97 HOURS

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

11 JD        INDEX STORM NO. 1
                   STRM       4.00  PRECIPITATION DEPTH
                   TRDA       0.00  TRANSPOSITION DRAINAGE AREA

12 PI          PRECIPITATION PATTERN
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
```

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

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

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	110A	36.	12.07	5.	1.	1.	0.02		
+	HYDROGRAPH AT	110B	58.	12.07	7.	2.	2.	0.04		
+	2 COMBINED AT	PW1	93.	12.07	12.	3.	3.	0.06		
+	ROUTED TO	RPW1	93.	12.10	12.	3.	3.	0.06		
+									1682.95	12.10
+	HYDROGRAPH AT	110C	7.	12.03	1.	0.	0.	0.00		
+	HYDROGRAPH AT	110D	125.	12.03	15.	4.	4.	0.07		
+	3 COMBINED AT	PW2	224.	12.07	28.	8.	8.	0.13		
+	ROUTED TO	RPW2	223.	12.10	28.	8.	8.	0.13		
+									1668.76	12.10
+	HYDROGRAPH AT	110E	42.	12.03	5.	1.	1.	0.03		
+	2 COMBINED AT	*PW3	263.	12.07	32.	9.	9.	0.16		
+	HYDROGRAPH AT	110F	13.	12.00	2.	0.	0.	0.01		
+	HYDROGRAPH AT	110G	10.	12.00	1.	0.	0.	0.01		
+	3 COMBINED AT	PW3	284.	12.07	35.	10.	10.	0.17		
+	ROUTED TO	RPW3	276.	12.17	35.	10.	10.	0.17		
+									1634.81	12.17
+	HYDROGRAPH AT	110H	41.	12.07	5.	1.	1.	0.03		
+	2 COMBINED AT	*PW4	313.	12.13	40.	11.	11.	0.20		
+	HYDROGRAPH AT	110I	28.	12.03	3.	1.	1.	0.02		
+	2 COMBINED AT	PW4	338.	12.13	43.	12.	12.	0.22		
+	ROUTED TO	SPW4	331.	12.17	43.	12.	12.	0.22		
+									1616.68	12.17
+	HYDROGRAPH AT	110J	12.	12.00	1.	0.	0.	0.01		

+	HYDROGRAPH AT	110K	22.	12.00	2.	1.	1.	0.01	
+	ROUTED TO	R110K	21.	12.00	2.	1.	1.	0.01	
+									1626.21 12.00
+	HYDROGRAPH AT	110L	37.	12.03	4.	1.	1.	0.02	
+	4 COMBINED AT	PW5	387.	12.07	51.	14.	14.	0.27	
+	ROUTED TO	RPW5	380.	12.17	51.	14.	14.	0.27	
+									1599.83 12.17
+	HYDROGRAPH AT	110M	49.	12.03	5.	1.	1.	0.03	
+	2 COMBINED AT	*PW6	413.	12.13	56.	16.	16.	0.30	
+	HYDROGRAPH AT	110N	22.	12.03	2.	1.	1.	0.01	
+	HYDROGRAPH AT	110O	7.	12.00	1.	0.	0.	0.00	
+	3 COMBINED AT	PW6	434.	12.13	59.	17.	17.	0.32	

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

K.2

CEREUS WASH

```
****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*              MAY   1991              *
*            VERSION 4.0.1E            *
*     Lahey F77L-EM/32 version 5.01    *
*       Dodson & Associates, Inc.      *
*  RUN DATE  01/20/97  TIME  09:32:59  *
****************************************
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```
****************************************
*                                      *
*    U.S. ARMY CORPS OF ENGINEERS      *
*    HYDROLOGIC ENGINEERING CENTER     *
*          609 SECOND STREET           *
*       DAVIS, CALIFORNIA 95616        *
*           (916) 551-1748             *
*                                      *
****************************************
```

```
X     X  XXXXXXX   XXXXX           X
X     X  X        X     X         XX
X     X  X        X                X
XXXXXXX  XXXX     X        XXXXX   X
X     X  X        X                X
X     X  X        X     X          X
X     X  XXXXXXX   XXXXX          XXX
```

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

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

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

  1           ID   CEREUS WASH -   EXISTING CONDITIONS , AGK ENGINEERS, 04-11-95
  2           ID   First routing 5-28-93
  3           ID   100-Year 24-Hour storm
  4           ID   24-Hour SCS Type II distribution
  5           ID   2 minutes time step
  6           ID   File:  120-24CE.DAT
  7           ID
  8           IT       2                    720
  9           IO       5
              *DIAGRAM
 10           IN      30
 11           JD     4.0
 12           PC    .000    .005    .011    .016    .022    .028    .035    .041    .048    .056
 13           PC    .063    .071    .080    .089    .098    .109    .120    .133    .147    .163
 14           PC    .181    .204    .235    .283    .663    .735    .772    .799    .820    .838
 15           PC    .854    .868    .880    .891    .902    .912    .921    .929    .937    .945
 16           PC    .952    .959    .965    .972    .978    .984    .989    .995   1.000

 17           KK    120A
 18           KM   SUB-BASIN 120A
 19           KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 20           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 21           BA    .016
 22           LG    .100    .250   5.700    .170  31.500
 23           UC    .183    .336
 24           UA       0       5      16      30      65      77      84      90      94      97
 25           UA     100

 26           KK    120B
 27           KM   SUB-BASIN 120B
 28           KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 29           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 30           BA    .053
 31           LG    .150    .250   5.700    .207   9.000
 32           UC    .237    .219
 33           UA       0       5      16      30      65      77      84      90      94      97
 34           UA     100

 35           KK    160A
 36           KM   SUB-BASIN 160A
 37           KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 38           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 39           BA    .006
 40           LG    .100    .250   5.700    .170  40.500
 41           UC    .096    .099
 42           UA       0       5      16      30      65      77      84      90      94      97
 43           UA     100

 44           KK   R160A
 45           KM   ROUTE 160A THROUGH SUB-BASIN 120B TO CON. POINT CER1
 46           RS       5    FLOW       0
 47           RC    0.04    0.04    0.04    2300   0.054
 48           RX    9920    9942    9975    9997   10003   10050   10060   10085
 49           RY    1810    1806    1800    1791    1791    1802    1804    1810
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  50          KK    CER1
  51          KM   CEREUS WASH CONCENTRATION POINT 1 - COMBINE R160A, 120A AND 120B
  52          HC       3

  53          KK   SCER1
  54          KM   ROUTE CER1 THROUGH 60" CULVERT AT FOUNTAIN HILLS BLVD.
  55          KO       3
  56          RS       1    ELEV    1756
  57          SQ       0      37     115     222     355    1000
  58          SE    1757  1759.5    1762    1767  1778.7    1779
  59          SA     .04     .23    2.68
  60          SE    1756    1760    1780

  61          KK    120C
  62          KM   SUB-BASIN 120C
  63          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
  64          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
  65          BA    .005
  66          LG    .100    .250   5.700    .170  34.300
  67          UC    .121    .176
  68          UA       0       5      16      30      65      77      84      90      94      97
  69          UA     100

  70          KK    CER2
  71          KM   CEREUS WASH CONCENTRATION POINT 2 - COMBINE SCER1 WITH SUB-BASIN 120C
  72          HC       2

  73          KK   RCER2
  74          KM   ROUTE CER2 THROUGH SUB-BASIN 120D
  75          RS       4    FLOW       0
  76          RC     .04     .04     .04    2012    .029
  77          RX    9927    9935    9965   10000   10007   10035   10063   10080
  78          RY    1720    1718    1712    1706    1706    1710    1716    1720

  79          KK    120D
  80          KM   SUB-BASIN 120D
  81          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
  82          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
  83          BA    .069
  84          LG    .132    .250   5.800    .187   5.810
  85          UC    .213    .191
  86          UA       0       5      16      30      65      77      84      90      94      97
  87          UA     100

  88          KK   *CER3
  89          KM   CEREUS WASH CONCENTRATION POINT *3 - COMBINE RCER2, 120D
  90          HC       2

  91          KK    120H
  92          KM   SUB-BASIN 120H
  93          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
  94          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
  95          BA    .005
  96          LG    .085    .250   5.800    .160  30.910
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  97          UC    .158    .384
  98          UA       0       5      16      30      65      77      84      90      94      97
  99          UA     100

 100          KK   R120H
 101          KM   ROUTE 120H THROUGH 120I
 102          RS       1    FLOW       0
 103          RC     .04     .04     .04     557    .115
 104          RX    9870    9910    9960    9999   10001   10080   10125   10225
 105          RY    1732    1726    1718    1712    1712    1718    1724    1730

 106          KK    120I
 107          KM   SUB-BASIN 120I
 108          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 109          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 110          BA    .007
 111          LG    .150    .250   5.700    .207  10.000
 112          UC    .154    .199
 113          UA       0       5      16      30      65      77      84      90      94      97
 114          UA     100

 115          KK   CER3A
 116          KM   COMBINE R120H AND 120I
 117          HC       2

 118          KK  SCER3A
 119          KM   ROUTE CER3A BY STAGE DISCHARGE TO CER3 - PONDED STORAGE
 120          RS       1    ELEV    1694
 121          SQ       0    25.2     160     473    1019    1850
 122          SE    1700    1701    1702    1703    1704    1705
 123          SA       0     .22     .22
 124          SE    1694    1700    1710

 125          KK    CER3
 126          KM   CEREUS WASH CONCENTRATION POINT 3 - COMBINE (RCER2, 120D),CER3A
 127          HC       2

 128          KK   SCER3
 129          KM   ROUTE CER3 THROUGH 1-84" CULVERTS AT SHEA BLVD.
 130          KO       3
 131          RS       1    ELEV  1687.3
 132          SQ       0      96     300     610     850     900
 133          SE  1687.3  1690.8  1694.3  1701.3    1710    1711
 134          SA       0     .08    1.47    4.98
 135          SE  1687.3    1692    1700    1710

 136          KK   RCER3
 137          KM   ROUTE CER3 THROUGH SUB-AREA 120E TO CONFLUENCE WITH WALNUT WASH
 138          RS       1    FLOW       0
 139          RC     .04     .04     .04     768    .034
 140          RX    9920    9974    9985    9999   10001   10021   10135   10222
 141          RY    1690    1678    1674    1670    1670    1674    1680    1690
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 142          KK    120E
 143          KM   SUB-BASIN 120E
 144          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 145          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 146          BA    .018
 147          LG    .050    .250   5.800    .160  13.960
 148          UC    .208    .350
 149          UA       0       5      16      30      65      77      84      90      94      97
 150          UA     100

 151          KK   *CER4
 152          KM   CEREUS WASH CONCENTRATION POINT *4 - RCER3, 120E
 153          HC       2

 154          KK    126A
 155          KM   SUB-BASIN 126A
 156          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 157          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 158          BA    .007
 159          LG    .100    .250   5.700    .170  27.000
 160          UC    .142    .197
 161          UA       0       5      16      30      65      77      84      90      94      97
 162          UA     100

 163          KK   R126A
 164          KM   ROUTE SUB-BASIN 126A THROUGH SUB-BASIN 126B
 165          RS       4    FLOW       0
 166          RC     .04    .017     .04    2348    .035
 167          RX    9975    9980    9985    9986   10014   10015   10020   10025
 168          RY  1922.5  1922.5  1922.5    1922    1922  1922.5  1922.5  1922.5

 169          KK    126B
 170          KM   SUB-BASIN 126B
 171          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 172          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 173          BA    .021
 174          LG    .100    .250   5.700    .179  22.500
 175          UC    .196    .299
 176          UA       0       5      16      30      65      77      84      90      94      97
 177          UA     100

 178          KK     WW1
 179          KM   WALNUT WASH CONCENTRATION POINT 1 - COMBINE R126A AND 126B
 180          HC       2

 181          KK    RWW1
 182          KM   ROUTE WW1 THROUGH SUB-BASIN 126D
 183          RS       1    FLOW       0
 184          RC     .04     .04     .04     546    .019
 185          RX    9895    9935    9955    9962   10003   10010   10020   10045
 186          RY    1830    1818    1816    1813    1813    1816    1820    1830
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 187          KK    126C
 188          KM   SUB-BASIN 126C
 189          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 190          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .998
 191          BA    .142
 192          LG    .140    .320   5.700    .204   1.240
 193          UC    .358    .355
 194          UA       0       5      16      30      65      77      84      90      94      97
 195          UA     100

 196          KK   R126C
 197          KM   ROUTE 126C THROUGH SUB-BASIN 126D
 198          RS       2    FLOW       0
 199          RC     .04     .04     .04    1291    .029
 200          RX    9895    9935    9955    9962   10003   10010   10020   10045
 201          RY    1830    1818    1816    1813    1813    1816    1820    1830

 202          KK    126D
 203          KM   SUB-BASIN 126D
 204          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 205          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 206          BA    .028
 207          LG    .146    .250   5.700    .204   3.240
 208          UC    .196    .187
 209          UA       0       5      16      30      65      77      84      90      94      97
 210          UA     100

 211          KK     WW3
 212          KM   WALNUT WASH CONCENTRATION POINT 3 - RWW1 AND RWW2 AND 126D
 213          HC       3

 214          KK    RWW3
 215          KM   ROUTE WW3 THROUGH 126H
 216          RS       2    FLOW       0
 217          RC     .04     .04     .04     894    .027
 218          RX    9910    9940    9985    9995   10020   10080   10105   10145
 219          RY    1810    1800    1790    1786    1786    1792    1800    1810

 220          KK    126E
 221          KM   SUB-BASIN 126E
 222          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 223          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 224          BA    .090
 225          LG    .150    .360   6.800    .134  21.880
 226          UC    .242    .187
 227          UA       0       3       5       8      12      20      43      75      90      96
 228          UA     100

 229          KK    126F
 230          KM   SUB-BASIN 126F
 231          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 232          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 233          BA    .055
 234          LG    .150    .330   7.300    .110  30.000
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 235          UC    .208    .169
 236          UA       0       3       5       8      12      20      43      75      90      96
 237          UA     100

 238          KK     WW4
 239          KM   WALNUT WASH CONCENTRATION POINT 4 - 126E AND 126F
 240          HC       2

 241          KK    RWW4
 242          KM   ROUTE WW4 THROUGH 126G
 243          RS       7    FLOW       0
 244          RC     .04     .04     .04    4158    .031
 245          RX    9870    9940    9980    9995   10005   10015   10040   10090
 246          RY    1820    1802    1800    1796    1796    1800    1810    1820

 247          KK    126G
 248          KM   SUB-BASIN 126G
 249          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 250          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .998
 251          BA    .136
 252          LG    .150    .240   6.600    .146  16.340
 253          UC    .304    .273
 254          UA       0       3       5       8      12      20      43      75      90      96
 255          UA     100

 256          KK    126H
 257          KM   SUB-BASIN 126H
 258          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 259          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 260          BA    .020
 261          LG    .127    .250   5.700    .199   9.760
 262          UC    .188    .199
 263          UA       0       5      16      30      65      77      84      90      94      97
 264          UA     100

 265          KK     WW5
 266          KM   WALNUT WASH CONCENTRATION POINT 5 - RWW3, RWW4, 126H AND 126G
 267          HC       4

 268          KK    RWW5
 269          KM   ROUTE WW5 THROUGH 126I
 270          RS       3    FLOW       0
 271          RC     .04     .04     .04    1740     .02
 272          RX    9790    9860    9910    9975   10010   10055   10090   10150
 273          RY    1780    1764    1762    1758    1758    1766    1768    1780

 274          KK    126I
 275          KM   SUB-BASIN 126I
 276          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 277          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 278          BA    .082
 279          LG    .133    .190   6.600    .144  14.100
 280          UC    .229    .167
 281          UA       0       5      16      30      65      77      84      90      94      97
 282          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 283          KK    126J
 284          KM   SUB-BASIN 126J
 285          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 286          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 287          BA    .002
 288          LG    .100    .250   5.700    .179  22.500
 289          UC    .133    .299
 290          UA       0       5      16      30      65      77      84      90      94      97
 291          UA     100

 292          KK   R126J
 293          KM   ROUTE 126J THROUGH 126I
 294          RS       4    FLOW       0
 295          RC     .04     .02     .04    2299    .066
 296          RX    9790    9860    9910    9975   10010   10055   10090   10150
 297          RY    1780    1764    1762    1758    1758    1766    1768    1780

 298          KK     WW6
 299          KM   WALNUT WASH CONCENTRATION POINT 6 - RWW5, R126J AND 126I
 300          HC       3

 301          KK    RWW6
 302          KM   ROUTE WW6 THROUGH 126M
 303          RS       2    FLOW       0
 304          RC     .04     .04     .04    1206    .019
 305          RX    9830    9890    9925    9985   10005   10020   10055   10100
 306          RY    1738    1736    1722    1720    1720    1722    1730    1740

 307          KK    126M
 308          KM   SUB-BASIN 126M
 309          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 310          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 311          BA    .025
 312          LG    .144    .230   6.200    .169   7.630
 313          UC    .208    .235
 314          UA       0       5      16      30      65      77      84      90      94      97
 315          UA     100

 316          KK    *WW7
 317          KM   WALNUT WASH CONCENTRATION POIT *7 - RWW6, 126M
 318          HC       2

 319          KK    126K
 320          KM   SUB-BASIN 126K
 321          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 322          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 323          BA    .012
 324          LG    .100    .250   5.700    .179  27.000
 325          UC    .158    .263
 326          UA       0       5      16      30      65      77      84      90      94      97
 327          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 328          KK   R126K
 329          KM   ROUTE 126K THROUGH 126M
 330          RS       2    FLOW       0
 331          RC     .04     .04     .04    1061    .072
 332          RX    9830    9890    9925    9985   10005   10020   10055   10100
 333          RY    1738    1736    1722    1720    1720    1722    1730    1740

 334          KK    126L
 335          KM   SUB-BASIN 126L
 336          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 337          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 338          BA    .023
 339          LG    .150    .210   6.400    .159   9.420
 340          UC    .221    .280
 341          UA       0       5      16      30      65      77      84      90      94      97
 342          UA     100

 343          KK     WW7
 344          KM   WALNUT WASH CONCENTRATION POINT 7 - (RWW6, 126M), R126K, 126L
 345          HC       3

 346          KK    SWW7
 347          KM   ROUTE WW7 THROUGH 10'BY 10' RCB UNDER SHEA BLVD.
 348          RS       1    ELEV    1704
 349          SQ       0     290     800    1650    1850
 350          SE    1704    1709    1714    1724    1727
 351          SA       0     .01     .44    2.44
 352          SE    1704    1710    1716  1728.5

 353          KK    127A
 354          KM   SUB-BASIN 127A
 355          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 356          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 357          BA    .028
 358          LG    .150    .250   5.700    .207    .000
 359          UC    .204    .215
 360          UA       0       3       5       8      12      20      43      75      90      96
 361          UA     100

 362          KK    127B
 363          KM   SUB-BASIN 127B
 364          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 365          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 366          BA    .039
 367          LG    .100    .250   5.700    .189   4.500
 368          UC    .196    .162
 369          UA       0       5      16      30      65      77      84      90      94      97
 370          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 371          KK    CAP1
 372          KM   CAP WASH CONCENTRATION POINT 1 - SUB-BASINS 127A AND 127B
 373          HC       2

 374          KK   RCAP1
 375          KM   ROUTE CAP1 THROUGH 127D
 376          RS       2    FLOW       0
 377          RC     .04     .04     .04    1146    .026
 378          RX    9870    9910    9955    9985   10000   10020   10050   10100
 379          RY    1760    1756    1750    1742    1742    1744    1750    1760

 380          KK    127C
 381          KM   SUB-BASIN 127C
 382          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 383          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 384          BA    .042
 385          LG    .150    .170   6.800    .134  18.710
 386          UC    .208    .186
 387          UA       0       3       5       8      12      20      43      75      90      96
 388          UA     100

 389          KK    127D
 390          KM   SUB-BASIN 127D
 391          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 392          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 393          BA    .024
 394          LG    .150    .250   5.800    .195   1.500
 395          UC    .192    .189
 396          UA       0       5      16      30      65      77      84      90      94      97
 397          UA     100

 398          KK    CAP2
 399          KM   CAP WASH CONCENTRATION POINT 2 - RCAP1, 127C, AND 127D
 400          HC       3

 401          KK   RCAP2
 402          KM   ROUTE CAP2 THROUGH 127H
 403          RS       1    FLOW       0
 404          RC     .04     .04     .04     545    .017
 405          RX    9895    9940    9950    9995   10005   10047   10105   10180
 406          RY    1741    1740    1738    1732    1732    1736    1739    1748

 407          KK    127E
 408          KM   SUB-BASIN 127E
 409          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 410          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .998
 411          BA    .103
 412          LG    .150    .204   6.800    .134  16.730
 413          UC    .258    .189
 414          UA       0       5      16      30      65      77      84      90      94      97
 415          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 416          KK    127F
 417          KM   SUB-BASIN 127F
 418          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 419          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .998
 420          BA    .147
 421          LG    .150    .229   7.300    .110  25.520
 422          UC    .287    .234
 423          UA       0       3       5       8      12      20      43      75      90      96
 424          UA     100

 425          KK    CAP3
 426          KM   CAP WASH CONCENTRATION POINT 3 - SUB-BASINS 127E AND 127F
 427          HC       2

 428          KK   RCAP3
 429          KM   ROUTE CAP3 THROUGH 127G
 430          RS       2    FLOW       0
 431          RC     .04     .04     .04    1253    .025
 432          RX    9870    9920    9940    9974   10007   10055   10075   10130
 433          RY    1780    1770    1768    1758    1758    1770    1774    1780

 434          KK    127G
 435          KM   SUB-BASIN 127G
 436          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 437          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 438          BA    .057
 439          LG    .150    .150   7.000    .122  19.750
 440          UC    .208    .160
 441          UA       0       5      16      30      65      77      84      90      94      97
 442          UA     100

 443          KK    CAP4
 444          KM   CAP WASH CONCENTRATION POINT 4 - RCAP3 AND SUB-BASIN 127G
 445          HC       2

 446          KK   SCAP4
 447          KM   ROUTE CAP4 THROUGH 2-72" CULVERTS UNDER SHEA BLVD.
 448          KO       3
 449          RS       1    ELEV  1742.2
 450          SQ       0     130     410     830    1300
 451          SE  1742.2  1742.5  1748.2  1754.2  1766.5
 452          SA       0    .008    .037    3.31
 453          SE  1742.2    1746    1752    1766

 454          KK  R2CAP4
 455          KM   ROUTE CAP4 THROUGH 127I
 456          RS       1    FLOW       0
 457          RC     .04     .04     .04     743     .02
 458          RX    9800    9837    9985    9995   10020   10070   10180   10200
 459          RY    1760  1745.5    1738    1736    1736    1742    1752    1756
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 460          KK    127I
 461          KM   SUB-BASIN 127I
 462          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 463          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 464          BA    .010
 465          LG    .100    .250   6.000    .158   9.000
 466          UC    .158    .292
 467          UA       0       5      16      30      65      77      84      90      94      97
 468          UA     100

 469          KK   *CAP5
 470          KM   CAP WASH CONCENTRATION POINT *5 - RCAP4, 127I
 471          HC       2

 472          KK    127H
 473          KM   SUB-BASIN 127H
 474          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 475          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 476          BA    .018
 477          LG    .150    .150   7.000    .122  21.740
 478          UC    .171    .180
 479          UA       0       3       5       8      12      20      43      75      90      96
 480          UA     100

 481          KK    CAP5
 482          KM   CAP WASH CONCENTRATION POINT 5 - RCAP4, 127H, (RCAP4,127I)
 483          HC       3

 484          KK   RCAP5
 485          KM   ROUTE CAP5 THROUGH 127J TO WALNUT WASH (WW8)
 486          RS       2    FLOW       0
 487          RC     .04     .04     .04    1382    .018
 488          RX    9895    9937    9960    9982   10005   10030   10075   10125
 489          RY    1730    1714  1711.5    1710    1710    1714    1720    1730

 490          KK    127J
 491          KM   SUB-BASIN 127J
 492          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 493          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 494          BA    .032
 495          LG    .100    .170   6.800    .122  16.060
 496          UC    .204    .212
 497          UA       0       3       5       8      12      20      43      75      90      96
 498          UA     100

 499          KK    CAP6
 500          KM   CAP WASH COMBINATION POINT 6 - RCAP5, 127J
 501          HC       2
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 502          KK     WW8
 503          KM   WALNUT WASH CONCENTRATION POINT 8 - RWW7,CAP6
 504          KM   CONFLUENCE OF CAP WASH AND WALNUT WASH
 505          HC       2

 506          KK    RWW8
 507          KM   ROUTE WW8 THROUGH 126N TO CONFLUENCE WITH CEREUS WASH
 508          RS       5    FLOW       0
 509          RC     .04     .04     .04    2789    .016
 510          RX    9850    9915    9930    9990   10005   10030   10142   10205
 511          RY    1700    1686    1682    1678    1678    1680 1685.25    1700

 512          KK    126N
 513          KM   SUB-BASIN 126N
 514          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 515          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 516          BA    .077
 517          LG    .150    .230   6.200    .171  12.260
 518          UC    .271    .272
 519          UA       0       5      16      30      65      77      84      90      94      97
 520          UA     100

 521          KK     WW9
 522          KM    WALNUT WASH CONCENTRATION POIT 9 - RWW8, 126N
 523          HC       2

 524          KK    CER4
 525          KM   CEREUS WASH CONCENTRATION POINT 4 - (RCER3,120E), (WW9, 126N)
 526          KM   CONFLUENCE OF CEREUS WASH AND WALNUT WASH
 527          HC       2

 528          KK   RCER4
 529          KM   ROUTE CER4 THROUGH SUB-BASIN 120F TO CONFLUENCE WITH CHUKAR WASH
 530          RS       2    FLOW       0
 531          RC     .04     .04     .04    1183    .015
 532          RX    9967    9973    9982    9999   10055   10135   10235   10325
 533          RY    1766    1762    1756    1744    1744    1756  1753.5    1756

 534          KK    120F
 535          KM   SUB-BASIN 120F
 536          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 537          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 538          BA    .022
 539          LG    .150    .250   6.000    .183  12.460
 540          UC    .162    .174
 541          UA       0       5      16      30      65      77      84      90      94      97
 542          UA     100

 543          KK   *CER5
 544          KM   CEREUS WASH CONCENTRATION POIT *5 - RCER4, 120F
 545          HC       2
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 546          KK    125A
 547          KM   SUB-BASIN 125A
 548          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 549          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 550          BA    .077
 551          LG    .150    .150   7.300    .110  25.500
 552          UC    .279    .298
 553          UA       0       3       5       8      12      20      43      75      90      96
 554          UA     100

 555          KK    125B
 556          KM   SUB-BASIN 125B
 557          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 558          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 559          BA    .113
 560          LG    .150    .150   7.300    .110  25.250
 561          UC    .296    .258
 562          UA       0       3       5       8      12      20      43      75      90      96
 563          UA     100

 564          KK    CHK1
 565          KM   CHUKAR WASH CONCENTRATION POINT 1 - SUB-BASINS 125A AND 125B
 566          HC       2

 567          KK   RCHK1
 568          KM   ROUTE CHK1 THROUGH 125D
 569          RS       1    FLOW       0
 570          RC     .04     .04     .04     544    .004
 571          RX    9830    9880    9915    9955   10005   10032   10140   10190
 572          RY    1700    1696    1690    1682    1682    1690    1690    1698

 573          KK    125C
 574          KM   SUB-BASIN 125C
 575          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 576          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 577          BA    .030
 578          LG    .150    .150   7.300    .110  25.060
 579          UC    .200    .198
 580          UA       0       3       5       8      12      20      43      75      90      96
 581          UA     100

 582          KK   R125C
 583          KM   ROUTE 125C THROUGH SUB-BASIN 125D TO CON. POINT CHK2
 584          RS       1    FLOW       0
 585          RC    0.04    0.04    0.04     290  0.0001
 586          RX    9905    9930    9945    9972   10025   10080   10090   10130
 587          RY    1680    1674    1670  1665.5  1665.5    1668    1670    1680

 588          KK    125D
 589          KM   SUB-BASIN 125D
 590          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 591          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 592          BA    .018
 593          LG    .100    .210   6.400    .159  22.030
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 594          UC    .475    .459
 595          UA       0       3       5       8      12      20      43      75      90      96
 596          UA     100

 597          KK    CHK2
 598          KM   CHUKAR WASH CONCENTRATION POINT 2 - RCHK1 AND SUB BASINS 125C AND 125D
 599          HC       3

 600          KK  R2CHK2
 601          KM   ROUTE CHK2 THROUGH SUB-BASIN 125E TO CONFLUENCE WITH CEREUS WASH
 602          RS       3    FLOW       0
 603          RC     .04     .04     .04    1780    .027
 604          RX    9905    9930    9945    9972   10025   10080   10090   10130
 605          RY    1680    1674    1670  1665.5  1665.5    1668    1670    1680

 606          KK    125E
 607          KM   SUB-BASIN 125E
 608          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 609          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 610          BA    .047
 611          LG    .150    .230   6.200    .171  19.180
 612          UC    .200    .174
 613          UA       0       3       5       8      12      20      43      75      90      96
 614          UA     100

 615          KK    CHK3
 616          KM   CHUKAR WASH CONCENTRATON POINT 3 - RCHK2, 125E
 617          HC       2

 618          KK    CER5
 619          KM   CEREUS WASH CONCENTRATION POINT 5 - (RCER4, 120F), CHK3
 620          KM   CONFLUENCE OF CHUKAR WASH AND CEREUS WASH
 621          HC       2

 622          KK   RCER5
 623          KM   ROUTE CEREUS WASH (CER5) THROUGH 120G TO CONFLUENCE WITH LOGAN WASH
 624          RS       2    FLOW       0
 625          RC     .04     .04     .04    1119    .017
 626          RX    9885    9930    9970    9999   10001   10006   10200   10299
 627          RY    1650    1645    1640    1630    1630    1634    1631    1640

 628          KK    120G
 629          KM   SUB-BASIN 120G
 630          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 631          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 632          BA    .037
 633          LG    .150    .170   6.800    .134  12.920
 634          UC    .208    .196
 635          UA       0       3       5       8      12      20      43      75      90      96
 636          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 637          KK   *CER6
 638          KM   CEREUS WASH CONCENTRATION POINT *6 - RCER5, 120G
 639          HC       2

 640          KK    124A
 641          KM   SUB-BASIN 124A
 642          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 643          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 644          BA    .071
 645          LG    .150    .150   7.000    .122  20.640
 646          UC    .254    .252
 647          UA       0       3       5       8      12      20      43      75      90      96
 648          UA     100

 649          KK    124B
 650          KM   SUB-BASIN 124B
 651          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 652          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 653          BA    .043
 654          LG    .150    .170   6.800    .134  19.010
 655          UC    .179    .126
 656          UA       0       3       5       8      12      20      43      75      90      96
 657          UA     100

 658          KK    LOG1
 659          KM   LOGAN WASH CONCENTRATION POINT 1 - SUB-BASINS 124A AND 124B
 660          HC       2

 661          KK   RLOG1
 662          KM   ROUTE LOG1 THROUGH 124D
 663          RS       1    FLOW       0
 664          RC     .04     .04     .04     647    .015
 665          RX    9920    9940    9965    9993   10008   10040   10057   10090
 666          RY    1670    1666    1660  1655.5  1655.5    1658    1662    1663

 667          KK    124D
 668          KM   SUB-BASIN 124D
 669          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 670          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 671          BA    .009
 672          LG    .150    .230   6.200    .171   9.350
 673          UC    .213    .439
 674          UA       0       3       5       8      12      20      43      75      90      96
 675          UA     100

 676          KK   *LOG2
 677          KM   LOGAN WASH CONCENTRATION POINT *2 - RLOG1,124D
 678          HC       2
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 679          KK    124C
 680          KM   SUB-BASIN 124C
 681          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 682          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 683          BA    .020
 684          LG    .150    .230   6.200    .171  17.240
 685          UC    .213    .278
 686          UA       0       5      16      30      65      77      84      90      94      97
 687          UA     100

 688          KK    LOG2
 689          KM   LOGAN WASH CONCENTRATION POINT 2 - (RLOG1,124D), 124C
 690          HC       2

 691          KK   RLOG2
 692          KM   ROUTE LOG2 THROUGH 124E TO CONFLUENCE WITH CEREUS WASH
 693          RS       3    FLOW       0
 694          RC     .04     .04     .04    1436    .014
 695          RX    9885    9920    9965   10005   10030   10060   10090   10140
 696          RY    1660    1650    1642    1640    1640    1650    1660    1670

 697          KK    124E
 698          KM   SUB-BASIN 124E
 699          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 700          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 701          BA    .051
 702          LG    .150    .210   6.400    .159  13.430
 703          UC    .217    .192
 704          UA       0       3       5       8      12      20      43      75      90      96
 705          UA     100

 706          KK    LOG3
 707          KM   LOGAN WASH CONCENTRATION POINT 3 - RLOG2, 124E
 708          HC       2

 709          KK    CER6
 710          KM   CEREUS WASH CONCENTRATION POINT 6 - (RCER5, 120G), RLOG2
 711          KM   CONFLUENCE OF LOGAN AND CEREUS WASH
 712          HC       2

 713          KK   RCER6
 714          KM   ROUTE CER6 THROUGH 120L
 715          RS       3    FLOW       0
 716          RC     .04     .04     .04    1481    .011
 717          RX    9945    9955    9970    9990   10020   10150   10180   10210
 718          RY    1628    1627    1626    1612    1612    1618    1624    1630

 719          KK    120L
 720          KM   SUB-BASIN 120L
 721          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 722          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 723          BA    .036
 724          LG    .150    .150   7.000    .122   5.550
 725          UC    .208    .203
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 726          UA       0       3       5       8      12      20      43      75      90      96
 727          UA     100

 728          KK   *CER7
 729          KM   CEREUS WASH PONCENTRATION POINT *7 - RCER6, 120L
 730          HC       2

 731          KK    120J
 732          KM   SUB-BASIN 120J
 733          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 734          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 735          BA    .006
 736          LG    .100    .250   5.700    .170  15.000
 737          UC    .225    .524
 738          UA       0       5      16      30      65      77      84      90      94      97
 739          UA     100

 740          KK   R120J
 741          KM   ROUTE 120J THROUGH 120K
 742          RS       1    FLOW       0
 743          RC     .04     .04     .04     624    .159
 744          RX    9840    9940    9985    9993   10005   10040   10047   10110
 745          RY    1710    1690    1685  1682.5  1682.5    1690    1692    1710

 746          KK    120K
 747          KM   SUB-BASIN 120K
 748          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 749          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 750          BA    .034
 751          LG    .150    .250   5.700    .207  11.250
 752          UC    .242    .268
 753          UA       0       5      16      30      65      77      84      90      94      97
 754          UA     100

 755          KK   CER7A
 756          KM   CEREUS WASH CONCENTRATION POINT 7A- R120J AND 120K
 757          HC       2

 758          KK  SCER7A
 759          KM   ROUTE CER7A THROUGH 48" CULVERT UNDER SHEA BLVD.
 760          KO       3
 761          RS       1    ELEV  1640.9
 762          SQ       0      24      73     150     240
 763          SE  1640.9  1642.9  1644.9  1648.9    1658
 764          SA       0     .81
 765          SE  1640.9    1658

 766          KK  RCER7A
 767          KM   ROUTE CER7A THROUGH SUB-BASIN 120M TO CON. POINT CER7
 768          RS       3    FLOW       0
 769          RC     .04     .04     .04    1400    .027
 770          RX    9895    9920    9950    9975   10015   10110   10140   10200
 771          RY    1640    1636    1632    1628    1628    1632    1634    1640
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 772          KK    120M
 773          KM   SUB-BASIN 120M
 774          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 775          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 776          BA    .040
 777          LG    .100    .250   5.800    .186  19.930
 778          UC    .246    .367
 779          UA       0       5      16      30      65      77      84      90      94      97
 780          UA     100

 781          KK    123B
 782          KM   SUB-BASIN 123B
 783          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 784          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 785          BA    .019
 786          LG    .150    .250   5.700    .207   6.250
 787          UC    .179    .179
 788          UA       0       5      16      30      65      77      84      90      94      97
 789          UA     100

 790          KK   S123B
 791          KM   ROUTE 123B THROUGH 36" CMP CULVERT UNDER SHEA BLVD
 792          KO       3
 793          RS       1    ELEV  1624.7
 794          SQ       0      11      33      63      77
 795          SE  1624.7  1626.2  1627.7  1630.7  1633.1
 796          SA       0   0.004    0.01
 797          SE  1624.7    1628    1629

 798          KK   R123B
 799          KM   ROUTE 123B THROUGH SUB-BASIN 120M TO WASH
 800          RS       2    FLOW       0
 801          RC    0.04    0.04    0.04     412   0.034
 802          RX    9965    9970    9980    9995   10005   10080  100115   10160
 803          RY    1630    1628    1623    1616    1616    1624    1628    1634

 804          KK   R123B
 805          KM   ROUTE R123B THROUGH SUB-BASIN 120M (IN WASH) TO CON. POINT CER7
 806          RS       1    FLOW       0
 807          RC    0.04    0.04    0.04     193    0.36
 808          RX    9895    9920    9950    9975   10015   10110   10140   10200
 809          RY    1640    1636    1632    1628    1628    1632    1634    1640

 810          KK    CER7
 811          KM   CEREUS WASH CONCENTRATION POINT 7 - (RCER6, 120L), RCER7A, 120M 123B
 812          HC       4

 813          KK   RCER7
 814          KM   ROUTE CER7 THROUGH SUB-BASIN 120N
 815          RS       4    FLOW       0
 816          RC     .04     .04     .04    2006    .013
 817          RX    9860    9910    9945    9985   10010   10150   10180   10300
 818          RY    1597    1596    1594    1582    1582    1586    1590    1592
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 819          KK    120N
 820          KM   SUB-BASIN 120N
 821          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 822          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 823          BA    .044
 824          LG    .136    .150   7.000    .117  11.440
 825          UC    .188    .187
 826          UA       0       5      16      30      65      77      84      90      94      97
 827          UA     100

 828          KK   *CER8
 829          KM   CEREUS WASH CONCENTRATION POINT *8 - RCER7, 120N
 830          HC       2

 831          KK    123A
 832          KM   SUB-BASIN 123A
 833          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 834          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 835          BA    .075
 836          LG    .150    .250   5.700    .207   5.000
 837          UC    .250    .209
 838          UA       0       5      16      30      65      77      84      90      94      97
 839          UA     100

 840          KK   S123A
 841          KM   ROUTE 123A THROUGH 2 60" CULVERT AT TRAVINO DRIVE
 842          KO       3
 843          RS       1    ELEV  1594.5
 844          SQ       0      74     130     360     444
 845          SE  1594.5    1597  1599.5    1602  1604.5
 846          SA       0    0.01    0.69
 847          SE  1594.5    1596    1604

 848          KK    123D
 849          KM   SUB-BASIN 123D
 850          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 851          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 852          BA    .010
 853          LG    .100    .250   5.700    .189  11.250
 854          UC    .229    .478
 855          UA       0       5      16      30      65      77      84      90      94      97
 856          UA     100

 857          KK    TRV1
 858          KM   TREVINO WASH CONCENTRATION POINT 1 - S123A AND 123D
 859          HC       2

 860          KK   STRV1
 861          KM   ROUTE TRV1 THROUGH 84" CMP CULVERT UNDER SHEA BLVD
 862          KO       3
 863          RS       1    ELEV  1588.7
 864          SQ       0      97     300     435     620
 865          SE  1588.7  1591.7  1595.7  1602.7    1598
 866          SA       0    0.01    0.14
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 867          SE  1588.7    1589    1598

 868          KK   RTRV1
 869          KM   ROUTE TRV1 THROUGH SUB-BASIN 120N TO *CER8
 870          RS       2    FLOW       0
 871          RC     .04     .04     .04     971    .007
 872          RX    9860    9910    9945    9985   10010   10150   10180   10300
 873          RY    1597    1596    1594    1582    1582    1586    1590    1592

 874          KK    123C
 875          KM   SUB-BASIN 123C
 876          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 877          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 878          BA    .003
 879          LG    .150    .250   5.700    .207   3.750
 880          UC    .092    .085
 881          UA       0       5      16      30      65      77      84      90      94      97
 882          UA     100

 883          KK   S123C
 884          KM   ROUTE THROUGH 24" CMP CULVERT UNDER SHEA BLVD
 885          KO       3
 886          RS       1    ELEV    1618
 887          SQ       0       4      12      22      28
 888          SE    1618    1619    1620    1622    1624
 889          SA       0    0.01
 890          SE    1618    1623

 891          KK   R123C
 892          KM   ROUTE R123C THROUGH SUB-BASIN 120N TO WASH
 893          RS       1    FLOW       0
 894          RC    0.04    0.04    0.04     136   0.147
 895          RX    9965    9970    9980    9995   10005   10080   10115   10160
 896          RY    1630    1628    1623    1616    1616    1624    1628    1634

 897          KK   R123C
 898          KM   ROUTE 123C THROUGH SUB-BASIN 120N (WASH) TO CON. POINT CER8
 899          RS       5    FLOW       0
 900          RC    0.04    0.04    0.04    1688   0.012
 901          RX    9860    9910    9945    9985   10010   10150   10180   10300
 902          RY    1597    1596    1594    1582    1582    1586    1590    1592

 903          KK    CER8
 904          KM   CEREUS WASH CONCENTRATION POINT 8 - (RCER7, 120N), R2TREV, 123C
 905          KM   CONFLUENCE WITH TREVINO WASH
 906          HC       3

 907          KK   RCER8
 908          KM   ROUTE CER8 THROUGH SUB-BASIN 120Q
 909          RS       3    FLOW       0
 910          RC     .04     .04     .04    1703    .013
 911          RX    9890    9920    9980    9999   10001   10055   10095   10180
 912          RY    1571    1570    1558    1556    1556    1560    1570    1574
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 913          KK   120O
 914          KM   SUB-BASIN 120O
 915          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 916          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 917          BA    .008
 918          LG    .100    .250   5.700    .189  10.000
 919          UC    .117    .104
 920          UA       0       5      16      30      65      77      84      90      94      97
 921          UA     100

 922          KK   S120O
 923          KM   ROUTE 120O THROUGH 2 30" CMP CULVERT UNDER SHEA BLVD
 924          KO       3
 925          RS       1    ELEV    1587
 926          SQ       0      15      44      90     180     400
 927          SE    1585  1588.8  1590.6  1594.2    1595    1596
 928          SA       0    0.01    0.02
 929          SE    1587    1589    1594

 930          KK   R120O
 931          KM   ROUTE 120O TO WASH THROUGH 120Q
 932          RS       1    FLOW       0
 933          RC     .04     .04     .04     572    .028
 934          RX    9860    9910    9945    9985   10010   10150   10180   10300
 935          RY    1597    1596    1594    1582    1582    1586    1590    1590

 936          KK   R120O
 937          KM   ROUTE 120O FROM WASH TO *CER9 THROUGH SUB-BASIN 120Q
 938          RS       3    FLOW       0
 939          RC     .04     .04     .04    1503    .013
 940          RX    9890    9920    9980    9999   10001   10055   10095   10180
 941          RY    1571    1570    1558    1556    1556    1560    1570    1574

 942          KK    120Q
 943          KM   SUB-BASIN 120Q
 944          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 945          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 946          BA    .035
 947          LG    .138    .150   7.000    .118  11.720
 948          UC    .213    .220
 949          UA       0       5      16      30      65      77      84      90      94      97
 950          UA     100

 951          KK   *CER9
 952          KM   CEREUS WASH CONCENTRATION POINT *9 - RCER8, 120Q, R120O
 953          HC       3

 954          KK    120P
 955          KM   SUB-BASIN 120P
 956          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 957          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 958          BA    .028
 959          LG    .150    .250   5.700    .198   7.500
 960          UC    .121    .053
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 961          UA       0       5      16      30      65      77      84      90      94      97
 962          UA     100

 963          KK   S120P
 964          KM   ROUTE 120P THROUGH 36" CMP CULVERT UNDER SHEA BLVD
 965          KO       3
 966          RS       1    ELEV    1580
 967          SQ       0      11      35      70
 968          SE    1580  1581.5    1583    1586
 969          SA       0    0.02    0.25
 970          SE    1580    1990    1593

 971          KK   R120P
 972          KM   ROUTE 120P THROUGH SUB-BASIN 120Q
 973          RS       2    FLOW       0
 974          RC     .04     .04     .04    1168    .025
 975          RX    9890    9920    9980    9999   10001   10055   10095   10180
 976          RY    1571    1570    1558    1556    1556  1560.5    1570    1574

 977          KK    CER9
 978          KM   CEREUS WASH CONCENTRATION POINT 9 - (RCER8, 120Q), R120P
 979          HC       2

 980          KK   SCER9
 981          KM   ROUTE CER9 THROUGH 2 10' X 8' BOX CULVERT UNDER SAGUARO BLVD
 982          KM   ******* NEW CULVERT CULVERT INSTALLED TO REPLACE 2-60" CMP  *********
 983          KO       3
 984          RS       1    ELEV 1549.37
 985          SQ       0     226     480    1500    2400    3786
 986          SE  1549.4 1551.77 1553.37 1557.37 1563.53 1565.37
 987          SA       0    0.02    0.48    2.43
 988          SE  1549.4    1552    1556    1564

 989          KK    120R
 990          KM   SUB-BASIN 120R
 991          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 992          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 993          BA    .012
 994          LG    .140    .250   6.000    .178   4.610
 995          UC    .208    .324
 996          UA       0       5      16      30      65      77      84      90      94      97
 997          UA     100

 998          KK    120S
 999          KM   SUB-BASIN 120S
1000          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1001          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1002          BA    .007
1003          LG    .054    .150   8.000    .070  33.280
1004          UC    .162    .239
1005          UA       0       5      16      30      65      77      84      90      94      97
1006          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1007          KK   CER10
1008          KM   CEREUS WASH CONCENTRATION POINT 10- SCER9, 120R, 120S
1009          HC       3

1010          KK  RCER10
1011          KM   ROUTE CER10 THROUGH SUB-BASIN 120T
1012          RS       1    FLOW       0
1013          RC     .04     .04     .04     405     .01
1014          RX    9790    9815    9895    9965   10030   10065   10150   10220
1015          RY    1562    1560    1558    1546    1546    1558    1558    1562

1016          KK    120T
1017          KM   SUB-BASIN 120T
1018          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1019          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1020          BA    .002
1021          LG    .150    .150   8.000    .085    .000
1022          UC    .129    .209
1023          UA       0       3       5       8      12      20      43      75      90      96
1024          UA     100

1025          KK  *CER11
1026          KM   CEREUS WASH CONCENTRATION POINT *11 - RCER10, 120T
1027          HC       2

1028          KK    122C
1029          KM   SUB-BASIN 122C
1030          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1031          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1032          BA    .014
1033          LG    .150    .250   6.000    .163  11.320
1034          UC    .158    .162
1035          UA       0       5      16      30      65      77      84      90      94      97
1036          UA     100

1037          KK   D122C
1038          KM   DIVERTION AT 122C INTO 122A
1039          DT  DO122C
1040          DI       0      10     100    1000
1041          DQ     0.5       5      50     500

1042          KK   R122C
1043          KM   ROUTE 122C THROUGH SUB-BASIN 122E TO CON. POINT LSR2B
1044          RS       2    FLOW       0
1045          RC    0.02    0.02    0.02    1000   0.032
1046          RX    9975    9980    9985    9986   10014   10015   10020   10025
1047          RY  1614.5  1614.5  1614.5    1614    1614  1614.5  1614.5  1614.5

1048          KK    122E
1049          KM   SUB-BASIN 122E
1050          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1051          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1052          BA    .032
1053          LG    .144    .250   6.000    .168  12.390
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1054          UC    .192    .173
1055          UA       0       5      16      30      65      77      84      90      94      97
1056          UA     100

1057          KK   LSR2B
1058          KM   LASER WASH CONSENTRATION POINT 2B - COMBINE RD122E, 122E
1059          HC       2

1060          KK  RLSR2B
1061          KM   ROUTE LASER WASH LSR2B THROUGH SUB-BASIN 120G TO CON. POINT LSR2
1062          RS       2    FLOW       0
1063          RC    0.02    0.02    0.02    1281   0.017
1064          RX    9780    9905    9955    9975   10015   10050   10060   10085
1065          RY    1600    1598    1596    1592    1590  1591.5    1592  1592.5

1066          KK    122D
1067          KM   SUB-BASIN 122D
1068          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1069          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1070          BA    .032
1071          LG    .150    .250   6.000    .183   1.480
1072          UC    .196    .194
1073          UA       0       5      16      30      65      77      84      90      94      97
1074          UA     100

1075          KK   R122D
1076          KM   ROUTE 122D THROUGH SUB-BASIN 122G TO CON. POIT LSR2
1077          RS       2    FLOW       0
1078          RC    0.02    0.02    0.02     480   0.015
1079          RX    9780    9905    9955    9975   10015   10050   10060   10085
1080          RY    1600    1598    1596    1592    1590  1591.5    1592   10085

1081          KK    122F
1082          KM   SUB-BASIN 122F
1083          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1084          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1085          BA    .010
1086          LG    .150    .230   6.200    .171  20.110
1087          UC    .200    .327
1088          UA       0       5      16      30      65      77      84      90      94      97
1089          UA     100

1090          KK   R122F
1091          KM   ROUTE 122F THROUGH SUB-BAASIN 122G TO CON. POINT LSR2
1092          RS       2    FLOW       0
1093          RC    0.02    0.02    0.02     430   0.032
1094          RX    9780    9905    9955    9975   10015   10050   10060   10085
1095          RY    1600    1598    1596    1592    1590  1591.5    1592  1592.5

1096          KK    122G
1097          KM   SUB-BASIN 122G
1098          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1099          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1100          BA    .022
1101          LG    .100    .250   6.000    .158  64.500
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1102          UC    .125    .124
1103          UA       0       5      16      30      65      77      84      90      94      97
1104          UA     100

1105          KK    LSR2
1106          KM   LASER DRAIN CONCENTRATION POINT 2 - RLSR2B, R122F, R122D, 122G
1107          HC       4

1108          KK    LSR2
1109          KM   ROUTE LSR2 THROUGH SUB-BASIN 122I TO CON. POINT LSR3
1110          RS       2    FLOW       0
1111          RC    0.02    0.02    0.02     826   0.017
1112          RX    9790    9875    9895    9985   10015   10070   10130   10170
1113          RY    1576    1576  1574.5    1571  1570.5    1574    1576    1578

1114          KK    122A
1115          KM   SUB-BASIN 122A
1116          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1117          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1118          BA    .020
1119          LG    .115    .250   6.000    .162   8.200
1120          UC    .208    .335
1121          UA       0       5      16      30      65      77      84      90      94      97
1122          UA     100

1123          KK   D122C
1124          KM   FLOW FROM DIVERSION OUT OF 122C INTO 122A
1125          DR  DO122C

1126          KK  RD122C
1127          KM   ROUTE D122C THROUGH SUB-BASIN 122A TO CON. POINT LSR1B
1128          RS       4    FLOW       0
1129          RC    0.02    0.02    0.02    2050   0.019
1130          RX    9956    9961    9966  9966.5 10033.5   10034   10039   10044
1131          RY  1606.5  1606.5  1606.5    1606    1606  1606.5  1606.5  1606.5

1132          KK   LSR1B
1133          KM   LASER WASH CONCENTRATION POINT 1B - COMBINE 122A, RD122C
1134          HC       2

1135          KK  RLSR1B
1136          KM   ROUTE LSR1B THROUGH SUB-BASIN 122B TO CON. POINT LSR1
1137          RS       2    FLOW       0
1138          RC     .04     .04     .04    1052    .019
1139          RX    9840    9870    9890    9930   10045   10105   10130   10170
1140          RY    1582    1582    1582    1578    1577    1582    1582    1582

1141          KK    122B
1142          KM   SUB-BASIN 122B
1143          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1144          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1145          BA    .034
1146          LG    .110    .250   6.000    .162  31.040
1147          UC    .175    .148
1148          UA       0       5      16      30      65      77      84      90      94      97
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1149          UA     100

1150          KK    LSR1
1151          KM   LASER DRAIN CONCENTRATION POINT 1 - R122A AND 122B
1152          HC       2

1153          KK   RLSR1
1154          KM   ROUTE LSR1 THROUGH SUB-BASIN 122H TO CON. POINT LSR3
1155          RS       2    FLOW       0
1156          RC    0.02    0.02    0.02     500   0.018
1157          RX    9885    9905    9935    9960   10030   10050   10110   10130
1158          RY  1574.5    1574    1570  1568.5  1568.5    1572    1572    1574

1159          KK    122H
1160          KM   SUB-BASIN 122H
1161          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1162          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1163          BA    .006
1164          LG    .150    .250   6.000    .181  16.130
1165          UC    .129    .163
1166          UA       0       5      16      30      65      77      84      90      94      97
1167          UA     100

1168          KK    122I
1169          KM   SUB-BASIN 122I
1170          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1171          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1172          BA    .007
1173          LG    .150    .250   6.000    .175  14.250
1174          UC    .175    .239
1175          UA       0       5      16      30      65      77      84      90      94      97
1176          UA     100

1177          KK    LSR3
1178          KM   LASER DRAIN CONCENTRATION POINT 3 - RLSR1,RLSR2,122H,122I
1179          HC       4

1180          KK    RSL3
1181          KM   ROUTE LSR3 THROUGH SUB-BASIN 122J TO CON. POINT LSR4
1182          RS       2    FLOW       0
1183          RC    0.04    0.04    0.04     422   0.017
1184          RX    9835    9875    9890    9910   10045   10055   10070   10080
1185          RY    1570    1568    1564    1562    1562    1564    1566    1568

1186          KK    122J
1187          KM   SUB-BASIN 122J
1188          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1189          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1190          BA    .025
1191          LG    .150    .250   6.000    .183  19.780
1192          UC    .213    .245
1193          UA       0       5      16      30      65      77      84      90      94      97
1194          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1195          KK    LSR4
1196          KM   LASER DRAIN CONCENTRATION POINT 4 - RLSR3 AND 122J
1197          HC       2

1198          KK    RSL4
1199          KM   ROUTE LSR4 THROUGH SUB-BASIN 122K TO CONFLUENCE WITH CEREUS WASH CER11
1200          RS       2    FLOW       0
1201          RC    0.04    0.04    0.04     666    0.02
1202          RX    9790    9815    9895    9965   10030   10065   10150   10220
1203          RY    1562    1560    1558    1546    1546    1556    1558    1562

1204          KK    122K
1205          KM   SUB-BASIN 122K
1206          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1207          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1208          BA    .003
1209          LG    .134    .210   6.400    .152   9.670
1210          UC    .179    .382
1211          UA       0       5      16      30      65      77      84      90      94      97
1212          UA     100

1213          KK    LSR5
1214          KM   LASER DRAIN CONCENTRATION POINT 5 - RLSR4, 122K
1215          HC       2

1216          KK   CER11
1217          KM   CEREUS WASH CONCENTRATION POINT 11 - (RCER10, 120T), (RLSR4, 122K)
1218          KM   CONFLUENCE OF CEREUS WASH AND LASER DRAIN
1219          HC       2

1220          KK  RCER11
1221          KM   ROUTE CER11 THROUGH SUB-BASIN 120U TO CON. POINT CER12
1222          RS       2    FLOW       0
1223          RC     .04     .04     .04     821    .012
1224          RX    9885    9920    9965    9995   10020   10070   10120   10270
1225          RY    1570    1560    1548    1540    1540    1550    1554    1556

1226          KK    120U
1227          KM   SUB-BASIN 120U
1228          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1229          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1230          BA    .019
1231          LG    .128    .170   6.800    .128  13.230
1232          UC    .154    .151
1233          UA       0       5      16      30      65      77      84      90      94      97
1234          UA     100

1235          KK  *CER12
1236          KM   CEREUS WASH CONCENTRATION POINT *12 - RCER11, 120U
1237          HC       2
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1238          KK    121A
1239          KM   SUB-BASIN 121A
1240          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1241          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
1242          BA    .050
1243          LG    .150     .250   6.000     .175   6.000
1244          UC    .258     .273
1245          UA       0        5      16       30      65      77      84      90      94      97
1246          UA     100

1247          KK   R121A
1248          KM   ROUTE 121A THROUGH SUB-BASIN 121B TO CON. POINT CER12
1249          RS       2    FLOW       0
1250          RC    0.04     0.04    0.04      446   0.036
1251          RX    9870     9905    9925     9990   10010   10052   10065   10100
1252          RY    1552     1550    1548     1542    1542    1550    1552    1554

1253          KK    121B
1254          KM   SUB-BASIN 121B
1255          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1256          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1257          BA    .020
1258          LG    .150     .250   6.000     .175  10.980
1259          UC    .225     .341
1260          UA       0        5      16       30      65      77      84      90      94      97
1261          UA     100

1262          KK    LTD1
1263          KM   LAST TRAIL DRAIN CONCENTRATION POINT 1 - R121A, 121B
1264          HC       2

1265          KK   CER12
1266          KM   CEREUS WASH CONCENTRATION POINT 12 - (RCER11, 120U), (R121A, 121B)
1267          KM   CONFLUENCE WITH LAST TRAIL DRAIN
1268          HC       2

1269          KK  RCER13
1270          KM   ROUTE CER12 THROUGH SUB-BASIN 120V TO CON. POINT CER13
1271          RS       1    FLOW       0
1272          RC    0.04     0.04    0.04      317   0.006
1273          RX    9820     9900    9950     9995   10030   10075   10120   10150
1274          RY    1550     1548    1540     1532    1532    1542    1552    1556

1275          KK    120V
1276          KM   SUB-BASIN 120V
1277          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1278          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1279          BA    .010
1280          LG    .150     .190   6.600     .146    .990
1281          UC    .162     .188
1282          UA       0        5      16       30      65      77      84      90      94      97
1283          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1284          KK   CER13
1285          KM   CEREUS WASH CONCENTRATION POINT 13 - RCER12, 120V UPSTREAM OF SHEA BLVD
1286          HC       2

1287          KK  SCER13
1288          KM   ROUTE CER13 THROGH 3 12'X12' BOX CULVERTS UNDER SHEA BLVD
1289          KO       3
1290          RS       1    ELEV 1530.30
1291          SQ       0    1332    3780    6300
1292          SE  1530.3  1536.3  1542.3  1549.1
1293          SA       0   0.011    0.95    3.40    6.46
1294          SE  1530.3    1532    1536    1544    1548

1295          KK  RCER13
1296          KM   ROUTE SCER13 THROUGHT SUB-BASIN 120X TO CON. POINT CER14
1297          RS       2    FLOW       0
1298          RC    0.04    0.04    0.04     868   0.013
1299          RX    9785    9850    9875    9910   10090   10135   10200   10280
1300          RY    1539    1538    1536    1525    1524    1536    1537    1538

1301          KK    120X
1302          KM   SUB-BASIN 120X
1303          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1304          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1305          BA    .016
1306          LG    .117    .150   7.600    .092  24.240
1307          UC    .133    .115
1308          UA       0       5      16      30      65      77      84      90      94      97
1309          UA     100

1310          KK  *CER14
1311          KM   CEREUS WASH CONCENTRATION POINT *14 - RCER13, 120X
1312          HC       2

1313          KK    120W
1314          KM   SUB-BASIN 120W
1315          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1316          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1317          BA    .005
1318          LG    .147    .250   6.000    .181   3.010
1319          UC    .087    .067
1320          UA       0       5      16      30      65      77      84      90      94      97
1321          UA     100

1322          KK   S120W
1323          KM   ROUTE 120W THROUGH 2 30" CMP CULVERT UNDER SHEA BLVD
1324          KO       3
1325          RS       1    ELEV 1540.94
1326          SQ       0      28      60     100
1327          SE  1540.9  1542.8  1544.6  1548.2
1328          SA       0    0.06    0.46
1329          SE    1539    1540    1543
```

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

1330          KK   R120W
1331          KM   ROUTE R120W THROUGH SUB-BASIN 120X TO CON. POINT CER14
1332          RS       2    FLOW       0
1333          RC    0.04    0.04    0.04     500   0.042
1334          RX    9970    9985    9995    9998   10002   10015   10050   10065
1335          RY    1532    1530    1528  1527.5  1527.5    1530    1536    1538

1336          KK   CER14
1337          KM   CEREUS WASH POINT OF CONCENTRATION 13 - (RCER13,120X), R120W
1338          HC       2
1339          ZZ
```

SCHEMATIC DIAGRAM OF STREAM NETWORK

(V) ROUTING (--->) DIVERSION OR PUMP FLOW

(.) CONNECTOR (<---) RETURN OF DIVERTED OR PUMPED FLOW

```
 NO.
  17      120A
           .
           .
  26       .        120B
           .           .
           .           .
  35       .           .        160A
           .           .           V
           .           .           V
  44       .           .       R160A
           .           .           .
           .           .           .
  50     CER1.......................
           V
           V
  53    SCER1
           .
           .
  61       .        120C
           .           .
           .           .
  70     CER2............
           V
           V
  73    RCER2
           .
           .
  79       .        120D
           .           .
           .           .
  88    *CER3............
           .
           .
  91       .        120H
           .           V
           .           V
           .       R120H
           .           .
           .           .
 106       .           .        120I
           .           .           .
           .           .           .
 115       .       CER3A............
           .           V
           .           V
 118       .      SCER3A
           .           .
           .           .
 125     CER3............
           V
           V
 128    SCER3
           V
           V
 136    RCER3
           .
           .
 142       .        120E
           .           .
           .           .
 151    *CER4............
           .
           .
 154       .        126A
           .           V
           .           V
 163       .       R126A
           .           .
           .           .
 169       .           .        126B
           .           .           .
           .           .           .
 178       .         WW1............
           .           V
           .           V
 181       .        RWW1
           .           .
           .           .
           .           .        126C
           .           .           V
```

```
                    V
                 R126C
                    .
                    .
202                 .        126D
                    .          .
                    .          .
211            WW3.......................
                 V
                 V
214           RWW3
                 .
                 .
220                 .      126E
                    .
                    .
229                 .        126F
                    .          .
                    .          .
238                 .       WW4............
                    .         V
                    .         V
241                 .      RWW4
                    .
                    .
247                 .        126G
                    .          .
                    .          .
256                 .          .        126H
                    .          .          .
                    .          .          .
265            WW5.................................
                 V
                 V
268           RWW5
                 .
                 .
274                 .      126I
                    .
                    .
283                 .        126J
                    .          V
                    .          V
                    .       R126J
                    .          .
                    .          .
298            WW6.......................
                 V
                 V
301           RWW6
                 .
                 .
307                 .      126M
                    .
                    .
316           *WW7............
                 .
                 .
319                 .      126K
                    .         V
                    .         V
328                 .      R126K
                    .
                    .
334                 .        126L
                    .          .
                    .          .
343            WW7.......................
                 V
                 V
346           SWW7
                 .
                 .
353                 .      127A
                    .
                    .
362                 .        127B
                    .          .
                    .          .
371                 .      CAP1............
                    .         V
                    .         V
374                 .     RCAP1
                    .
                    .
                    .        127C
                    .          .
```

```
                                                  127D
398                        CAP2.......................
                              V
                              V
401                       RCAP2
407                                       127E
416                                                127F
425                                       CAP3............
                                             V
                                             V
428                                      RCAP3
434                                                127G
443                                       CAP4............
                                             V
                                             V
446                                      SCAP4
                                             V
                                             V
454                                     R2CAP4
460                                                127I
469                                      *CAP5...........
472                                                127H
                           CAP5.......................
                              V
                              V
484                       RCAP5
490                                       127J
499                        CAP6............
502                   WW8............
                         V
                         V
506                  RWW8
512                        126N
521                   WW9............
524            CER4............
                  V
                  V
528           RCER4
534                  120F
543           *CER5............
546                  125A
555                        125B
                     CHK1............
                         V
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```
          .          V
          .      RCHK1
          .          .
          .          .
573       .          .        125C
          .          .           V
          .          .           V
582       .          .       R125C
          .          .           .
          .          .           .
588       .          .           .        125D
          .          .           .           .
          .          .           .           .
597       .       CHK2.......................
          .          V
          .          V
600       .      R2CHK2
          .          .
          .          .
606       .          .        125E
          .          .           .
          .          .           .
615       .       CHK3............
          .          .
          .          .
618    CER5............
          V
          V
622    RCER5
          .
          .
628       .       120G
          .          .
          .          .
637    *CER6...........
          .
          .
640       .       124A
          .          .
          .          .
649       .          .        124B
          .          .           .
          .          .           .
          .       LOG1............
          .          V
          .          V
661       .      RLOG1
          .          .
          .          .
667       .          .        124D
          .          .           .
          .          .           .
676       .      *LOG2...........
          .          .
          .          .
679       .          .        124C
          .          .           .
          .          .           .
688       .       LOG2............
          .          V
          .          V
691       .      RLOG2
          .          .
          .          .
697       .          .        124E
          .          .           .
          .          .           .
706       .       LOG3............
          .          .
          .          .
709    CER6............
          V
          V
713    RCER6
          .
          .
719       .       120L
          .          .
          .          .
728    *CER7...........
          .
          .
731       .       120J
          .          V
          .          V
          .      R120J
          .          .
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          .           .
          .           .        120K
          .           .           .
          .           .           .
755       .       CER7A............
          .           V
          .           V
758       .      SCER7A
          .           V
          .           V
766       .      RCER7A
          .           .
          .           .
772       .           .        120M
          .           .           .
          .           .           .
781       .           .           .        123B
          .           .           .           V
          .           .           .           V
790       .           .           .       S123B
          .           .           .           V
          .           .           .           V
798       .           .           .       R123B
          .           .           .           V
          .           .           .           V
804       .           .           .       R123B
          .           .           .           .
          .           .           .           .
810     CER7..................................
          V
          V
813     RCER7
          .
          .
819       .        120N
          .           .
          .           .
828     *CER8............
          .
          .
831       .        123A
          .           V
          .           V
          .       S123A
          .           .
          .           .
848       .           .        123D
          .           .           .
          .           .           .
857       .        TRV1............
          .           V
          .           V
860       .       STRV1
          .           V
          .           V
868       .       RTRV1
          .           .
          .           .
874       .           .        123C
          .           .           V
          .           .           V
883       .           .       S123C
          .           .           V
          .           .           V
891       .           .       R123C
          .           .           V
          .           .           V
897       .           .       R123C
          .           .           .
          .           .           .
903     CER8........................
          V
          V
907     RCER8
          .
          .
913       .        1200
          .           V
          .           V
922       .       S1200
          .           V
          .           V
930       .       R1200
          .           V
          .           V
          .       R1200
          .           .
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                .           .
                .           .        120Q
                .           .           .
                .           .           .
      *CER9.......................
                .
                .
954             .        120P
                .           V
                .           V
963             .       S120P
                .           V
                .           V
971             .       R120P
                .           .
                .           .
977        CER9............
              V
              V
980       SCER9
                .
                .
989             .        120R
                .           .
                .           .
998             .           .        120S
                .           .           .
                .           .           .
1007      CER10.......................
              V
              V
1010     RCER10
                .
                .
1016            .        120T
                .           .
                .           .
1025     *CER11............
                .
                .
1028            .        122C
                .           .
                .           .
                .           .-------> DO122C
                .       D122C
                .           V
                .           V
1042            .       R122C
                .           .
                .           .
1048            .           .        122E
                .           .           .
                .           .           .
1057            .       LSR2B............
                .           V
                .           V
1060            .      RLSR2B
                .           .
                .           .
1066            .           .        122D
                .           .           V
                .           .           V
1075            .           .       R122D
                .           .           .
                .           .           .
1081            .           .           .        122F
                .           .           .           V
                .           .           .           V
1090            .           .           .       R122F
                .           .           .           .
                .           .           .           .
1096            .           .           .           .        122G
                .           .           .           .           .
                .           .           .           .           .
1105            .        LSR2.................................
                .           V
                .           V
1108            .        LSR2
                .           .
                .           .
1114            .           .        122A
                .           .           .
                .           .           .
1125            .           .           .           .<-------  DO122C
                .           .           .       D122C
                .           .           .           V
                .           .           .           V
```

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1126          .           .           .      RD122C
              .           .           .           .
              .           .           .           .
              .           .      LSR1B............
              .           .           V
              .           .           V
1135          .           .     RLSR1B
              .           .           .
              .           .           .
1141          .           .           .       122B
              .           .           .           .
              .           .           .           .
1150          .           .       LSR1............
              .           .           V
              .           .           V
1153          .           .      RLSR1
              .           .           .
              .           .           .
1159          .           .           .       122H
              .           .           .           .
              .           .           .           .
1168          .           .           .           .       122I
              .           .           .           .         .
              .           .           .           .         .
1177          .        LSR3.................................
              .           V
              .           V
1180          .        RSL3
              .           .
              .           .
1186          .           .       122J
              .           .           .
              .           .           .
1195          .        LSR4............
              .           V
              .           V
1198          .        RSL4
              .           .
              .           .
1204          .           .       122K
              .           .           .
              .           .           .
1213          .        LSR5............
              .           .
              .           .
1216      CER11............
              V
              V
1220     RCER11
              .
              .
1226          .        120U
              .           .
              .           .
1235     *CER12............
              .
              .
1238          .        121A
              .           V
              .           V
1247          .       R121A
              .           .
              .           .
1253          .           .       121B
              .           .           .
              .           .           .
1262          .        LTD1............
              .           .
              .           .
1265      CER12............
              V
              V
1269     RCER13
              .
              .
1275          .        120V
              .           .
              .           .
1284      CER13............
              V
              V
1287     SCER13
              V
              V
         RCER13
              .
              .
```

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1301          .        120X
              .           .
              .           .
1310     *CER14............
              .
              .
1313          .        120W
              .           V
              .           V
              .       S120W
              .           V
              .           V
1330          .       R120W
              .           .
              .           .
1336      CER14............
```

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

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

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	120A	21.	12.03	3.	1.	1.	0.02		
+	HYDROGRAPH AT	120B	77.	12.03	8.	2.	2.	0.05		
+	HYDROGRAPH AT	160A	11.	12.00	1.	0.	0.	0.01		
+	ROUTED TO	R160A	11.	12.03	1.	0.	0.	0.01		
+									1791.16	12.03
+	3 COMBINED AT	CER1	109.	12.03	13.	4.	4.	0.08		
+	ROUTED TO	SCER1	100.	12.10	13.	4.	4.	0.08		
+									1761.53	12.10
+	HYDROGRAPH AT	120C	8.	12.00	1.	0.	0.	0.00		
+	2 COMBINED AT	CER2	107.	12.10	14.	4.	4.	0.08		
+	ROUTED TO	RCER2	105.	12.17	14.	4.	4.	0.08		
+									1707.20	12.17
+	HYDROGRAPH AT	120D	105.	12.03	11.	3.	3.	0.07		
+	2 COMBINED AT	*CER3	199.	12.07	25.	7.	7.	0.15		
+	HYDROGRAPH AT	120H	6.	12.03	1.	0.	0.	0.00		
+	ROUTED TO	R120H	6.	12.07	1.	0.	0.	0.00		
+									1712.06	12.07
+	HYDROGRAPH AT	120I	11.	12.03	1.	0.	0.	0.01		
+	2 COMBINED AT	CER3A	17.	12.03	2.	1.	1.	0.01		
+	ROUTED TO	SCER3A	13.	12.17	1.	0.	0.	0.01		
+									1700.52	12.17
+	2 COMBINED AT	CER3	211.	12.07	26.	7.	7.	0.16		
+	ROUTED TO	SCER3	207.	12.10	26.	7.	7.	0.16		
+									1692.70	12.10
+	ROUTED TO	RCER3	207.	12.13	26.	7.	7.	0.16		
+									1672.23	12.13
+	HYDROGRAPH AT	120E	23.	12.07	3.	1.	1.	0.02		
+	2 COMBINED AT	*CER4	228.	12.13	29.	8.	8.	0.18		
+	HYDROGRAPH AT	126A	11.	12.03	1.	0.	0.	0.01		
+	ROUTED TO	R126A	11.	12.10	1.	0.	0.	0.01		
+									1922.11	12.10
	HYDROGRAPH AT									

+		126B	29.	12.03	4.	1.	1.	0.02	
	2 COMBINED AT								
+		WW1	39.	12.07	5.	2.	2.	0.03	
	ROUTED TO								
+		RWW1	39.	12.10	5.	2.	2.	0.03	
+									1813.20 12.07
	HYDROGRAPH AT								
+		126C	160.	12.10	20.	5.	5.	0.14	
	ROUTED TO								
+		R126C	156.	12.17	20.	5.	5.	0.14	
+									1813.64 12.17
	HYDROGRAPH AT								
+		126D	42.	12.03	4.	1.	1.	0.03	
	3 COMBINED AT								
+		WW3	227.	12.10	30.	8.	8.	0.20	
	ROUTED TO								
+		RWW3	225.	12.13	30.	8.	8.	0.20	
+									1787.11 12.13
	HYDROGRAPH AT								
+		126E	140.	12.10	16.	5.	5.	0.09	
	HYDROGRAPH AT								
+		126F	91.	12.07	11.	3.	3.	0.05	
	2 COMBINED AT								
+		WW4	230.	12.10	28.	8.	8.	0.15	
	ROUTED TO								
+		RWW4	227.	12.17	28.	8.	8.	0.15	
+									1797.73 12.17
	HYDROGRAPH AT								
+		126G	189.	12.17	25.	7.	7.	0.14	
	HYDROGRAPH AT								
+		126H	30.	12.03	3.	1.	1.	0.02	
	4 COMBINED AT								
+		WW5	663.	12.13	85.	23.	23.	0.50	
	ROUTED TO								
+		RWW5	659.	12.20	85.	23.	23.	0.50	
+									1759.76 12.20
	HYDROGRAPH AT								
+		126I	135.	12.03	15.	4.	4.	0.08	
	HYDROGRAPH AT								
+		126J	3.	12.03	0.	0.	0.	0.00	
	ROUTED TO								
+		R126J	3.	12.07	0.	0.	0.	0.00	
+									1758.00 12.03
	3 COMBINED AT								
+		WW6	753.	12.17	100.	28.	28.	0.58	
	ROUTED TO								
+		RWW6	749.	12.20	100.	28.	28.	0.58	
+									1722.07 12.20
	HYDROGRAPH AT								
+		126M	37.	12.03	4.	1.	1.	0.03	
	2 COMBINED AT								
+		*WW7	774.	12.20	104.	29.	29.	0.61	
	HYDROGRAPH AT								
+		126K	18.	12.03	2.	1.	1.	0.01	
	ROUTED TO								
+		R126K	17.	12.07	2.	1.	1.	0.01	
+									1720.06 12.07
	HYDROGRAPH AT								
+		126L	32.	12.07	4.	1.	1.	0.02	
	3 COMBINED AT								
+		WW7	814.	12.17	111.	30.	30.	0.64	

+	ROUTED TO	SWW7	809.	12.20	111.	30.	30.	0.64	
+									1714.11 12.20
+	HYDROGRAPH AT	127A	40.	12.10	4.	1.	1.	0.03	
+	HYDROGRAPH AT	127B	62.	12.03	6.	2.	2.	0.04	
+	2 COMBINED AT	CAP1	101.	12.03	10.	3.	3.	0.07	
+	ROUTED TO	RCAP1	99.	12.07	10.	3.	3.	0.07	
+									1742.95 12.07
+	HYDROGRAPH AT	127C	68.	12.07	8.	2.	2.	0.04	
+	HYDROGRAPH AT	127D	36.	12.03	4.	1.	1.	0.02	
+	3 COMBINED AT	CAP2	202.	12.07	22.	6.	6.	0.13	
+	ROUTED TO	RCAP2	200.	12.10	22.	6.	6.	0.13	
+									1733.62 12.10
+	HYDROGRAPH AT	127E	165.	12.03	19.	5.	5.	0.10	
+	HYDROGRAPH AT	127F	224.	12.13	30.	9.	9.	0.15	
+	2 COMBINED AT	CAP3	382.	12.07	49.	14.	14.	0.25	
+	ROUTED TO	RCAP3	380.	12.10	49.	14.	14.	0.25	
+									1759.39 12.10
+	HYDROGRAPH AT	127G	97.	12.03	12.	3.	3.	0.06	
+	2 COMBINED AT	CAP4	471.	12.07	61.	17.	17.	0.31	
+	ROUTED TO	SCAP4	470.	12.07	61.	17.	17.	0.31	
+									1749.06 12.07
+	ROUTED TO	R2CAP4	469.	12.10	61.	17.	17.	0.31	
+									1737.76 12.10
+	HYDROGRAPH AT	127I	14.	12.03	2.	0.	0.	0.01	
+	2 COMBINED AT	*CAP5	481.	12.10	62.	18.	18.	0.32	
+	HYDROGRAPH AT	127H	30.	12.07	4.	1.	1.	0.02	
+	3 COMBINED AT	CAP5	711.	12.10	88.	25.	25.	0.47	
+	ROUTED TO	RCAP5	707.	12.13	88.	25.	25.	0.47	
+									1712.21 12.13
+	HYDROGRAPH AT	127J	51.	12.10	6.	2.	2.	0.03	
+	2 COMBINED AT	CAP6	756.	12.13	94.	26.	26.	0.50	
+	2 COMBINED AT	WW8	1556.	12.13	205.	57.	57.	1.14	
+	ROUTED TO	RWW8	1535.	12.23	205.	57.	57.	1.14	
+									1681.27 12.23
	HYDROGRAPH AT								

+		126N	107.	12.07	13.	4.	4.	0.08		
	2 COMBINED AT								
+		WW9	1611.	12.23	218.	60.	60.	1.22		
	2 COMBINED AT								
+		CER4	1822.	12.20	248.	68.	68.	1.40		
	ROUTED TO								
+		RCER4	1818.	12.23	248.	68.	68.	1.40		
+									1747.05	12.23
	HYDROGRAPH AT								
+		120F	35.	12.03	4.	1.	1.	0.02		
	2 COMBINED AT								
+		*CER5	1834.	12.23	251.	69.	69.	1.42		
	HYDROGRAPH AT								
+		125A	111.	12.13	16.	5.	5.	0.08		
	HYDROGRAPH AT								
+		125B	170.	12.13	24.	7.	7.	0.11		
	2 COMBINED AT								
+		CHK1	280.	12.13	40.	12.	12.	0.19		
	ROUTED TO								
+		RCHK1	278.	12.17	40.	12.	12.	0.19		
+									1683.58	12.17
	HYDROGRAPH AT								
+		125C	49.	12.07	6.	2.	2.	0.03		
	ROUTED TO								
+		R125C	43.	12.17	6.	2.	2.	0.03		
+									1666.93	12.17
	HYDROGRAPH AT								
+		125D	20.	12.30	3.	1.	1.	0.02		
	3 COMBINED AT								
+		CHK2	339.	12.17	50.	14.	14.	0.24		
	ROUTED TO								
+		R2CHK2	335.	12.23	50.	14.	14.	0.24		
+									1666.42	12.23
	HYDROGRAPH AT								
+		125E	75.	12.07	9.	2.	2.	0.05		
	2 COMBINED AT								
+		CHK3	389.	12.17	59.	17.	17.	0.28		
	2 COMBINED AT								
+		CER5	2215.	12.23	310.	86.	86.	1.71		
	ROUTED TO								
+		RCER5	2204.	12.27	310.	86.	86.	1.71		
+									1633.76	12.27
	HYDROGRAPH AT								
+		120G	59.	12.07	7.	2.	2.	0.04		
	2 COMBINED AT								
+		*CER6	2238.	12.27	317.	88.	88.	1.74		
	HYDROGRAPH AT								
+		124A	107.	12.13	14.	4.	4.	0.07		
	HYDROGRAPH AT								
+		124B	75.	12.03	8.	2.	2.	0.04		
	2 COMBINED AT								
+		LOG1	180.	12.07	23.	6.	6.	0.11		
	ROUTED TO								
+		RLOG1	178.	12.10	23.	6.	6.	0.11		
+									1656.88	12.10
	HYDROGRAPH AT								
+		124D	10.	12.13	2.	0.	0.	0.01		
	2 COMBINED AT								
+		*LOG2	188.	12.10	24.	7.	7.	0.12		
	HYDROGRAPH AT								

+		124C	28.	12.03	4.	1.	1.	0.02	
+	2 COMBINED AT	LOG2	215.	12.10	28.	8.	8.	0.14	
+	ROUTED TO	RLOG2	211.	12.17	28.	8.	8.	0.14	
+									1641.04 12.17
+	HYDROGRAPH AT	124E	80.	12.10	9.	2.	2.	0.05	
+	2 COMBINED AT	LOG3	287.	12.13	37.	10.	10.	0.19	
+	2 COMBINED AT	CER6	2480.	12.23	354.	98.	98.	1.94	
+	ROUTED TO	RCER6	2470.	12.30	354.	98.	98.	1.94	
+									1616.21 12.30
+	HYDROGRAPH AT	120L	57.	12.10	7.	2.	2.	0.04	
+	2 COMBINED AT	*CER7	2500.	12.30	360.	100.	100.	1.97	
+	HYDROGRAPH AT	120J	6.	12.07	1.	0.	0.	0.01	
+	ROUTED TO	R120J	6.	12.10	1.	0.	0.	0.01	
+									1682.52 12.10
+	HYDROGRAPH AT	120K	46.	12.07	6.	2.	2.	0.03	
+	2 COMBINED AT	CER7A	52.	12.07	7.	2.	2.	0.04	
+	ROUTED TO	SCER7A	52.	12.07	7.	2.	2.	0.04	
+									1644.05 12.07
+	ROUTED TO	RCER7A	50.	12.17	7.	2.	2.	0.04	
+									1628.25 12.17
+	HYDROGRAPH AT	120M	50.	12.07	7.	2.	2.	0.04	
+	HYDROGRAPH AT	123B	29.	12.03	3.	1.	1.	0.02	
+	ROUTED TO	S123B	29.	12.03	3.	1.	1.	0.02	
+									1627.44 12.03
+	ROUTED TO	R123B	29.	12.03	3.	1.	1.	0.02	
+									1616.35 12.03
+	ROUTED TO	R123B	29.	12.03	3.	1.	1.	0.02	
+									1628.04 12.03
+	4 COMBINED AT	CER7	2592.	12.27	377.	105.	105.	2.07	
+	ROUTED TO	RCER7	2577.	12.33	377.	104.	104.	2.07	
+									1585.73 12.33
+	HYDROGRAPH AT	120N	73.	12.03	9.	2.	2.	0.04	
+	2 COMBINED AT	*CER8	2604.	12.33	386.	107.	107.	2.12	
+	HYDROGRAPH AT	123A	109.	12.03	11.	3.	3.	0.08	
+	ROUTED TO	S123A	106.	12.07	11.	3.	3.	0.08	
+									1598.44 12.07

+	HYDROGRAPH AT	123D	11.	12.07	2.	0.	0.	0.01		
+	2 COMBINED AT	TRV1	117.	12.07	13.	3.	3.	0.09		
+	ROUTED TO	STRV1	117.	12.10	13.	3.	3.	0.09		
+									1592.09	12.10
+	ROUTED TO	RTRV1	114.	12.17	13.	3.	3.	0.09		
+									1582.96	12.17
+	HYDROGRAPH AT	123C	5.	12.00	0.	0.	0.	0.00		
+	ROUTED TO	S123C	5.	12.00	0.	0.	0.	0.00		
+									1619.13	12.00
+	ROUTED TO	R123C	5.	12.00	0.	0.	0.	0.00		
+									1616.03	12.00
+	ROUTED TO	R123C	5.	12.07	0.	0.	0.	0.00		
+									1582.04	12.07
+	3 COMBINED AT	CER8	2684.	12.33	399.	110.	110.	2.20		
+	ROUTED TO	RCER8	2678.	12.37	399.	110.	110.	2.20		
+									1561.14	12.37
+	HYDROGRAPH AT	120O	14.	12.00	1.	0.	0.	0.01		
+	ROUTED TO	S120O	14.	12.00	1.	0.	0.	0.01		
+									1588.44	12.00
+	ROUTED TO	R120O	13.	12.00	1.	0.	0.	0.01		
+									1582.08	12.00
+	ROUTED TO	R120O	13.	12.10	1.	0.	0.	0.01		
+									1556.37	12.10
+	HYDROGRAPH AT	120Q	55.	12.03	7.	2.	2.	0.04		
+	3 COMBINED AT	*CER9	2706.	12.37	407.	112.	112.	2.25		
+	HYDROGRAPH AT	120P	47.	12.00	4.	1.	1.	0.03		
+	ROUTED TO	S120P	47.	12.00	4.	1.	1.	0.03		
+									1584.06	12.00
+	ROUTED TO	R120P	47.	12.00	4.	1.	1.	0.03		
+									1556.96	12.00
+	2 COMBINED AT	CER9	2711.	12.37	412.	114.	114.	2.28		
+	ROUTED TO	SCER9	2609.	12.43	412.	114.	114.	2.28		
+									1563.81	12.43
+	HYDROGRAPH AT	120R	15.	12.07	2.	0.	0.	0.01		
+	HYDROGRAPH AT	120S	11.	12.03	2.	0.	0.	0.01		
+	3 COMBINED AT	CER10	2620.	12.43	415.	115.	115.	2.29		
+	ROUTED TO	RCER10	2611.	12.47	415.	115.	115.	2.29		
+									1549.90	12.47

	HYDROGRAPH AT								
+		120T	3.	12.03	0.	0.	0.	0.00	
	2 COMBINED AT								
+		*CER11	2612.	12.47	416.	115.	115.	2.30	
	HYDROGRAPH AT								
+		122C	23.	12.00	2.	1.	1.	0.01	
	DIVERSION TO								
+		DO122C	11.	12.00	1.	0.	0.	0.01	
	HYDROGRAPH AT								
+		D122C	11.	12.00	1.	0.	0.	0.01	
	ROUTED TO								
+		R122C	11.	12.03	1.	0.	0.	0.01	
+									1614.12 12.03
	HYDROGRAPH AT								
+		122E	51.	12.03	5.	1.	1.	0.03	
	2 COMBINED AT								
+		LSR2B	62.	12.03	7.	2.	2.	0.05	
	ROUTED TO								
+		RLSR2B	62.	12.07	7.	2.	2.	0.05	
+									1590.68 12.07
	HYDROGRAPH AT								
+		122D	48.	12.03	5.	1.	1.	0.03	
	ROUTED TO								
+		R122D	48.	12.03	5.	1.	1.	0.03	
+									1590.00 11.90
	HYDROGRAPH AT								
+		122F	13.	12.07	2.	1.	1.	0.01	
	ROUTED TO								
+		R122F	13.	12.07	2.	1.	1.	0.01	
+									1590.21 12.07
	HYDROGRAPH AT								
+		122G	40.	12.00	6.	2.	2.	0.02	
	4 COMBINED AT								
+		LSR2	162.	12.03	19.	5.	5.	0.11	
	ROUTED TO								
+		LSR2	160.	12.03	19.	5.	5.	0.11	
+									1571.35 12.03
	HYDROGRAPH AT								
+		122A	26.	12.07	3.	1.	1.	0.02	
	HYDROGRAPH AT								
+		D122C	11.	12.00	1.	0.	0.	0.01	
	ROUTED TO								
+		RD122C	11.	12.17	1.	0.	0.	0.01	
+									1606.08 12.13
	2 COMBINED AT								
+		LSR1B	35.	12.07	5.	1.	1.	0.02	
	ROUTED TO								
+		RLSR1B	33.	12.20	5.	1.	1.	0.02	
+									1577.49 12.20
	HYDROGRAPH AT								
+		122B	58.	12.00	7.	2.	2.	0.03	
	2 COMBINED AT								
+		LSR1	83.	12.03	11.	3.	3.	0.05	
	ROUTED TO								
+		RLSR1	82.	12.07	11.	3.	3.	0.05	
+									1568.75 12.07
	HYDROGRAPH AT								
+		122H	10.	12.00	1.	0.	0.	0.01	
	HYDROGRAPH AT								
+		122I	10.	12.03	1.	0.	0.	0.01	
	4 COMBINED AT								

+		LSR3	262.	12.07	32.	9.	9.	0.18		
	ROUTED TO									
+		RSL3	261.	12.07	32.	9.	9.	0.18		
+									1562.55	12.07
	HYDROGRAPH AT									
+		122J	36.	12.03	4.	1.	1.	0.03		
	2 COMBINED AT									
+		LSR4	297.	12.07	37.	11.	11.	0.20		
	ROUTED TO									
+		RSL4	296.	12.10	37.	11.	11.	0.20		
+									1546.89	12.10
	HYDROGRAPH AT									
+		122K	4.	12.03	1.	0.	0.	0.00		
	2 COMBINED AT									
+		LSR5	299.	12.10	37.	11.	11.	0.21		
	2 COMBINED AT									
+		CER11	2745.	12.43	453.	125.	125.	2.50		
	ROUTED TO									
+		RCER11	2747.	12.47	453.	125.	125.	2.50		
+									1545.59	12.47
	HYDROGRAPH AT									
+		120U	33.	12.00	4.	1.	1.	0.02		
	2 COMBINED AT									
+		*CER12	2753.	12.47	457.	126.	126.	2.52		
	HYDROGRAPH AT									
+		121A	68.	12.07	8.	2.	2.	0.05		
	ROUTED TO									
+		R121A	67.	12.10	8.	2.	2.	0.05		
+									1542.59	12.10
	HYDROGRAPH AT									
+		121B	25.	12.07	3.	1.	1.	0.02		
	2 COMBINED AT									
+		LTD1	93.	12.07	11.	3.	3.	0.07		
	2 COMBINED AT									
+		CER12	2790.	12.47	468.	129.	129.	2.59		
	ROUTED TO									
+		RCER13	2783.	12.47	468.	129.	129.	2.59		
+									1537.87	12.47
	HYDROGRAPH AT									
+		120V	16.	12.03	2.	0.	0.	0.01		
	2 COMBINED AT									
+		CER13	2787.	12.47	470.	130.	130.	2.60		
	ROUTED TO									
+		SCER13	2716.	12.53	470.	130.	130.	2.60		
+									1539.69	12.53
	ROUTED TO									
+		RCER13	2710.	12.53	470.	130.	130.	2.60		
+									1526.59	12.53
	HYDROGRAPH AT									
+		120X	29.	12.00	3.	1.	1.	0.02		
	2 COMBINED AT									
+		*CER14	2715.	12.53	473.	131.	131.	2.62		
	HYDROGRAPH AT									
+		120W	8.	12.00	1.	0.	0.	0.00		
	ROUTED TO									
+		S120W	7.	12.03	1.	0.	0.	0.00		
+									1541.39	12.03
	ROUTED TO									
+		R120W	7.	12.07	1.	0.	0.	0.00		
+									1527.74	12.07
	2 COMBINED AT									

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+                    CER14      2717.   12.53      474.       131.       131.       2.62

ORMAL END OF HEC-1 ***
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K.3

CYPRUS POINT WASH

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****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*              MAY   1991              *
*           VERSION 4.0.1E             *
*     Lahey F77L-EM/32 version 5.01    *
*       Dodson & Associates, Inc.      *
* RUN DATE  04/11/95  TIME  13:07:15   *
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*                                      *
*    U.S. ARMY CORPS OF ENGINEERS      *
*    HYDROLOGIC ENGINEERING CENTER     *
*          609 SECOND STREET           *
*       DAVIS, CALIFORNIA 95616        *
*           (916) 551-1748             *
*                                      *
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X     X  XXXXXXX   XXXXX          X
X     X  X        X     X        XX
X     X  X        X              X
XXXXXXX  XXXX     X       XXXXX  X
X     X  X        X              X
X     X  X        X     X        X
X     X  XXXXXXX   XXXXX         XXX
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THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

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

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

  1           ID   CYPRUS POINT WASH - EXISTING CONDITIONS, AGK ENGINEERS, 04-11-95
  2           ID   First routing 5-6-93
  3           ID   100-Year 24-Hour storm
  4           ID   24-Hour SCS Type II distribution
  5           ID   2 minutes time step
  6           ID   File:130-24CE.DAT
  7           ID
  8           IT       2                    720
  9           IO       5
              *DIAGRAM
 10           IN      30
 11           JD     4.0
 12           PC    .000    .005    .011    .016    .022    .028    .035    .041    .048    .056
 13           PC    .063    .071    .080    .089    .098    .109    .120    .133    .147    .163
 14           PC    .181    .204    .235    .283    .663    .735    .772    .799    .820    .838
 15           PC    .854    .868    .880    .891    .902    .912    .921    .929    .937    .945
 16           PC    .952    .959    .965    .972    .978    .984    .989    .995   1.000

 17           KK    130A
 18           KM   SUB-BASIN 130A
 19           KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 20           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 21           BA    .008
 22           LG    .062    .250   5.700    .170  19.550
 23           UC    .183    .441
 24           UA       0       5      16      30      65      77      84      90      94      97
 25           UA     100

 26           KK    130B
 27           KM   SUB-BASIN 130B
 28           KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 29           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 30           BA    .031
 31           LG    .150    .250   5.700    .207  10.360
 32           UC    .175    .136
 33           UA       0       5      16      30      65      77      84      90      94      97
 34           UA     100

 35           KK    130C
 36           KM   SUB-BASIN 130C
 37           KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 38           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 39           BA    .005
 40           LG    .050    .250   5.700    .170  18.500
 41           UC    .142    .331
 42           UA       0       5      16      30      65      77      84      90      94      97
 43           UA     100

 44           KK   R130C
 45           KM   ROUTE 130C THROUGH 130D
 46           RS       3    FLOW       0
 47           RC    .025    .013    .025    1767    .054
 48           RX    9975    9980    9985    9986   10014   10015   10020   10025
 49           RY  1640.5  1640.5  1640.5    1640    1640  1640.5  1640.5  1640.5
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  50          KK    130D
  51          KM   SUB-BASIN 130D
  52          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
  53          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
  54          BA    .004
  55          LG    .100    .250   5.700    .170  31.880
  56          UC    .158    .470
  57          UA       0       5      16      30      65      77      84      90      94      97
  58          UA     100

  59          KK     CP1
  60          KM   CYPRUS POINT WASH CONC. POINT 1 - 130A, 130B, R130C, 130D
  61          HC       4

  62          KK    RCP1
  63          KM   ROUTE CP1 THROUGH SUB-BASIN 130F TO CON. POINT CP2
  64          RS       4    FLOW       0
  65          RC     .04     .04     .04    1902    .034
  66          RX    9840    9870    9955    9996   10004   10060   10105   10190
  67          RY    1596    1594    1576    1575    1575    1578    1582    1600

  68          KK    130F
  69          KM   SUB-BASIN 130F
  70          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
  71          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
  72          BA    .039
  73          LG    .130    .250   5.700    .189  14.400
  74          UC    .242    .247
  75          UA       0       5      16      30      65      77      84      90      94      97
  76          UA     100

  77          KK    *CP2
  78          KM   CYPRUS POINT WASH CONCENTRATION POIT *2 - RCP1, 130F
  79          HC       2

  80          KK    130E
  81          KM   SUB-BASIN 130E
  82          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
  83          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
  84          BA    .004
  85          LG    .050    .250   5.700    .170  27.000
  86          UC    .150    .389
  87          UA       0       5      16      30      65      77      84      90      94      97
  88          UA     100

  89          KK     CP2
  90          KM   CYPRUS POINT WASH CONC. POINT 2 - (RCP1, 130F), 130E
  91          HC       2
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  92          KK    RCP2
  93          KM   ROUTE CP2 THROUGH SUB-BASIN 131A TO CON. POINT CP3
  94          RS       1    FLOW       0
  95          RC     .04     .04     .04     553    .026
  96          RX    9820    9840    9910    9965   10050   10120   10160   10190
  97          RY    1546    1544    1534  1530.5  1530.5    1534    1538    1542

  98          KK    131A
  99          KM   SUB-BASIN 131A
 100          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 101          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 102          BA    .049
 103          LG    .121    .250   5.700    .189  17.600
 104          UC    .237    .229
 105          UA       0       5      16      30      65      77      84      90      94      97
 106          UA     100

 107          KK     CP3
 108          KM   CYPRUS POINT WASH CONC. POINT 3 - RCP2, 131A
 109          HC       2

 110          KK    SCP3
 111          KM   ROUTE CP3 THROUGH CULVERT UNDER SAGUARO BLVD.
 112          RS       1    STOR       0
 113          SQ       0      14      50     202    1075
 114          SE    1522    1523    1524    1525    1526
 115          SV       0    .002    .009    .017
 116          SE    1522    1523    1524    1525

 117          KK    RCP3
 118          KM   ROUTE CP3 THROUGH SUB-BASIN 130G TO CON. POINT CP4
 119          RS       2    FLOW       0
 120          RC    0.04    0.04    0.04     768   0.029
 121          RX    9915    9950    9980    9998   10002   10025   10030   10090
 122          RY    1519    1518    1516   15122    1512    1520    1522    1530

 123          KK    130G
 124          KM   SUB-BASIN 130G
 125          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 126          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 127          BA    .011
 128          LG    .150    .250   5.300    .222   1.300
 129          UC    .129    .121
 130          UA       0       3       5       8      12      20      43      75      90      96
 131          UA     100

 132          KK   CP4
 133          KM   CYPRUS POINT WASH CONC. POINT 4 - RCP3, 130G
 134          HC       2
 135          ZZ
```

SCHEMATIC DIAGRAM OF STREAM NETWORK

```
INPUT
 LINE      (V) ROUTING          (--->) DIVERSION OR PUMP FLOW

  NO.      (.) CONNECTOR        (<---) RETURN OF DIVERTED OR PUMPED FLOW

   17        130A
               .
               .
   26          .        130B
               .          .
               .          .
   35          .          .       130C
               .          .         V
               .          .         V
   44          .          .      R130C
               .          .         .
               .          .         .
   50          .          .         .        130D
               .          .         .          .
               .          .         .          .
   59        CP1.................................
              V
              V
   62       RCP1
               .
               .
   68          .        130F
               .          .
               .          .
           *CP2............
               .
               .
   80          .        130E
               .          .
               .          .
   89        CP2............
              V
              V
   92       RCP2
               .
               .
   98          .        131A
               .          .
               .          .
  107        CP3............
              V
              V
  110       SCP3
              V
              V
  117       RCP3
               .
               .
  123          .        130G
               .          .
               .          .
  132       CP4 ............
```

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

```
*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*             MAY   1991                *
*          VERSION 4.0.1E               *
*     Lahey F77L-EM/32 version 5.01     *
*       Dodson & Associates, Inc.       *
*  RUN DATE  04/11/95  TIME  13:07:15   *
*****************************************
```

```
*****************************************
*                                       *
*    U.S. ARMY CORPS OF ENGINEERS       *
*    HYDROLOGIC ENGINEERING CENTER      *
*          609 SECOND STREET            *
*       DAVIS, CALIFORNIA 95616         *
*           (916) 551-1748              *
*                                       *
*****************************************
```

```
                    CYPRUS POINT WASH - EXISTING CONDITIONS, AGK ENGINEERS, 04-11-95
                    First routing 5-6-93
                    100-Year 24-Hour storm
                    24-Hour SCS Type II distribution
                    2 minutes time step
                    File:130-24CE.DAT

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

   IT        HYDROGRAPH TIME DATA
                   NMIN          2  MINUTES IN COMPUTATION INTERVAL
                  IDATE      1   0  STARTING DATE
                  ITIME       0000  STARTING TIME
                     NQ        720  NUMBER OF HYDROGRAPH ORDINATES
                 NDDATE      1   0  ENDING DATE
                 NDTIME       2358  ENDING TIME
                  ICENT         19  CENTURY MARK

             COMPUTATION INTERVAL    0.03 HOURS
                  TOTAL TIME BASE   23.97 HOURS

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

11 JD        INDEX STORM NO. 1
                  STRM        4.00  PRECIPITATION DEPTH
                  TRDA        0.00  TRANSPOSITION DRAINAGE AREA

12 PI          PRECIPITATION PATTERN
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
```

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

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

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	130A	9.	12.07	1.	0.	0.	0.01		
+	HYDROGRAPH AT	130B	50.	12.00	5.	1.	1.	0.03		
+	HYDROGRAPH AT	130C	7.	12.03	1.	0.	0.	0.00		
+	ROUTED TO	R130C	7.	12.10	1.	0.	0.	0.00		
+									1640.06	12.10
+	HYDROGRAPH AT	130D	5.	12.03	1.	0.	0.	0.00		
+	4 COMBINED AT	CP1	70.	12.03	8.	2.	2.	0.05		
+	ROUTED TO	RCP1	68.	12.10	8.	2.	2.	0.05		
+									1575.25	12.10
+	HYDROGRAPH AT	130F	56.	12.07	7.	2.	2.	0.04		
+	2 COMBINED AT	*CP2	123.	12.07	15.	4.	4.	0.09		
+	HYDROGRAPH AT	130E	5.	12.03	1.	0.	0.	0.00		
+	2 COMBINED AT	CP2	128.	12.07	16.	4.	4.	0.09		
+	ROUTED TO	RCP2	127.	12.10	16.	4.	4.	0.09		
+									1530.77	12.10
+	HYDROGRAPH AT	131A	72.	12.03	9.	2.	2.	0.05		
+	2 COMBINED AT	CP3	198.	12.07	24.	7.	7.	0.14		
+	ROUTED TO	SCP3	198.	12.07	24.	7.	7.	0.14		
+									1524.97	12.07
+	ROUTED TO	RCP3	198.	12.07	24.	7.	7.	0.14		
+									1512.00	12.03
+	HYDROGRAPH AT	130G	18.	12.03	2.	0.	0.	0.01		
+	2 COMBINED AT	CP4	215.	12.07	26.	7.	7.	0.15		

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

K.4

JACKLIN WASH

```
*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*              MAY   1991               *
*            VERSION 4.0.1E             *
*     Lahey F77L-EM/32 version 5.01     *
*       Dodson & Associates, Inc.       *
*  RUN DATE  04/11/95  TIME  13:09:25   *
*****************************************
```

```
*****************************************
*                                       *
*    U.S. ARMY CORPS OF ENGINEERS       *
*    HYDROLOGIC ENGINEERING CENTER      *
*          609 SECOND STREET            *
*       DAVIS, CALIFORNIA 95616         *
*           (916) 551-1748              *
*                                       *
*****************************************
```

```
X     X  XXXXXXX   XXXXX          X
X     X  X        X     X        XX
X     X  X        X              X
XXXXXXX  XXXX     X        XXXXX  X
X     X  X        X              X
X     X  X        X     X        X
X     X  XXXXXXX   XXXXX         XXX
```

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

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

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

  1           ID   JACKLIN WASH - EXISTING CONDITIONS, AGK ENGINEERS, 04-11-95
  2           ID
  3           ID   100-Year 24-Hour storm
  4           ID   24-Hour SCS Type II distribution
  5           ID   2 minutes time step
  6           ID   File: 150-24CE.DAT
  7           ID
  8           IT       2                    720
  9           IO       5
              *DIAGRAM
 10           IN      30
 11           JD     4.0
 12           PC    .000    .005    .011    .016    .022    .028    .035    .041    .048    .056
 13           PC    .063    .071    .080    .089    .098    .109    .120    .133    .147    .163
 14           PC    .181    .204    .235    .283    .663    .735    .772    .799    .820    .838
 15           PC    .854    .868    .880    .891    .902    .912    .921    .929    .937    .945
 16           PC    .952    .959    .965    .972    .978    .984    .989    .995   1.000

 17           KK    151A
 18           KM   SUB-BASIN 151A
 19           KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 20           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 21           BA    .003
 22           LG    .050    .250   5.700    .170  30.020
 23           UC    .096    .156
 24           UA       0       5      16      30      65      77      84      90      94      97
 25           UA     100

 26           KK   D151A
 27           KM   DIVERSION AT INTERSECTION OF KINGSTREE AND KEOTA
 28           DT  DO151A
 29           DI       0      10     100    1000
 30           DQ       0     2.5      25     250

 31           KK   R151A
 32           KM   ROUTE 151A THROUGH SUB-BASIN 151B TO POINT OF CON. KGT1
 33           RS       2    FLOW       0
 34           RC    0.02    0.02    0.02     775    .021
 35           RX    9975    9980    9985    9986   10014   10015   10020   10025
 36           RY  1774.5  1774.5  1774.5    1774    1774  1774.5  1774.5  1774.5

 37           KK    151B
 38           KM   SUB-BASIN 151B
 39           KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 40           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 41           BA    .005
 42           LG    .050    .250   5.700    .170  25.000
 43           UC    .125    .272
 44           UA       0       5      16      30      65      77      84      90      94      97
 45           UA     100
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```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  46          KK   D151B
  47          KM   DIVERTION AT INTERSECTION OF KINGSTREE AND FRISCO
  48          DT  DO151B
  49          DI       1      10     100    1000
  50          DQ     0.5       5      50     500

  51          KK    KGT1
  52          KM   KINGSTREE DRAIN CONCENTRATION POINT 1 - COMBINE R151A WITH D151B
  53          HC       2

  54          KK   RKGT1
  55          KM   ROUTE KGT1 THROUGH SUB-BASIN 151C TO POINT OF CON. KGT2
  56          RS       4    FLOW       0
  57          RC    0.02    0.02    0.02    2023   0.026
  58          RX  9956.5  9961.5  9966.5  9966.5 10033.5 10033.5 10038.5 10043.5
  59          RY  1740.5  1740.5  1740.5    1740    1740  1740.5  1740.5  1740.5

  60          KK    151C
  61          KM   SUB-BASIN 151C
  62          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
  63          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
  64          BA    .005
  65          LG    .050    .250   5.700    .170  25.000
  66          UC    .121    .247
  67          UA       0       5      16      30      65      77      84      90      94      97
  68          UA     100

  69          KK    KGT2
  70          KM   KINGSTREE DRAIN CONCENTRATION POINT 2 - COMBINE RKGT1 WITH 151C
  71          HC       2

  72          KK   RKGT2
  73          KM   ROUTE KGT2 THROUGH SUB-BASIN 151I TO POINT OF CON. KGT3
  74          RS       3    FLOW       0
  75          RC    0.02    0.02    0.02    1577    .082
  76          RX  9956.5  9961.5  9966.5  9966.5 10033.5 10033.5 10038.5 10043.5
  77          RY  1660.5  1660.5  1660.5    1660    1660  1660.5  1660.5  1660.5

  78          KK    151D
  79          KM   SUB-BASIN 151D
  80          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
  81          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
  82          BA    .039
  83          LG    .147    .250   5.700    .179  12.240
  84          UC    .188    .151
  85          UA       0       5      16      30      65      77      84      90      94      97
  86          UA     100

  87          KK    151F
  88          KM   SUB-BASIN 151F
  89          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
  90          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
  91          BA    .003
  92          LG    .050    .250   5.700    .170  25.000
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  93          UC    .142    .358
  94          UA       0       5      16      30      65      77      84      90      94      97
  95          UA     100

  96          KK   D151F
  97          KM   DIVERSION AT INTERSECTION OF EMERALD AND FRISCO
  98          DT  DO151F
  99          DI       1      10     100    1000
 100          DQ     0.5       5      50     500

 101          KK  RD151F
 102          KM   ROUTE THE D151F THROUGH SUB-BASIN 151E TO CON. POINT KGT3A
 103          RS       1    FLOW       0
 104          RC    0.02    0.02    0.02     400   0.065
 105          RX    9975    9980    9985    9986   10014   10015   10020   10025
 106          RY  1715.5  1715.5  1715.5    1715    1715  1715.5  1715.5  1715.5

 107          KK   D151B
 108          KM   FLOW FROM DIVERSION AT KINGSTREE AND FRISCO
 109          DR  DO151B

 110          KK  RD151B
 111          KM   ROUTE DIVERTED FLOW THROUGH SUB-BASIN 151E TO CON. POINT KGT3A
 112          RS       2    FLOW       0
 113          RC    0.02    0.02    0.02     488    0.98
 114          RX    9975    9980    9985    9986   10014   10015   10020   10025
 115          RY  1730.5  1730.5  1730.5    1730    1730  1730.5  1730.5  1730.5

 116          KK   KGT3A
 117          KM   KENGSTREE CONCENTRATION POINT 3A - COMBINE RD151B,RD151F,151D
 118          HC       3

 119          KK   R151D
 120          KM   ROUTE KGT3A THROUGH SUB-BASIN 151E TO POINT OF CON. KGT3
 121          RS       7    FLOW       0
 122          RC    0.04    0.04    0.04    3243    .033
 123          RX    9830    9895    9970    9998   10002   10045   10055   10095
 124          RY    1650    1636    1626    1620    1620    1638    1640    1650

 125          KK   151E
 126          KM   SUB-BASIN 151E
 127          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 128          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 129          BA    .066
 130          LG    .150    .250   5.700    .179  12.500
 131          UC    .217    .245
 132          UA       0       5      16      30      65      77      84      90      94      97
 133          UA     100

 134          KK   *KGT3
 135          KM   KINGSTREE DRAIN CONCENTRATION POINT *3 - RKGT3A, 151E, RKGT2
 136          HC       3
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 137          KK    151I
 138          KM   SUB-BASIN 151I
 139          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 140          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 141          BA    .006
 142          LG    .050    .250   5.700    .170  22.500
 143          UC    .142    .298
 144          UA       0       5      16      30      65      77      84      90      94      97
 145          UA     100

 146          KK    KGT3
 147          KM   KINGSTREE DRAIN CONCENTRATION POINT 3 - COMBINE (RKGT2, RKGT3A, 151E), 151I
 148          HC       2

 149          KK   RKGT3
 150          KM   ROUTE KGT3 THROUGH SUB-BASIN 151I TO POINT OF CON. KGT4
 151          RS       1    FLOW       0
 152          RC    0.02    0.02    0.02     120   0.042
 153          RX  9956.5  9961.5  9966.5  9966.5 10033.5 10033.5 10038.5 10043.5
 154          RY  1583.5  1583.5  1583.5    1583    1583  1583.5  1583.5  1853.5

 155          KK    151J
 156          KM   SUB-BASIN 151J
 157          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 158          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 159          BA    .003
 160          LG    .064    .250   5.700    .170  24.850
 161          UC    .083    .102
 162          UA       0       5      16      30      65      77      84      90      94      97
 163          UA     100

 164          KK   *KGT4
 165          KM   KINGSTREE CONCENTRATION POINT *4 - RKGR3, 151J
 166          HC       2

 167          KK    151H
 168          KM   SUB-BASIN 151H
 169          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 170          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 171          BA    .005
 172          LG    .050    .250   5.700    .170  25.000
 173          UC    .179    .518
 174          UA       0       5      16      30      65      77      84      90      94      97
 175          UA     100

 176          KK   R151H
 177          KM   ROUTE 151H THROUGH SUB-BASIN 151J TO POINT OF CON. KGT4
 178          RS       1    FLOW       0
 179          RC    0.02    0.02    0.02     424   0.092
 180          RX  9956.5  9961.5  9966.5  9966.5 10033.5 10033.5 10038.5 10043.5
 181          RY  1660.5  1660.5  1660.5    1660    1660  1660.5  1660.5  1660.5
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 182          KK    KGT4
 183          KM   KINGSTREE DRAIN CONCENTRATION POINT 4 - COMBINE (RKGT3, 151J), 151H
 184          HC       2

 185          KK   RKGT4
 186          KM   ROUTE KGT4 THROUGH SUB-BASIN 151K TO POINT OF CON. KGT5
 187          RS       2    FLOW       0
 188          RC    0.02    0.02    0.02    1007    0.03
 189          RX    9765    9815    9930    9960   10010   10070   10185   10220
 190          RY    1546    1544    1540  1539.5  1539.5    1542    1546    1548

 191          KK    151K
 192          KM   SUB-BASIN 151K
 193          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 194          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 195          BA    .033
 196          LG    .100    .250   5.700    .171  23.550
 197          UC    .146    .101
 198          UA       0       5      16      30      65      77      84      90      94      97
 199          UA     100

 200          KK    KGT5
 201          KM   KINGSTREE DRAIN CONCENTRATION POINT 5 - COMBINE  RKGT4 AND 151K
 202          HC       2

 203          KK   RKGT5
 204          KM   ROUTE KGT5 THROUGH SUB-BASIN 151L TO POINT OF CON. JKL8
 205          RS       4    FLOW       0
 206          RC    0.02    0.02    0.02    1733   0.019
 207          RX  9956.5  9961.5  9966.5  9966.5 10033.5 10033.5 10038.5 10043.5
 208          RY  1540.7  1540.6  1540.5    1540    1540  1540.5  1540.6  1540.7

 209          KK    151L
 210          KM   SUB-BASIN 151L
 211          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 212          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 213          BA    .052
 214          LG    .063    .250   5.700    .170  35.790
 215          UC    .196    .166
 216          UA       0       5      16      30      65      77      84      90      94      97
 217          UA     100

 218          KK    KGT6
 219          KM   KINGSTREE DRAIN CONCENTRATION POINT 6 - RKGT5, 151L
 220          HC       2

 221          KK    152A
 222          KM   SUB-BASIN 152A
 223          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 224          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 225          BA    .040
 226          LG    .150    .250   5.700    .179   8.750
 227          UC    .204    .175
 228          UA       0       5      16      30      65      77      84      90      94      97
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 229          UA     100

 230          KK   R152A
 231          KM   ROUTE 152A THROUGH SUB-BASIN 152B TO POINT OF CON. MNG1
 232          RS       2    FLOW       0
 233          RC    0.04    0.04    0.04    1056   0.034
 234          RX    9920    9955    9972    9996   10004   10010   10020   10100
 235          RY    1630    1620    1614    1606    1606    1608    1610    1630

 236          KK    152B
 237          KM   SUB-BASIN 152B
 238          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 239          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 240          BA    .016
 241          LG    .150    .250   5.700    .179   5.000
 242          UC    .179    .197
 243          UA       0       5      16      30      65      77      84      90      94      97
 244          UA     100

 245          KK   *MNG1
 246          KM   MANGRUM DRAIN CONCENTRATION POINT *1 - 152A, 152B
 247          HC       2

 248          KK    152C
 249          KM   SUB-BASIN 152C
 250          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 251          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 252          BA    .013
 253          LG    .150    .250   5.700    .179   5.000
 254          UC    .167    .186
 255          UA       0       5      16      30      65      77      84      90      94      97
 256          UA     100

 257          KK    MNG1
 258          KM   MANGRUM DRAIN CONCENTRATION POINT 1 - COMBINE (R152A,152B), 152C
 259          HC       2

 260          KK   RMNG1
 261          KM   ROUTE RMNG1 THROUGH SUB-BASIN 152D TO POINT OF CON. MNG1
 262          RS       3    FLOW       0
 263          RC    0.04    0.04    0.04    1214   0.021
 264          RX    9870    9920    9945    9980   10020   10045   10060   10100
 265          RY    1610    1600    1594  1589.5  1589.5    1596    1600    1610

 266          KK    152D
 267          KM   SUB-BASIN 152D
 268          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 269          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 270          BA    .018
 271          LG    .150    .250   5.700    .179  12.140
 272          UC    .192    .223
 273          UA       0       5      16      30      65      77      84      90      94      97
 274          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 275          KK   *MNG2
 276          KM   MANGRUM DRAIN CONCENTRATION POINT *2 - RMNG1, 152D
 277          HC       2

 278          KK    152E
 279          KM   SUB-BASIN 152E
 280          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 281          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 282          BA    .017
 283          LG    .198    .250   5.700    .179   4.640
 284          UC    .196    .242
 285          UA       0       5      16      30      65      77      84      90      94      97
 286          UA     100

 287          KK    MNG2
 288          KM   MANGRUM DRAIN CONCENTRATION POINT 2 - COMBINE (RMNG1, 152D), 152E
 289          HC       2

 290          KK   RMNG2
 291          KM   ROUTE MNG2 THROUGH SUB-BASIN 152F TO POINT OF CON. JKL7
 292          RS      2     FLOW       0
 293          RC   0.04    0.04    0.04    1066   0.027
 294          RX   9885    9920    9950    9970   10050   10110   10150   10200
 295          RY   1560    1559    1558    1557    1557    1562    1566    1572

 296          KK    152F
 297          KM   SUB-BASIN 152F
 298          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 299          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 300          BA    .014
 301          LG    .154    .250   5.700    .179   6.090
 302          UC    .188    .231
 303          UA       0       5      16      30      65      77      84      90      94      97
 304          UA     100

 305          KK    MNG3
 306          KM   MANGRUM DRAIN CONCENTRATION POINT 3 - RMNG2, 152F
 307          HC       2

 308          KK    150A
 309          KM   SUB-BASIN 150A
 310          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 311          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 312          BA    .010
 313          LG    .096    .250   5.800    .168  27.440
 314          UC    .138    .192
 315          UA       0       5      16      30      65      77      84      90      94      97
 316          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 317          KK   S150A
 318          KM   ROUTE 150A THROUGH 3- 3'X2' GRATES AWAY FROM THE ROAD
 319          RS       1    ELEV    1746
 320          SQ       0       0      17      50      90
 321          SE    1746    1751  1751.5    1752  1752.5
 322          SA    0.03    0.06    0.35    0.59
 323          SE    1746    1748    1750  1753.5

 324          KK    150B
 325          KM   SUB-BASIN 150B
 326          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 327          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 328          BA    .003
 329          LG    .100    .250   5.700    .170  40.500
 330          UC    .117    .237
 331          UA       0       5      16      30      65      77      84      90      94      97
 332          UA     100

 333          KK   R150B
 334          KM   ROUTE 150B THROUGH SUB-BASIN 150C TO STREET CATCH BASIN
 335          RS       1    FLOW       0
 336          RC    0.04    0.04    0.04     287     0.1
 337          RX    9895    9925    9955    9995   10005   10020   10030   10080
 338          RY    1760    1756    1750    1742    1742    1749    1752    1752

 339          KK   S150B
 340          KM   ROUTE R150B THROUGH 36" CULVERT (STREET CATCH BASIN) TO JKL1
 341          RS       1    ELEV    1753
 342          SQ       0      10      27      39
 343          SE    1753  1753.2  1753.4  1753.5
 344          SA       0     0.1
 345          SE    1753  1753.5

 346          KK    JKL1
 347          KM   JACKLIN WASH CONCENTRATION POINT 1 - COMBINE S150A WITH S150B
 348          HC       2

 349          KK   RJKL1
 350          KM   ROUTE JKL1 THROUGH SUB-BASIN 150C TO POINT OF CON. JKL2
 351          RS       3    FLOW       0
 352          RC    0.04    0.04    0.04    1469   0.061
 353          RX    9900    9940    9975    9992   10008   10025   10050   10115
 354          RY    1720    1710    1700    1694    1694    1698    1704    1720

 355          KK    150C
 356          KM   SUB-BASIN 150C
 357          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 358          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 359          BA    .022
 360          LG    .150    .250   5.700    .179  15.000
 361          UC    .142    .146
 362          UA       0       5      16      30      65      77      84      90      94      97
 363          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 364          KK    150D
 365          KM   SUB-BASIN 150D
 366          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 367          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 368          BA    .055
 369          LG    .135    .250   5.700    .176  11.920
 370          UC    .283    .321
 371          UA      0       5      16      30      65      77      84      90      94      97
 372          UA     100

 373          KK    JKL2
 374          KM   JACKLIN WASH CONCENTRATION POINT 2 - COMBINE RJKL1 WITH 150D AND 150C
 375          HC       3

 376          KK   RJKL2
 377          KM   ROUTE JKL2 THROUGH SUB-BASIN 150E TO POINT OF CON. JKL3
 378          RS       1    FLOW       0
 379          RC    0.04    0.04    0.04     573    .003
 380          RX    9840    9920    9980    9992   10008   10045   10070   10165
 381          RY    1690    1668    1666    1664    1664    1668    1670    1690

 382          KK    150E
 383          KM   SUB-BASIN 150E
 384          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 385          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 386          BA    .020
 387          LG    .150    .250   5.700    .179  13.750
 388          UC    .108    .077
 389          UA      0       5      16      30      65      77      84      90      94      97
 390          UA     100

 391          KK    JKL3
 392          KM   JACKLIN WASH CONCENTRATION POINT 3 - COMBINE 150E WITH RJKL2
 393          HC       2

 394          KK   SJKL3
 395          KM   ROUTE JKL3 THROUGH CULVERT AT KEOTA DRIVE
 396          RS       1    ELEV    1664
 397          SQ       0      16      48      92     115
 398          SE    1664 1665.75  1667.5    1671    1674
 399          SA    0.17    1.42    4.15
 400          SE    1664    1668    1674

 401          KK    150F
 402          KM   SUB-BASIN 150F
 403          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 404          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 405          BA    .004
 406          LG    .150    .250   5.700    .179  15.000
 407          UC    .108    .169
 408          UA      0       5      16      30      65      77      84      90      94      97
 409          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 410          KK    150G
 411          KM   SUB-BASIN 150G
 412          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 413          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 414          BA    .005
 415          LG    .050    .250   5.700    .170  15.000
 416          UC    .154    .392
 417          UA       0       5      16      30      65      77      84      90      94      97
 418          UA     100

 419          KK   D151A
 420          KM   FLOW FROM DIVERSION AT KINGSTRE AND KEOTA
 421          DR  DO151A

 422          KK  RD151A
 423          KM   ROUTE DIVERTED FLOW THROUGH 150G TO CON. POINT JKL4
 424          RS       4    FLOW       0
 425          RC    0.02    0.02    0.02    1713   0.062
 426          RX    9975    9980    9985    9986   10014   10015   10020   10025
 427          RY  1750.5  1750.5  1750.5    1750    1750  1750.5  1750.5  1750.5

 428          KK    JKL4
 429          KM   JACKLIN WASH CONCENTRATION POINT 4 - COMBINE SJKL3, 150F, 150G, RD151A
 430          HC       4

 431          KK   RJKL4
 432          KM   ROUTE JKL4 THROUGH SUB-BASIN 150H TO POINT OF CON. JKL5
 433          RS       1    FLOW       0
 434          RC    0.04    0.04    0.04     119   0.067
 435          RX    9780    9835    9920    9990   10003   10010   10035   10045
 436          RY    1560    1550    1546    1536    1536    1540    1554    1560

 437          KK    150H
 438          KM   SUB-BASIN 150H
 439          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 440          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 441          BA    .032
 442          LG    .150    .250   5.700    .179  12.500
 443          UC    .146    .137
 444          UA       0       5      16      30      65      77      84      90      94      97
 445          UA     100

 446          KK    JKL5
 447          KM   JACKLIN WASH CONCENTRATION POINT 5 - COMBINE RJKL4 WITH 150H
 448          HC       2

 449          KK   RJKL5
 450          KM   ROUTE JKL5 THROUGH SUB-BASIN 150I TO POINT OF CON. JKL6
 451          RS       8    FLOW       0
 452          RC    0.04    0.04    0.04    4453    0.02
 453          RX    9795    9920    9955    9990   10010   10045   10090   10120
 454          RY    1626    1610    1604    1602    1602    1610    1622    1630
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 455          KK    150I
 456          KM   SUB-BASIN 150I
 457          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 458          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .998
 459          BA    .117
 460          LG    .162    .250   5.700    .178   8.790
 461          UC    .350    .351
 462          UA       0       5      16      30      65      77      84      90      94      97
 463          UA     100

 464          KK    JKL6
 465          KM   JACKLIN WASH CONCENTRATION POINT 6 - COMBINE RJKL5 WITH 150I
 466          HC       2

 467          KK   RJKL6
 468          KM   ROUTE JKL6 THROUGHT SUB-BASIN 150K TO POINT OF CON. JKL6
 469          RS       1    FLOW       0
 470          RC    0.04    0.04    0.04     345    0.02
 471          RX    9765    9815    9930    9960   10010   10070   10185   10220
 472          RY    1546    1544    1540  1539.5  1539.5    1542    1546    1548

 473          KK    150J
 474          KM   SUB-BASIN 150J
 475          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 476          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 477          BA    .010
 478          LG    .050    .250   5.700    .170  27.770
 479          UC    .225    .742
 480          UA       0       5      16      30      65      77      84      90      94      97
 481          UA     100

 482          KK   R150J
 483          KM   ROUTE 150J THROUGH SUB-BASIN 150K TO POINT OF CON. JKL7
 484          RS       1    FLOW       0
 485          RC    0.04    0.04    0.04     437   0.032
 486          RX    9765    9815    9930    9960   10010   10070   10185   10220
 487          RY    1546    1544    1540  1539.5  1539.5    1542    1546    1548

 488          KK    150K
 489          KM   SUB-BASIN 150K
 490          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 491          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 492          BA    .009
 493          LG    .100    .250   5.700    .170  27.000
 494          UC    .121    .149
 495          UA       0       5      16      30      65      77      84      90      94      97
 496          UA     100

 497          KK   *JKL7
 498          KM   JAKLIN WASH CONCENTRATION POINT *7 COMBINES RJKL6, 150J, 150K
 499          HC       3
```

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

 500          KK    JKL7
 501          KM   JACKLIN WASH CONCENTRATION POINT 7 - COMBINE (RJKL6, 150J, 150K), MNG3
 502          HC       2

 503          KK   RJKL7
 504          KM   ROUTE JKL7 THROUGH SUB-BASIN 150L TO POINT OF CON. JKL8
 505          RS       2    FLOW       0
 506          RC    0.04    0.04    0.04    1073    .020
 507          RX    9875    9895    9925    9965   10035   10070   10090   10112
 508          RY    1536    1536    1528    1525    1525    1528    1532    1537

 509          KK    150L
 510          KM   SUB-BASIN 150L
 511          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 512          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 513          BA    .010
 514          LG    .200    .250   5.700    .179   6.750
 515          UC    .171    .252
 516          UA       0       5      16      30      65      77      84      90      94      97
 517          UA     100

 518          KK   *JKL8
 519          KM   JACKLING WASH CONCENTRATION POINT *8 - COMBINE  RJKL7, 150L
 520          HC       2

 521          KK    JKL8
 522          KM   JACKLING WASH CONCENTRATION POINT 8 - COMBINE  (RJKL7, 150L), RKGT5
 523          HC       2

 524          KK   SJKL8
 525          KM   ROUTE JKL8 THROUGH 7x14 BOX CULVERT AT SAGUARO BLV.
 526          RS       1    ELEV  1514.3
 527          SQ       0     273     504     756    1190
 528          SE  1514.3  1517.8  1519.6  1521.3  1524.8
 529          SA       0    0.04    1.19
 530          SE  1514.3    1518    1525

 531          KK   RJKL8
 532          KM   ROUTE SJKL8 THROUGH SUB-BASIN 150M TO POINT OF CON. JKL9
 533          RS       2    FLOW       0
 534          RC     .04    0.04    0.04     603    0.02
 535          RX    9760    9820    9890    9975   10000   10060   10120   10220
 536          RY    1515    1514    1512    1508    1508    1512    1516    1520

 537          KK    150M
 538          KM   SUB-BASIN 150M
 539          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 540          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 541          BA    .023
 542          LG    .200    .250   5.100    .232   9.000
 543          UC    .150    .119
 544          UA       0       5      16      30      65      77      84      90      94      97
 545          UA     100
```

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

 546          KK    JKL9
 547          KM   JACKLING WASH CONCENTRATION POINT 9 - COMBINE  RJKL8, 150M
 548          HC       2

 549          KK   SJKL9
 550          KM   ROUTE JKL9 THROUGH CULVERT AT INDIAN WELLS DRIVE.
 551          RS       1    ELEV 1501.73
 552          SQ       0      74     224     440     640     800    1350
 553          SE  1501.7  1504.2  1506.7  1511.7  1512.2  1512.7  1513.2
 554          SA       0    0.03    1.03
 555          SE  501.73    1504    1511

 556          KK    150N
 557          KM   SUB-BASIN 150N
 558          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 559          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 560          BA    .001
 561          LG    .050    .250   5.600    .180  36.000
 562          UC    .100    .233
 563          UA       0       5      16      30      65      77      84      90      94      97
 564          UA     100

 565          KK    150O
 566          KM   SUB-BASIN 150O
 567          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 568          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 569          BA    .004
 570          LG    .050    .250   4.350    .330  29.250
 571          UC    .179    .380
 572          UA       0       5      16      30      65      77      84      90      94      97
 573          UA     100

 574          KK   JKL10
 575          KM   JACKLING WASH CONCENTRATION POINT 10 - COMBINE  SJKL9, 150N, 150O
 576          HC       3

 577          KK  RJKL10
 578          KM   ROUTE RJKL10 THROUGH SUB-BASIN 150P TO POINT OF CON. JKL11
 579          RS       1    FLOW       0
 580          RC    0.04    0.04    0.04     231    .022
 581          RX    9945    9950    9970    9995   10010   10025   10045   10170
 582          RY    1516    1514    1508  1499.5  1499.5    1504    1510    1511

 583          KK    150P
 584          KM   SUB-BASIN 150P
 585          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 586          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 587          BA    .001
 588          LG    .250    .250   4.800    .443   4.500
 589          UC    .112    .200
 590          UA       0       3       5       8      12      20      43      75      90      96
 591          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 592          KK   JKL11
 593          KM   JACKLING WASH CONCENTRATION POINT 11 - COMBINE  RJKL10, 150DP
 594          HC       2
 595          ZZ
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            SCHEMATIC DIAGRAM OF STREAM NETWORK

LINE      (V) ROUTING          (--->) DIVERSION OR PUMP FLOW

 NO.      (.) CONNECTOR        (<---) RETURN OF DIVERTED OR PUMPED FLOW

 17         151A
            .
            .
 28         .-------> DO151A
 26       D151A
            V
            V
 31       R151A
            .
            .
 37         .        151B
            .           .
            .           .
 48         .           .-------> DO151B
 46         .       D151B
            .           .
            .           .
 51        KGT1............
            V
            V
 54       RKGT1
            .
            .
 60         .        151C
            .           .
            .           .
 69        KGT2............
            V
            V
          RKGT2
            .
            .
 78         .        151D
            .           .
            .           .
 87         .           .       151F
            .           .          .
            .           .          .
 98         .           .          .-------> DO151F
 96         .           .      D151F
            .           .          V
            .           .          V
101         .           .     RD151F
            .           .          .
            .           .          .
109         .           .          .          .<-------  DO151B
107         .           .          .      D151B
            .           .          .          V
            .           .          .          V
110         .           .          .     RD151B
            .           .          .          .
            .           .          .          .
116         .       KGT3A.......................
            .           V
            .           V
119         .       R151D
            .           .
            .           .
125         .           .       151E
            .           .          .
            .           .          .
134       *KGT3........................
            .
            .
 7          .        151I
```

```
        .          .
        .          .
     KGT3...........
        V
        V
149  RKGT3
        .
        .
155     .       151J
        .          .
        .          .
164  *KGT4...........
        .
        .
167     .       151H
        .          V
        .          V
176     .      R151H
        .          .
        .          .
182   KGT4...........
        V
        V
185  RKGT4
        .
        .
191     .       151K
        .          .
        .          .
200   KGT5...........
        V
        V
203  RKGT5
        .
        .
[illegible]9    .       151L
        .          .
        .          .
218   KGT6...........
        .
        .
221     .       152A
        .          V
        .          V
230     .      R152A
        .          .
        .          .
236     .          .       152B
        .          .          .
        .          .          .
245     .      *MNG1...........
        .          .
        .          .
248     .          .       152C
        .          .          .
        .          .          .
257     .       MNG1...........
        .          V
        .          V
260     .      RMNG1
        .          .
        .          .
266     .          .       152D
        .          .          .
        .          .          .
275     .      *MNG2...........
        .          .
        .          .
278     .          .       152E
        .          .          .
        .          .          .
[illegible]7    .       MNG2...........
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```
                V
                V
            RMNG2
                .
                .
296             .       152F
                .          .
                .          .
305         MNG3............
                .
                .
308             .       150A
                .          V
                .          V
317             .      S150A
                .          .
                .          .
324             .          .       150B
                .          .          V
                .          .          V
333             .          .      R150B
                .          .          V
                .          .          V
339             .          .      S150B
                .          .          .
                .          .          .
346             .       JKL1............
                .          V
                .          V
349             .      RJKL1
                .          .
                .          .
355             .          .       150C
                .          .          .
                .          .          .
364             .          .          .       150D
                .          .          .          .
                .          .          .          .
373             .       JKL2......................
                .          V
                .          V
376             .      RJKL2
                .          .
                .          .
382             .          .       150E
                .          .          .
                .          .          .
391             .       JKL3............
                .          V
                .          V
394             .      SJKL3
                .          .
                .          .
401             .          .       150F
                .          .          .
                .          .          .
410             .          .          .       150G
                .          .          .          .
                .          .          .          .
421             .          .          .          .          .<-------  DO151A
419             .          .          .          .      D151A
                .          .          .          .          V
                .          .          .          .          V
422             .          .          .          .     RD151A
                .          .          .          .          .
                .          .          .          .          .
428             .       JKL4...................................
                .          V
                .          V
431             .      RJKL4
                .          .
                .          .
```

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437          .          .          .        150H
             .          .          .          .
             .          .          .          .
446          .          .       JKL5............
             .          .          V
             .          .          V
449          .          .      RJKL5
             .          .          .
             .          .          .
455          .          .          .        150I
             .          .          .          .
             .          .          .          .
464          .          .       JKL6............
             .          .          V
             .          .          V
467          .          .      RJKL6
             .          .          .
             .          .          .
473          .          .          .        150J
             .          .          .          V
             .          .          .          V
482          .          .          .       R150J
             .          .          .          .
             .          .          .          .
488          .          .          .          .        150K
             .          .          .          .          .
             .          .          .          .          .
497          .          .      *JKL7........................
             .          .          .
             .          .          .
500          .       JKL7............
             .          V
             .          V
503          .      RJKL7
             .          .
             .          .
             .          .       150L
             .          .          .
             .          .          .
518          .      *JKL8............
             .          .
             .          .
521       JKL8............
             V
             V
524      SJKL8
             V
             V
531      RJKL8
             .
             .
537          .       150M
             .          .
             .          .
546       JKL9............
             V
             V
549      SJKL9
             .
             .
556          .       150N
             .          .
             .          .
565          .          .       1500
             .          .          .
             .          .          .
574      JKL10........................
             V
             V
577      RJKL10
             .
             .
```

```
583          .        150P
             :          :
             :          :
592      JKL11............
```

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

```
****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*             MAY   1991               *
*          VERSION 4.0.1E              *
*    Lahey F77L-EM/32 version 5.01     *
*       Dodson & Associates, Inc.      *
* RUN DATE  04/11/95  TIME  13:09:25   *
****************************************
```

```
****************************************
*                                      *
*    U.S. ARMY CORPS OF ENGINEERS      *
*    HYDROLOGIC ENGINEERING CENTER     *
*          609 SECOND STREET           *
*       DAVIS, CALIFORNIA 95616        *
*           (916) 551-1748             *
*                                      *
****************************************
```

```
                    JACKLIN WASH - EXISTING CONDITIONS, AGK ENGINEERS, 04-11-95
                    100-Year 6-Hour Storm
                    100-Year 24-Hour storm
                    24-Hour SCS Type II distribution
                    2 minutes time step
                    File: 150-24CE.DAT

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

   IT        HYDROGRAPH TIME DATA
                   NMIN          2  MINUTES IN COMPUTATION INTERVAL
                  IDATE      1   0  STARTING DATE
                  ITIME       0000  STARTING TIME
                     NQ        720  NUMBER OF HYDROGRAPH ORDINATES
                 NDDATE      1   0  ENDING DATE
                 NDTIME       2358  ENDING TIME
                  ICENT         19  CENTURY MARK

             COMPUTATION INTERVAL    0.03 HOURS
                  TOTAL TIME BASE   23.97 HOURS

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

11 JD        INDEX STORM NO. 1
                   STRM        4.00  PRECIPITATION DEPTH
                   TRDA        0.00  TRANSPOSITION DRAINAGE AREA

12 PI          PRECIPITATION PATTERN
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
```

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

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

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	151A	5.	12.00	1.	0.	0.	0.00		
+	DIVERSION TO	DO151A	4.	12.00	0.	0.	0.	0.00		
+	HYDROGRAPH AT	D151A	4.	12.00	0.	0.	0.	0.00		
+	ROUTED TO	R151A	4.	12.03	0.	0.	0.	0.00		
+									1774.07	12.03
+	HYDROGRAPH AT	151B	7.	12.03	1.	0.	0.	0.00		
+	DIVERSION TO	DO151B	4.	12.03	0.	0.	0.	0.00		
+	HYDROGRAPH AT	D151B	4.	12.03	0.	0.	0.	0.00		
+	2 COMBINED AT	KGT1	7.	12.03	1.	0.	0.	0.01		
+	ROUTED TO	RKGT1	7.	12.20	1.	0.	0.	0.01		
+									1740.06	12.20
+	HYDROGRAPH AT	151C	8.	12.03	1.	0.	0.	0.00		
+	2 COMBINED AT	KGT2	12.	12.10	2.	1.	1.	0.01		
+	ROUTED TO	RKGT2	12.	12.20	2.	1.	1.	0.01		
+									1660.06	12.20
+	HYDROGRAPH AT	151D	63.	12.03	7.	2.	2.	0.04		
+	HYDROGRAPH AT	151F	4.	12.03	1.	0.	0.	0.00		
+	DIVERSION TO	DO151F	2.	12.03	0.	0.	0.	0.00		
+	HYDROGRAPH AT	D151F	2.	12.03	0.	0.	0.	0.00		
+	ROUTED TO	RD151F	2.	12.07	0.	0.	0.	0.00		
+									1715.03	12.07
+	HYDROGRAPH AT	D151B	4.	12.03	1.	0.	0.	0.00		
+	ROUTED TO	RD151B	4.	12.03	1.	0.	0.	0.00		
+									1730.02	12.03
	3 COMBINED AT									

+		KGT3A	69.	12.03	7.	2.	2.	0.04		
	ROUTED TO									
+		R151D	67.	12.13	7.	2.	2.	0.04		
+									1621.06	12.13
	HYDROGRAPH AT									
+		151E	95.	12.03	11.	3.	3.	0.07		
	3 COMBINED AT									
+		*KGT3	169.	12.07	20.	6.	6.	0.12		
	HYDROGRAPH AT									
+		151I	8.	12.03	1.	0.	0.	0.01		
	2 COMBINED AT									
+		KGT3	177.	12.07	22.	6.	6.	0.13		
	ROUTED TO									
+		RKGT3	177.	12.07	22.	6.	6.	0.13		
+									1583.03	12.07
	HYDROGRAPH AT									
+		151J	5.	12.00	1.	0.	0.	0.00		
	2 COMBINED AT									
+		*KGT4	181.	12.07	22.	6.	6.	0.13		
	HYDROGRAPH AT									
+		151H	5.	12.07	1.	0.	0.	0.00		
	ROUTED TO									
+		R151H	5.	12.10	1.	0.	0.	0.00		
+									1660.03	12.07
	2 COMBINED AT									
+		KGT4	187.	12.07	23.	6.	6.	0.13		
	ROUTED TO									
+		RKGT4	185.	12.10	23.	6.	6.	0.13		
+									1539.92	12.10
	HYDROGRAPH AT									
+		151K	58.	12.00	6.	2.	2.	0.03		
	2 COMBINED AT									
+		KGT5	234.	12.03	29.	8.	8.	0.17		
	ROUTED TO									
+		RKGT5	232.	12.10	29.	8.	8.	0.17		
+									1540.52	12.10
	HYDROGRAPH AT									
+		151L	87.	12.03	11.	3.	3.	0.05		
	2 COMBINED AT									
+		KGT6	315.	12.07	40.	11.	11.	0.22		
	HYDROGRAPH AT									
+		152A	63.	12.03	7.	2.	2.	0.04		
	ROUTED TO									
+		R152A	62.	12.07	7.	2.	2.	0.04		
+									1606.81	12.07
	HYDROGRAPH AT									
+		152B	24.	12.03	3.	1.	1.	0.02		
	2 COMBINED AT									
+		*MNG1	86.	12.03	9.	2.	2.	0.06		
	HYDROGRAPH AT									

+		152C	20.	12.03	2.	1.	1.	0.01	
	2 COMBINED AT								
+		MNG1	106.	12.03	11.	3.	3.	0.07	
	ROUTED TO								
+		RMNG1	105.	12.10	11.	3.	3.	0.07	
+									1589.93 12.10
	HYDROGRAPH AT								
+		152D	27.	12.03	3.	1.	1.	0.02	
	2 COMBINED AT								
+		*MNG2	130.	12.07	14.	4.	4.	0.09	
	HYDROGRAPH AT								
+		152E	24.	12.03	3.	1.	1.	0.02	
	2 COMBINED AT								
+		MNG2	154.	12.07	17.	4.	4.	0.10	
	ROUTED TO								
+		RMNG2	154.	12.13	17.	4.	4.	0.10	
+									1557.35 12.13
	HYDROGRAPH AT								
+		152F	20.	12.03	2.	1.	1.	0.01	
	2 COMBINED AT								
+		MNG3	171.	12.10	19.	5.	5.	0.12	
	HYDROGRAPH AT								
+		150A	16.	12.03	2.	1.	1.	0.01	
	ROUTED TO								
+		S150A	3.	12.53	1.	0.	0.	0.01	
+									1751.10 12.53
	HYDROGRAPH AT								
+		150B	5.	12.03	1.	0.	0.	0.00	
	ROUTED TO								
+		R150B	5.	12.03	1.	0.	0.	0.00	
+									1742.04 12.03
	ROUTED TO								
+		S150B	5.	12.03	1.	0.	0.	0.00	
+									1753.09 12.03
	2 COMBINED AT								
+		JKL1	5.	12.03	1.	0.	0.	0.01	
	ROUTED TO								
+		RJKL1	5.	12.53	1.	0.	0.	0.01	
+									1694.02 12.53
	HYDROGRAPH AT								
+		150C	36.	12.00	4.	1.	1.	0.02	
	HYDROGRAPH AT								
+		150D	71.	12.07	9.	3.	3.	0.05	
	3 COMBINED AT								
+		JKL2	110.	12.03	14.	4.	4.	0.09	
	ROUTED TO								
+		RJKL2	107.	12.07	14.	4.	4.	0.09	
+									1665.57 12.07
	HYDROGRAPH AT								
		150E	35.	12.00	3.	1.	1.	0.02	

+	2 COMBINED AT	JKL3	138.	12.03	18.	5.	5.	0.11	
+	ROUTED TO	SJKL3	60.	12.40	18.	5.	5.	0.11	1668.43 12.40
+	HYDROGRAPH AT	150F	6.	12.00	1.	0.	0.	0.00	
+	HYDROGRAPH AT	150G	6.	12.03	1.	0.	0.	0.00	
+	HYDROGRAPH AT	D151A	1.	12.00	0.	0.	0.	0.00	
+	ROUTED TO	RD151A	1.	12.20	0.	0.	0.	0.00	1750.02 12.20
+	4 COMBINED AT	JKL4	67.	12.13	19.	5.	5.	0.12	
+	ROUTED TO	RJKL4	67.	12.17	19.	5.	5.	0.12	1536.39 12.17
+	HYDROGRAPH AT	150H	53.	12.00	5.	1.	1.	0.03	
+	2 COMBINED AT	JKL5	117.	12.03	25.	7.	7.	0.15	
+	ROUTED TO	RJKL5	108.	12.27	25.	7.	7.	0.15	1602.56 12.27
+	HYDROGRAPH AT	150I	141.	12.10	19.	5.	5.	0.12	
+	2 COMBINED AT	JKL6	236.	12.13	44.	12.	12.	0.27	
+	ROUTED TO	RJKL6	236.	12.17	44.	12.	12.	0.27	1540.24 12.17
+	HYDROGRAPH AT	150J	9.	12.10	2.	1.	1.	0.01	
+	ROUTED TO	R150J	9.	12.13	2.	1.	1.	0.01	1539.54 12.13
+	HYDROGRAPH AT	150K	15.	12.00	2.	1.	1.	0.01	
+	3 COMBINED AT	*JKL7	252.	12.17	48.	13.	13.	0.29	
+	2 COMBINED AT	JKL7	422.	12.13	67.	18.	18.	0.41	
+	ROUTED TO	RJKL7	419.	12.17	67.	18.	18.	0.41	1525.99 12.17
+	HYDROGRAPH AT	150L	14.	12.03	2.	0.	0.	0.01	
+	2 COMBINED AT	*JKL8	429.	12.17	69.	19.	19.	0.41	

	2 COMBINED AT								
+		JKL8	723.	12.10	109.	30.	30.	0.63	
	ROUTED TO								
+		SJKL8	720.	12.13	109.	30.	30.	0.63	
+									1521.06 12.13
	ROUTED TO								
+		RJKL8	718.	12.17	109.	30.	30.	0.63	
+									1509.95 12.17
	HYDROGRAPH AT								
+		150M	37.	12.00	4.	1.	1.	0.02	
	2 COMBINED AT								
+		JKL9	739.	12.13	112.	31.	31.	0.66	
	ROUTED TO								
+		SJKL9	720.	12.20	112.	31.	31.	0.66	
+									1512.45 12.20
	HYDROGRAPH AT								
+		150N	2.	12.00	0.	0.	0.	0.00	
	HYDROGRAPH AT								
+		150O	5.	12.03	1.	0.	0.	0.00	
	3 COMBINED AT								
+		JKL10	725.	12.20	113.	31.	31.	0.66	
	ROUTED TO								
+		RJKL10	724.	12.20	113.	31.	31.	0.66	
+									1502.60 12.20
	HYDROGRAPH AT								
+		150P	1.	12.03	0.	0.	0.	0.00	
	2 COMBINED AT								
+		JKL11	725.	12.20	113.	31.	31.	0.66	

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

K.5

EMERALD WASH

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****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*              MAY   1991              *
*           VERSION 4.0.1E             *
*     Lahey F77L-EM/32 version 5.01    *
*       Dodson & Associates, Inc.      *
*  RUN DATE  04/11/95  TIME  13:12:44  *
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****************************************
*                                      *
*    U.S. ARMY CORPS OF ENGINEERS      *
*    HYDROLOGIC ENGINEERING CENTER     *
*          609 SECOND STREET           *
*       DAVIS, CALIFORNIA 95616        *
*           (916) 551-1748             *
*                                      *
****************************************
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X     X  XXXXXXX   XXXXX          X
X     X  X        X     X        XX
X     X  X        X              X
XXXXXXX  XXXX     X        XXXXX  X
X     X  X        X              X
X     X  X        X     X        X
X     X  XXXXXXX   XXXXX         XXX
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THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

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

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

  1           ID   EMERALD WASH -  EXISTING CONDITIONS - AGK ENGINEERS, 04-11-95
  2           ID   first routing 5-20-93
  3           ID   100-Year 24-Hour storm
  4           ID   24-Hour SCS Type II distribution
  5           ID   2 minutes time step
  6           ID   File: 160-24CE.DAT
  7           ID
  8           IT       2                    720
  9           IO       5
              *DIAGRAM
 10           IN      30
 11           JD     4.0
 12           PC    .000    .005    .011    .016    .022    .028    .035    .041    .048    .056
 13           PC    .063    .071    .080    .089    .098    .109    .120    .133    .147    .163
 14           PC    .181    .204    .235    .283    .663    .735    .772    .799    .820    .838
 15           PC    .854    .868    .880    .891    .902    .912    .921    .929    .937    .945
 16           PC    .952    .959    .965    .972    .978    .984    .989    .995   1.000

 17           KK    160V
 18           KM   SUB-BASIN 160V
 19           KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 20           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 21           BA    .005
 22           LG    .050    .250   5.700    .170  20.000
 23           UC    .108    .192
 24           UA       0       5      16      30      65      77      84      90      94      97
 25           UA     100

 26           KK   R160V
 27           KM   ROUTE 160V THROUGH SUB-BASIN 160W TO POINT OF CON. EMR13A
 28           RS       1    FLOW       0
 29           RC    0.02    0.02    0.02     550   0.022
 30           RX    9975    9980    9985    9986   10014   10015   10020   10025
 31           RY  1730.5  1730.5  1730.5    1730    1730  1730.5  1730.5  1730.5

 32           KK    160W
 33           KM   SUB-BASIN 160W
 34           KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 35           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 36           BA    .002
 37           LG    .050    .250   5.700    .170  22.500
 38           UC    .083    .139
 39           UA       0       5      16      30      65      77      84      90      94      97
 40           UA     100

 41           KK  EMR13A
 42           KM   EMERAL WASH CONCENTRATION POIT 13A - COMBINE  R160V, 160W
 43           HC       2

 44           KK   D160W
 45           KM   DIVERSION AT INCA AV. AND BARON DR.
 46           DT  DO160W
 47           DI       1      10     100    1000
 48           DQ     0.2       2      20     200
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  49          KK  REM13A
  50          KM   ROUTE EMR13A THROUGH SUB-BASIN 160X TO POINT OF CON. EMR13B
  51          RS       3    FLOW       0
  52          RC    0.02    0.02    0.02    1678   0.046
  53          RX    9975    9980    9985    9986   10014   10015   10020   10025
  54          RY  1660.5  1660.5  1660.5    1660    1660  1660.5  1660.5  1660.5

  55          KK    160X
  56          KM   SUB-BASIN 160X
  57          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
  58          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
  59          BA    .029
  60          LG    .150    .250   5.700    .196  11.050
  61          UC    .204    .192
  62          UA       0       5      16      30      65      77      84      90      94      97
  63          UA     100

  64          KK  EMR13B
  65          KM   EMERAL WASH CONCENTRATION POIT 13B - COMBINE REM13A, 160X
  66          HC       2

  67          KK  REM13B
  68          KM   ROUTE EMR13B THROUGH SUB-BASIN 160Z TO POINT OF CON. EMR13C
  69          RS       7    FLOW       0
  70          RC    0.02    0.02    0.02    4072   0.029
  71          RX    9975    9980    9985    9986   10014   10015   10020   10025
  72          RY  1560.5  1560.5  1560.5    1560    1560  1560.5  1560.5  1560.5

  73          KK    160Y
  74          KM   SUB-BASIN 160Y
  75          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
  76          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
  77          BA    .004
  78          LG    .100    .250   5.700    .189  27.000
  79          UC    .117    .183
  80          UA       0       5      16      30      65      77      84      90      94      97
  81          UA     100

  82          KK   R160Y
  83          KM   ROUTE 160Y THROUGH SUB-BASIN 160Z TO POINT OF CON. EMR13C
  84          RS       1    FLOW       0
  85          RC    0.02    0.02    0.02     347   0.046
  86          RX    9975    9980    9985    9986   10014   10015   10020   10025
  87          RY  1560.5  1560.5  1560.5    1560    1560  1560.5  1560.5  1560.5

  88          KK    160Z
  89          KM   SUB-BASIN 160Z
  90          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
  91          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
  92          BA    .061
  93          LG    .099    .250   5.700    .178  22.830
  94          UC    .254    .350
  95          UA       0       5      16      30      65      77      84      90      94      97
  96          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 97           KK   EMR13C
 98           KM   EMERAL WASH CONCENTRATION POIT 13C - COMBINE REM13C, R160Y, 160Z
 99           HC       3

100           KK    160G
101           KM   SUB-BASIN 160G
102           KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
103           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
104           BA    .023
105           LG    .100    .250   5.700    .170  33.750
106           UC    .229    .373
107           UA       0       5      16      30      65      77      84      90      94      97
108           UA     100

109           KK   R160G
110           KM   ROUTE 160G THROUGH SUB-BASIN 160H TO POINT OF CON. EMR1
111           RS       6    FLOW       0
112           RC    0.02    0.02    0.02    3056    0.29
113           RX    9975    9980    9985    9986   10014   10015   10020   10025
114           RY  1910.5  1910.5  1910.5    1910    1910  1910.5  1910.5  1910.5

115           KK    160H
116           KM   SUB-BASIN 160H
117           KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
118           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
119           BA    .020
120           LG    .086    .250   5.700    .170  34.240
121           UC    .162    .308
122           UA       0       5      16      30      65      77      84      90      94      97
123           UA     100

124           KK    EMR1
125           KM   EMERAL WASH CONCENTRATION POIT 1 - COMBINE R160G AND 160H
126           HC       2

127           KK   REMR1
128           KM   ROUTE EMR1 THROUGH SUB-BASIN 160I TO POINT OF CON. EMR2
129           RS       2    FLOW       0
130           RC    0.02    0.02    0.02     695   0.058
131           RX    9975    9980    9985    9986   10014   10015   10020   10025
132           RY  1830.5  1830.5  1830.5    1830    1830  1830.5  1830.5  1830.5

133           KK    160I
134           KM   SUB-BASIN 160I
135           KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
136           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
137           BA    .005
138           LG    .085    .250   5.700    .170  22.710
139           UC    .150    .234
140           UA       0       5      16      30      65      77      84      90      94      97
141           UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 142          KK   160J
 143          KM   SUB-BASIN 160J
 144          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 145          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 146          BA    .008
 147          LG    .093    .250   5.700    .170  23.940
 148          UC    .083    .058
 149          UA       0       5      16      30      65      77      84      90      94      97
 150          UA     100

 151          KK   EMR2
 152          KM   EMERAL WASH CONCENTRATION POIT 2 - COMBINE REMR1, 160I, 160J
 153          HC       3

 154          KK   REMR2
 155          KM   ROUTE EMR2 THROUGH SUB-BASIN 160K TO POINT OF CON. EMR3
 156          RS       2    FLOW       0
 157          RC    0.04    0.04    0.04    1113    .073
 158          RX    9860    9930    9975    9980   10030   10055   10095   10130
 159          RY    1764    1750    1744    1742    1742    1748    1756    1760

 160          KK   160K
 161          KM   SUB-BASIN 160K
 162          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 163          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 164          BA    .028
 165          LG    .150    .250   5.800    .195  18.500
 166          UC    .171    .132
 167          UA       0       5      16      30      65      77      84      90      94      97
 168          UA     100

 169          KK   EMR3
 170          KM   EMERAL WASH CONCENTRATION POIT 3 - COMBINE REMR2, 160K
 171          HC       2

 172          KK   REMR3
 173          KM   ROUTE EMR3 THROUGH SUB-BASIN 160M TO POINT OF CON. EMR4
 174          RS       3    FLOW       0
 175          RC    0.04    0.04    0.04    1604    .032
 176          RX    9885    9920    9945    9980   10010   10040   10060   10075
 177          RY    1730    1720    1714    1712    1710    1720    1726    1730

 178          KK   160M
 179          KM   SUB-BASIN 160M
 180          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 181          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 182          BA    .059
 183          LG    .150    .250   5.800    .195  10.220
 184          UC    .225    .184
 185          UA       0       5      16      30      65      77      84      90      94      97
 186          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 187          KK   *EMR4
 188          KM   EMERALD WASH CONCENTRATION POINT *4 - REMR3, 160M
 189          HC       2

 190          KK    160L
 191          KM   SUB-BASIN 160L
 192          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 193          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 194          BA    .008
 195          LG    .091    .250   5.700    .170  39.890
 196          UC    .142    .219
 197          UA       0       5      16      30      65      77      84      90      94      97
 198          UA     100

 199          KK   R160L
 200          KM   ROUTE 160L THROUGH SUB-BASIN 160M TO POINT OF CON. EMR4
 201          RS       2    FLOW       0
 202          RC    0.04    0.04    0.04    1059   0.097
 203          RX    9885    9920    9945    9980   10010   10040   10060   10075
 204          RY    1730    1720    1714    1712    1710    1720    1726    1730

 205          KK    160N
 206          KM   SUB-BASIN 160N
 207          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 208          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 209          BA    .022
 210          LG    .150    .250   5.700    .207  15.000
 211          UC    .121    .096
 212          UA       0       5      16      30      65      77      84      90      94      97
 213          UA     100

 214          KK    EMR4
 215          KM   EMERAL WASH CONCENTRATION POIT 4 - COMBINE (REMR3, 160M), R160L, 160N
 216          HC       3

 217          KK   SEMR4
 218          KM   ROUTE EMR4 THROUGH 60" CMP CULVERT AT FOUNTAIN HILS BLV TO EMR5
 219          KO       3
 220          RS       1    ELEV 1689.28
 221          SQ       0      33      98     190     290
 222          SE  1689.3  1691.6  1693.9  1698.5  1708.2
 223          SA       0   0.004    3.72
 224          SE  1689.3    1690    1710

 225          KK    160B
 226          KM   SUB-BASIN 160B
 227          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 228          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 229          BA    .007
 230          LG    .100    .250   5.700    .170  40.500
 231          UC    .117    .178
 232          UA       0       5      16      30      65      77      84      90      94      97
 233          UA     100
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```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 234          KK   R160B
 235          KM   ROUTE 160B THROUGH SUB-BASIN 160D TO POINT OF CON. EMR5A
 236          RS       7    FLOW       0
 237          RC    0.02    0.02    0.02    4084    .041
 238          RX  9950.5  9955.5  9960.5  9960.5 10039.5 10039.5 10044.5 10049.5
 239          RY  1820.5  1820.5  1820.5    1820    1820  1820.5  1820.5  1820.5

 240          KK    160C
 241          KM   SUB-BASIN 160C
 242          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 243          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 244          BA    .016
 245          LG    .100    .250   5.700    .170  32.360
 246          UC    .125    .160
 247          UA       0       5      16      30      65      77      84      90      94      97
 248          UA     100

 249          KK   R160C
 250          KM   ROUTE 160C THROUGH SUB-BASIN 160D TO POINT OF CON. EMR5A
 251          RS       4    FLOW       0
 252          RC    0.02    0.02    0.02    1943    .058
 253          RX  9950.5  9955.5  9960.5  9960.5 10039.5 10039.5 10044.5 10049.5
 254          RY  1820.5  1820.5  1820.5    1820    1820  1820.5  1820.5  1820.5

 255          KK   EMR5A
 256          KM   EMERAL WASH CONCENTRATION POIT 5A - COMBINE R160C, R160B
 257          HC       2

 258          KK    160D
 259          KM   SUB-BASIN 160D
 260          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 261          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 262          BA    .041
 263          LG    .102    .250   5.700    .170  25.580
 264          UC    .329    .551
 265          UA       0       5      16      30      65      77      84      90      94      97
 266          UA     100

 267          KK    160F
 268          KM   SUB-BASIN 160F
 269          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 270          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 271          BA    .018
 272          LG    .100    .250   5.700    .170  20.430
 273          UC    .217    .526
 274          UA       0       5      16      30      65      77      84      90      94      97
 275          UA     100

 276          KK    EMR5
 277          KM   EMERAL WASH CONCENTRATION POIT 5 - COMBINE REMR5A, SEMR4, 160F, 160D
 278          HC       4
```

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

 279          KK   REMR5
 280          KM   ROUTE EMR5 THROUGH SUB-BASIN 1600 TO POINT OF CON. EMR6
 281          RS       4    FLOW       0
 282          RC    0.04    0.04    0.04    2176    .034
 283          RX    9805    9850    9920    9993   10010   10035   10075   10110
 284          RY    1670    1660    1652    1646    1646    1650    1660    1670

 285          KK    1600
 286          KM   SUB-BASIN 1600
 287          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 288          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 289          BA    .065
 290          LG    .150    .250   5.700    .207  10.000
 291          UC    .237    .191
 292          UA       0       5      16      30      65      77      84      90      94      97
 293          UA     100

 294          KK   *EMR6
 295          KM   EMERALD WASH CONCENTRATION POINT *6 - REMR5, 1600
 296          HC       2

 297          KK    151F
 298          KM   SUB-BASIN 151F
 299          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 300          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 301          BA    .003
 302          LG    .050    .250   5.700    .170  25.000
 303          UC    .142    .358
 304          UA       0       5      16      30      65      77      84      90      94      97
 305          UA     100

 306          KK   D151F
 307          KM   DIVERSION AT INTERSECTION OF EMERAL AND FRISCO
 308          DT  DO151F
 309          DI       1      10     100    1000
 310          DQ     0.5       5      50     500

 311          KK   R151F
 312          KM   ROUTE 151F THROUGH SUB-BASIN 151G TO POINT OF CON. EMR6A
 313          RS       2    FLOW       0
 314          RC    0.02    0.02    0.20    1011    .016
 315          RX    9975    9980    9985    9986   10014   10015   10020   10025
 316          RY  1730.5  1730.5  1730.5    1730    1730  1730.5  1730.5  1730.5

 317          KK    151G
 318          KM   SUB-BASIN 151G
 319          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASINT
 320          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 321          BA    .003
 322          LG    .100    .250   5.700    .170  25.000
 323          UC    .179    .589
 324          UA       0       5      16      30      65      77      84      90      94      97
 325          UA     100
```

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

 326          KK   EMR6A
 327          KM   EMERAL WASH CONCENTRATION POINT 6A - COMBINES R151F, 151G
 328          HC       2

 329          KK  REMR6A
 330          KM   ROUTE 151G THROUGH SUB-BASIN 160O TO  CON. POINT EMR6
 331          RS       1    FLOW       0
 332          RC    0.04    0.04    0.04     350   0.062
 333          RX    9960    9980    9995  9997.5 10002.5   10005   10030   10050
 334          RY    1672    1672    1672    1668    1668    1672    1672    1672

 335          KK    EMR6
 336          KM   EMERAL WASH CONCENTRATION POIT 6 - COMBINE (REMR5, 1600), REMR6A
 337          HC       2

 338          KK   REMR6
 339          KM   ROUTE EMR6 THROUGH SUB-BASIN 160P TO POINT OF CON. EMR7
 340          RS       2    FLOW       0
 341          RC    0.04    0.04    0.04     855    .007
 342          RX    9760    9820    9870    9980   10020   10045   10065   10080
 343          RY    1650    1640    1636    1634    1634    1640    1646    1650

 344          KK    160P
 345          KM   SUB-BASIN 160P
 346          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 347          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 348          BA    .023
 349          LG    .150    .250   5.700    .207  10.000
 350          UC    .179    .160
 351          UA       0       5      16      30      65      77      84      90      94      97
 352          UA     100

 353          KK    EMR7
 354          KM   EMERAL WASH CONCENTRATION POIT 7 - COMBINE REMR6, 160P
 355          HC       2

 356          KK   SEMR7
 357          KM   ROUTE EMR7 THROUGH CULVERT AT BARON DRIVE TO POINT OF CON. EMR7
 358          KO       3
 359          RS       1    ELEV  1628.0
 360          SQ       0      37     115     130     222
 361          SE    1628  1630.5    1633  1633.6  1638.0
 362          SA       0     .02    2.09
 363          SE    1628    1632    1635

 364          KK    160Q
 365          KM   SUB-BASIN 160Q
 366          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 367          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 368          BA    .006
 369          LG    .050    .250   5.700    .170  20.000
 370          UC    .112    .160
 371          UA       0       5      16      30      65      77      84      90      94      97
 372          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 373          KK   D160W
 374          KM   FLOW FROM DIVERSION AT BARON AND INCA
 375          DR  DO160W

 376          KK  RD160W
 377          KM   ROUTE DIVERION INFLOW THROUGH SUB-BASIN 160Q
 378          RS       3    FLOW       0
 379          RC    0.02    0.02    0.02     980   0.087
 380          RX    9975    9980    9985    9986   10014   10015   10020   10025
 381          RY  1670.5  1617.5  1617.5    1617    1617  1617.5  1617.5  1617.5

 382          KK    EMR8
 383          KM   EMERAL WASH CONCENTRATION POIT 8 - COMBINE SEMR7, 160Q, RD160W
 384          HC       3

 385          KK   REMR8
 386          KM   ROUTE EMR8 THROUGH SUB-BASIN 160R TO POINT OF CON. EMR9
 387          RS       3    FLOW       0
 388          RC    0.04    0.04    0.04    1264   0.029
 389          RX    9780    9900    9960    9974   10045   10065   10120   10165
 390          RY    1630    1616    1614  1607.5  1607.5    1616    1624    1636

 391          KK    160R
 392          KM   SUB-BASIN 160R
 393          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 394          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 395          BA    .053
 396          LG    .150    .250   5.700    .207   7.500
 397          UC    .217    .174
 398          UA       0       5      16      30      65      77      84      90      94      97
 399          UA     100

 400          KK    EMR9
 401          KM   EMERAL WASH CONCENTRATION POIT 9 - COMBINE REMR8, 160R
 402          HC       2

 403          KK   REMR9
 404          KM   ROUTE EMR9 THROUGH SUB-BASIN 160S TO POINT OF CON. EMR10
 405          RS       1    FLOW       0
 406          RC    0.04    0.04    0.04     510    0.02
 407          RX    9830    9910    9940    9986   10008   10063   10135   10195
 408          RY    1610    1592    1590  1585.5  1585.5    1597    1602    1610

 409          KK    160S
 410          KM   SUB-BASIN 160S
 411          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 412          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 413          BA    .011
 414          LG    .150    .250   5.700    .207  13.910
 415          UC    .100    .082
 416          UA       0       5      16      30      65      77      84      90      94      97
 417          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 418          KK   EMR10
 419          KM   EMERAL WASH CONCENTRATION POIT 10 - COMBINE REMR9, 160S
 420          HC       2

 421          KK  SEMR10
 422          KM   ROUTE EMR10 THROUGH CULVERT AT INCA AV. TO POINT OF CON. EMR11
 423          KO       3
 424          RS       1    ELEV    1583
 425          SQ       0      37     115     222     235
 426          SE    1583  1585.5    1588    1593  1593.7
 427          SA       0    .003     1.3
 428          SE    1583    1584    1595

 429          KK    160T
 430          KM   SUB-BASIN 160T
 431          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 432          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 433          BA    .009
 434          LG    .100    .250   5.700    .179  26.360
 435          UC    .112    .127
 436          UA       0       5      16      30      65      77      84      90      94      97
 437          UA     100

 438          KK   EMR11
 439          KM   EMERAL WASH CONCENTRATION POIT 11 - COMBINE SEMR10, 160T
 440          HC       2

 441          KK  REMR11
 442          KM   ROUTE EMR11 THROUGH SUB-BASIN 160U TO POINT OF CON. EMR12
 443          RS       6    FLOW       0
 444          RC    0.04    0.04    0.04    3300   0.021
 445          RX    9835    9945    9955    9995   10005   10030   10080   10145
 446          RY    1564    1561    1556    1550    1550    1558    1558    1568

 447          KK    160U
 448          KM   SUB-BASIN 160U
 449          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 450          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 451          BA    .077
 452          LG    .104    .250   5.700    .188  23.100
 453          UC    .233    .247
 454          UA       0       5      16      30      65      77      84      90      94      97
 455          UA     100

 456          KK  *EMR12
 457          KM   EMERALD WASH CONCENTRATION POINT *12 - REMR11, 160U
 458          HC       2

 459          KK   EMR12
 460          KM   EMERAL WASH CONCENTRATION POIT 12 - COMBINE (REMR11, 160U), EMR13C
 461          HC       2
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 462          KK  SEMR12
 463          KM   ROUTE EMR12 THROUGH CULVERT  AT SAGUARO BLV.
 464          KO       3
 465          RS       1    ELEV 1514.86
 466          SQ       0      74     230     410     459     700    1370
 467          SE  1514.9  1517.4  1519.9 1523.75    1524    1525    1526
 468          SA       0     .02     .87
 469          SE  1514.9    1516    1526

 470          KK  REMR12
 471          KM   ROUTE EMR12 THROUGH SUB-BASIN 160AA TO POINT OF CON. EMR13
 472          RS       1  FLOW 0
 473          RC    0.04    0.04    0.04     290    .021
 474          RX    9810    9880    9920    9950   10030   10050   10100   10150
 475          RY    1524    1522    1514    1512    1512    1520    1521    1522

 476          KK   160AA
 477          KM   SUB-BASIN 160AA
 478          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 479          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 480          BA    .005
 481          LG    .083    .250   5.700    .192  33.650
 482          UC    .125    .174
 483          UA       0       5      16      30      65      77      84      90      94      97
 484          UA     100

 485          KK   EMR13
 486          KM   EMERAL WASH CONCENTRATION POIT 13 - COMBINE SEMR12, 160AA
 487          HC       2
 488          ZZ
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            SCHEMATIC DIAGRAM OF STREAM NETWORK
LINE      (V) ROUTING          (--->) DIVERSION OR PUMP FLOW
NO.       (.) CONNECTOR        (<---) RETURN OF DIVERTED OR PUMPED FLOW
 17         160V
             V
             V
 26        R160V
             .
             .
 32          .        160W
             .          .
             .          .
 41      EMR13A............
             .
             .
 46          .-------> DO160W
 44        D160W
             V
             V
 49      REM13A
             .
             .
 55          .        160X
             .          .
             .          .
 64      EMR13B............
             V
             V
 67      REM13B
             .
             .
 73          .        160Y
             .          V
             .          V
 82          .       R160Y
             .          .
             .          .
 88          .          .        160Z
             .          .          .
             .          .          .
 97       EMR13........................
             .
             .
100          .        160G
             .          V
             .          V
109          .       R160G
             .          .
             .          .
115          .          .        160H
             .          .          .
             .          .          .
124          .       EMR1............
             .          V
             .          V
127          .       REMR1
             .          .
             .          .
133          .          .        160I
             .          .          .
             .          .          .
142          .          .          .        160J
             .          .          .          .
             .          .          .          .
151          .       EMR2........................
             .          V
             .          V
154          .       REMR2
```

```
                    .          .
                    .          .
                    .          .        160K
                    .          .          .
                    .          .          .
169                 .       EMR3...........
                    .          V
                    .          V
172                 .      REMR3
                    .          .
                    .          .
178                 .          .        160M
                    .          .          .
                    .          .          .
187                 .     *EMR4...........
                    .          .
                    .          .
190                 .          .        160L
                    .          .          V
                    .          .          V
199                 .          .      R160L
                    .          .          .
                    .          .          .
205                 .          .          .        160N
                    .          .          .          .
                    .          .          .          .
214                 .       EMR4.......................
                    .          V
                    .          V
217                 .      SEMR4
                    .          .
                    .          .
225                 .          .        160B
                    .          .          V
                    .          .          V
234                 .          .      R160B
                    .          .          .
                    .          .          .
240                 .          .          .        160C
                    .          .          .          V
                    .          .          .          V
249                 .          .          .      R160C
                    .          .          .          .
                    .          .          .          .
255                 .          .      EMR5A...........
                    .          .          .
                    .          .          .
258                 .          .          .        160D
                    .          .          .          .
                    .          .          .          .
267                 .          .          .          .        160F
                    .          .          .          .          .
                    .          .          .          .          .
276                 .       EMR5.................................
                    .          V
                    .          V
279                 .      REMR5
                    .          .
                    .          .
285                 .          .        160O
                    .          .          .
                    .          .          .
294                 .     *EMR6...........
                    .          .
                    .          .
297                 .          .        151F
                    .          .          .
                    .          .          .
308                 .          .          .-------> DO151F
306                 .          .      D151F
                    .          .          V
                    .          .          V
```

```
311          .          .      R151F
             .          .          .
             .          .          .
317          .          .          .        151G
             .          .          .          .
             .          .          .          .
326          .          .      EMR6A............
             .          .          V
             .          .          V
329          .          .     REMR6A
             .          .          .
             .          .          .
335          .       EMR6............
             .          V
             .          V
338          .      REMR6
             .          .
             .          .
344          .          .       160P
             .          .          .
             .          .          .
353          .       EMR7............
             .          V
             .          V
356          .      SEMR7
             .          .
             .          .
364          .          .       160Q
             .          .          .
             .          .          .
375          .          .          .<-------  DO160W
373          .          .          .      D160W
             .          .          .          V
             .          .          .          V
376          .          .          .     RD160W
             .          .          .          .
             .          .          .          .
382          .       EMR8........................
             .          V
             .          V
385          .      REMR8
             .          .
             .          .
391          .          .       160R
             .          .          .
             .          .          .
400          .       EMR9............
             .          V
             .          V
403          .      REMR9
             .          .
             .          .
409          .          .       160S
             .          .          .
             .          .          .
418          .      EMR10...........
             .          V
             .          V
421          .     SEMR10
             .          .
             .          .
429          .          .       160T
             .          .          .
             .          .          .
438          .      EMR11...........
             .          V
             .          V
441          .     REMR11
             .          .
             .          .
7            .          .       160U
             .          .          .
```

```
              .          .          .
 56           .      *EMR12.........
              .          .
              .          .
 459       EMR12.........
              V
              V
 462      SEMR12
              V
              V
 470      REMR12
              .
              .
 476          .       160AA
              .          .
              .          .
 485       EMR13.........
```

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

```
****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*             MAY   1991               *
*          VERSION 4.0.1E              *
*    Lahey F77L-EM/32 version 5.01     *
*       Dodson & Associates, Inc.      *
* RUN DATE  04/11/95  TIME  13:12:44   *
****************************************
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****************************************
*                                      *
*    U.S. ARMY CORPS OF ENGINEERS      *
*    HYDROLOGIC ENGINEERING CENTER     *
*          609 SECOND STREET           *
*       DAVIS, CALIFORNIA 95616        *
*          (916) 551-1748              *
*                                      *
****************************************
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                    EMERALD WASH -  EXISTING CONDITIONS - AGK ENGINEERS, 04-11-95
                    first routing 5-20-93
                    100-Year 24-Hour storm
                    24-Hour SCS Type II distribution
                    2 minutes time step
                    File: 160-24CE.DAT

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

   IT        HYDROGRAPH TIME DATA
                   NMIN          2  MINUTES IN COMPUTATION INTERVAL
                  IDATE      1   0  STARTING DATE
                  ITIME       0000  STARTING TIME
                     NQ        720  NUMBER OF HYDROGRAPH ORDINATES
                 NDDATE      1   0  ENDING DATE
                 NDTIME       2358  ENDING TIME
                  ICENT         19  CENTURY MARK

            COMPUTATION INTERVAL    0.03 HOURS
                 TOTAL TIME BASE   23.97 HOURS

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

11 JD        INDEX STORM NO. 1
                  STRM        4.00  PRECIPITATION DEPTH
                  TRDA        0.00  TRANSPOSITION DRAINAGE AREA

12 PI          PRECIPITATION PATTERN
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

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

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	160V	8.	12.00	1.	0.	0.	0.00		
+	ROUTED TO	R160V	8.	12.03	1.	0.	0.	0.00		
+									1730.11	12.03
+	HYDROGRAPH AT	160W	3.	12.00	0.	0.	0.	0.00		
+	2 COMBINED AT	EMR13A	11.	12.00	1.	0.	0.	0.01		
+	DIVERSION TO	DO160W	9.	12.00	1.	0.	0.	0.01		
+	HYDROGRAPH AT	D160W	9.	12.00	1.	0.	0.	0.01		
+	ROUTED TO	REM13A	9.	12.07	1.	0.	0.	0.01		
+									1660.09	12.07
+	HYDROGRAPH AT	160X	44.	12.03	5.	1.	1.	0.03		
	2 COMBINED AT	EMR13B	53.	12.03	6.	2.	2.	0.04		
+	ROUTED TO	REM13B	52.	12.13	6.	2.	2.	0.04		
+									1560.31	12.13
+	HYDROGRAPH AT	160Y	6.	12.00	1.	0.	0.	0.00		
+	ROUTED TO	R160Y	6.	12.03	1.	0.	0.	0.00		
+									1560.08	12.03
+	HYDROGRAPH AT	160Z	78.	12.07	11.	3.	3.	0.06		
+	3 COMBINED AT	EMR13	133.	12.10	18.	5.	5.	0.10		
+	HYDROGRAPH AT	160G	29.	12.07	5.	1.	1.	0.02		
+	ROUTED TO	R160G	29.	12.13	5.	1.	1.	0.02		
+									1910.11	12.13
+	HYDROGRAPH AT	160H	28.	12.03	4.	1.	1.	0.02		
+	2 COMBINED AT	EMR1	56.	12.07	9.	3.	3.	0.04		
+	ROUTED TO	REMR1	56.	12.07	9.	3.	3.	0.04		
									1830.27	12.07

	HYDROGRAPH AT	160I	8.	12.03	1.	0.	0.	0.00	
+	HYDROGRAPH AT	160J	14.	12.00	2.	0.	0.	0.01	
+	3 COMBINED AT	EMR2	74.	12.03	11.	3.	3.	0.06	
+	ROUTED TO	REMR2	73.	12.07	11.	3.	3.	0.06	
+									1742.13 12.07
+	HYDROGRAPH AT	160K	47.	12.00	5.	1.	1.	0.03	
+	2 COMBINED AT	EMR3	120.	12.03	16.	5.	5.	0.08	
+	ROUTED TO	REMR3	118.	12.10	16.	5.	5.	0.08	
+									1711.40 12.10
+	HYDROGRAPH AT	160M	91.	12.03	10.	3.	3.	0.06	
+	2 COMBINED AT	*EMR4	207.	12.07	26.	7.	7.	0.14	
+	HYDROGRAPH AT	160L	13.	12.03	2.	1.	1.	0.01	
+	ROUTED TO	R160L	13.	12.07	2.	1.	1.	0.01	
+									1710.18 12.07
+	HYDROGRAPH AT	160N	37.	12.00	4.	1.	1.	0.02	
+	3 COMBINED AT	EMR4	254.	12.03	31.	9.	9.	0.17	
+	ROUTED TO	SEMR4	192.	12.17	31.	9.	9.	0.17	
+									1698.67 12.17
+	HYDROGRAPH AT	160B	12.	12.00	1.	0.	0.	0.01	
+	ROUTED TO	R160B	10.	12.27	1.	0.	0.	0.01	
+									1820.06 12.27
+	HYDROGRAPH AT	160C	27.	12.00	3.	1.	1.	0.02	
+	ROUTED TO	R160C	27.	12.07	3.	1.	1.	0.02	
+									1820.09 12.07
+	2 COMBINED AT	EMR5A	31.	12.13	5.	1.	1.	0.02	
+	HYDROGRAPH AT	160D	41.	12.13	8.	2.	2.	0.04	
+	HYDROGRAPH AT	160F	19.	12.07	3.	1.	1.	0.02	
	4 COMBINED AT	EMR5	282.	12.13	47.	14.	14.	0.25	

	ROUTED TO								
+		REMR5	281.	12.17	47.	14.	14.	0.25	
								1647.35	12.17
	HYDROGRAPH AT								
+		160O	98.	12.03	10.	3.	3.	0.06	
	2 COMBINED AT								
+		*EMR6	361.	12.10	58.	16.	16.	0.32	
	HYDROGRAPH AT								
+		151F	4.	12.03	1.	0.	0.	0.00	
	DIVERSION TO								
+		DO151F	2.	12.03	0.	0.	0.	0.00	
	HYDROGRAPH AT								
+		D151F	2.	12.03	0.	0.	0.	0.00	
	ROUTED TO								
+		R151F	2.	12.17	0.	0.	0.	0.00	
+								1730.05	12.17
	HYDROGRAPH AT								
+		151G	3.	12.07	1.	0.	0.	0.00	
	2 COMBINED AT								
+		EMR6A	5.	12.10	1.	0.	0.	0.01	
	ROUTED TO								
+		REMR6A	5.	12.10	1.	0.	0.	0.01	
+								1668.25	12.10
	2 COMBINED AT								
+		EMR6	366.	12.10	58.	17.	17.	0.33	
	ROUTED TO								
+		REMR6	359.	12.17	58.	17.	17.	0.33	
+								1635.37	12.17
	HYDROGRAPH AT								
+		160P	36.	12.03	4.	1.	1.	0.02	
	2 COMBINED AT								
+		EMR7	381.	12.17	62.	18.	18.	0.35	
	ROUTED TO								
+		SEMR7	190.	12.70	62.	18.	18.	0.35	
+								1636.49	12.70
	HYDROGRAPH AT								
+		160Q	10.	12.00	1.	0.	0.	0.01	
	HYDROGRAPH AT								
+		D160W	2.	12.00	0.	0.	0.	0.01	
	ROUTED TO								
+		RD160W	2.	12.00	0.	0.	0.	0.01	
+								1617.00	12.00
	3 COMBINED AT								
+		EMR8	191.	12.67	64.	18.	18.	0.36	
	ROUTED TO								
+		REMR8	191.	12.70	64.	18.	18.	0.36	
+								1607.82	12.70
	HYDROGRAPH AT								
+		160R	81.	12.03	8.	2.	2.	0.05	
	2 COMBINED AT								
		EMR9	245.	12.07	72.	20.	20.	0.41	

	ROUTED TO								
+		REMR9	244.	12.10	72.	20.	20.	0.41	
+									1586.86 12.10
	HYDROGRAPH AT								
+		160S	19.	12.00	2.	1.	1.	0.01	
	2 COMBINED AT								
+		EMR10	257.	12.07	74.	21.	21.	0.42	
	ROUTED TO								
+		SEMR10	211.	12.33	74.	21.	21.	0.42	
+									1592.47 12.33
	HYDROGRAPH AT								
+		160T	16.	12.00	2.	1.	1.	0.01	
	2 COMBINED AT								
+		EMR11	214.	12.30	75.	21.	21.	0.43	
	ROUTED TO								
+		REMR11	214.	12.43	75.	21.	21.	0.43	
+									1551.80 12.43
	HYDROGRAPH AT								
+		160U	112.	12.07	14.	4.	4.	0.08	
	2 COMBINED AT								
+		*EMR12	282.	12.13	90.	25.	25.	0.51	
	2 COMBINED AT								
+		EMR12	414.	12.10	108.	30.	30.	0.61	
	ROUTED TO								
+		SEMR12	394.	12.20	108.	30.	30.	0.61	
+									1523.42 12.20
	ROUTED TO								
+		REMR12	394.	12.23	108.	30.	30.	0.61	
+									1512.89 12.23
	HYDROGRAPH AT								
+		160AA	8.	12.00	1.	0.	0.	0.00	
	2 COMBINED AT								
+		EMR13	398.	12.20	109.	31.	31.	0.61	

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

K.6

MALTA DRAIN

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*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*              MAY   1991               *
*            VERSION 4.0.1E             *
*     Lahey F77L-EM/32 version 5.01     *
*       Dodson & Associates, Inc.       *
*  RUN DATE  04/11/95  TIME  13:15:29   *
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*                                       *
*    U.S. ARMY CORPS OF ENGINEERS       *
*    HYDROLOGIC ENGINEERING CENTER      *
*          609 SECOND STREET            *
*       DAVIS, CALIFORNIA 95616         *
*           (916) 551-1748              *
*                                       *
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X     X  XXXXXXX   XXXXX          X
X     X  X        X     X        XX
X     X  X        X              X
XXXXXXX  XXXX     X       XXXXX  X
X     X  X        X              X
X     X  X        X     X        X
X     X  XXXXXXX   XXXXX         XXX
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THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

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

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

  1           ID   MALTA DRAIN - EXISTING CONDITIONS, AGK ENGINEERS, 04-11-95
  2           ID   first routing 7-20-93
  3           ID   100-Year 24-Hour storm
  4           ID   24-Hour SCS Type II distribution
  5           ID   2 minutes time step
  6           ID   File: 170-24CE.DAT
  7           ID
  8           IT       2                    720
  9           IO       5
              *DIAGRAM
 10           IN      30
 11           JD     4.0
 12           PC    .000    .005    .011    .016    .022    .028    .035    .041    .048    .056
 13           PC    .063    .071    .080    .089    .098    .109    .120    .133    .147    .163
 14           PC    .181    .204    .235    .283    .663    .735    .772    .799    .820    .838
 15           PC    .854    .868    .880    .891    .902    .912    .921    .929    .937    .945
 16           PC    .952    .959    .965    .972    .978    .984    .989    .995   1.000

 17           KK    160V
 18           KM   SUB-BASIN 160V
 19           KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 20           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 21           BA    .005
 22           LG    .050    .250   5.700    .170  20.000
 23           UC    .108    .192
 24           UA       0       5      16      30      65      77      84      90      94      97
 25           UA     100

 26           KK   R160V
 27           KM   ROUTE 160V THROUGH SUB-BASIN 160W TO POINT OF CON. EMR13A
 28           RS       1    FLOW       0
 29           RC    0.02    0.02    0.02     550   0.022
 30           RX    9975    9980    9985    9986   10014   10015   10020   10025
 31           RY  1730.5  1730.5  1730.5    1730    1730  1730.5  1730.5  1730.5

 32           KK    160W
 33           KM   SUB-BASIN 160W
 34           KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 35           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 36           BA    .002
 37           LG    .050    .250   5.700    .170  22.500
 38           UC    .083    .139
 39           UA       0       5      16      30      65      77      84      90      94      97
 40           UA     100

 41           KK  EMR13A
 42           KM   EMERAL WASH CONCENTRATION POIT 13A - COMBINE  R160V, 160W
 43           HC       2

 44           KK   D160W
 45           KM   DIVERSION AT INCA AV. AND BARON DR.
 46           DT  DO160W
 47           DI       1      10     100    1000
 48           DQ     0.8       8      80     800
```

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

  49          KK   R160W
  50          KM   ROUTE 160W THROUGH SUB-BASIN 170B TO CON. POINT MLT1
  51          RS       1    FLOW       0
  52          RC    0.02    0.02    0.02     460   0.091
  53          RX    9975    9980    9985    9986   10014   10015   10020   10025
  54          RY  1700.5  1700.5  1700.5    1700    1700  1700.5  1700.5  1700.5

  55          KK    170A
  56          KM   SUB-BASIN 170A
  57          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
  58          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
  59          BA    .024
  60          LG    .150    .250   5.700    .207  13.750
  61          UC    .138    .120
  62          UA       0       5      16      30      65      77      84      90      94      97
  63          UA     100

  64          KK   170B
  65          KM   SUB-BASIN 170B
  66          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
  67          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
  68          BA    .004
  69          LG    .050    .250   5.700    .170  25.000
  70          UC    .083    .087
  71          UA       0       5      16      30      65      77      84      90      94      97
  72          UA     100

  73          KK    MLT1
  74          KM   MALTA DRAIN CONCENTRATION POINT 1 - COBINE R160W, 170A, 170B
  75          HC       3

  76          KK   RMLT1
  77          KM   ROUTE MLT1 THROUGH SUB-BASIN 170C TO POINT OF CON. MLT2
  78          RS       4    FLOW       0
  79          RC    0.04    0.04    0.04    1844   0.029
  80          RX    9850    9950    9975    9990   10005   10020   10055   10100
  81          RY    1680    1660    1658    1656    1656    1660    1670    1680

  82          KK    170C
  83          KM   SUB-BASIN 170C
  84          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
  85          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
  86          BA    .034
  87          LG    .150    .250   5.700    .207  12.500
  88          UC    .171    .179
  89          UA       0       5      16      30      65      77      84      90      94      97
  90          UA     100

  91          KK    MLT2
  92          KM   MALTA DRAIN CONCENTRATION POINT 2 - COBINE RMLT1, 170C
  93          HC       2
```

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

 94           KK    170D
 95           KM   SUB-BASIN 170D
 96           KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 97           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 98           BA    .007
 99           LG    .050    .250   5.700    .170  17.500
100           UC    .138    .250
101           UA       0       5      16      30      65      77      84      90      94      97
102           UA     100

103           KK    MLT3
104           KM   MALTA DRAIN CONCENTRATION POINT 3 - COBINE RMLT2, 170D
105           HC       2

106           KK   RMLT3
107           KM   ROUTE MLT3 THROUGH SUB-BASIN 170E TO POINT OF CON. MLT4
108           RS       7    FLOW       0
109           RC    0.04    0.04    0.04    3852   0.023
110           RX    9805    9890    9955    9990   10005   10010   10137   10180
111           RY    1574    1573    1572    1562    1562    1564    1566    1580

112           KK    170E
113           KM   SUB-BASIN 170E
114           KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
115           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
116           BA    .095
117           LG    .142    .250   5.700    .187  25.340
118           UC    .246    .249
119           UA       0       5      16      30      65      77      84      90      94      97
120           UA     100

121           KK    MLT4
122           KM   MALTA DRAIN CONCENTRATION POINT 4 - COBINE RMLT3, 170E
123           HC       2

124           KK    170F
125           KM   SUB-BASIN 170F
126           KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
127           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
128           BA    .018
129           LG    .092    .250   5.700    .170  35.820
130           UC    .162    .176
131           UA       0       5      16      30      65      77      84      90      94      97
132           UA     100

133           KK   R170F
134           KM   ROUTE 170F THROUGH SUB-BASIN 170G  TO POINT OF CON. MLT4A
135           RS       1    FLOW       0
136           RC    0.02    0.02    0.02     288   0.035
137           RX    9975    9980    9985    9986   10014   10015   10020   10025
138           RY  1540.5  1540.5  1540.5    1540    1540  1540.5  1540.5  1450.5
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 139          KK    170G
 140          KM   SUB-BASIN 170G
 141          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 142          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 143          BA    .003
 144          LG    .050    .250   5.700    .170  50.110
 145          UC    .133    .334
 146          UA       0       5      16      30      65      77      84      90      94      97
 147          UA     100

 148          KK   MLT4A
 149          KM   MALTA DRAIN CONCENTRATION POINT 4A - COBINE RMLT4, 170G, 170F
 150          HC       3

 151          KK  RMLT4A
 152          KM   ROUTE MLT4A THROUGH SUB-BASIN 170H TO POINT OF CON. MLT5
 153          RS       2    FLOW       0
 154          RC    0.04    0.04    0.04     626   0.034
 155          RX    9825    9870    9955    9995   10005   10020   10140   10175
 156          RY    1556    1550  1547.5    1537    1537    1544  1545.5    1550

 157          KK    170H
 158          KM   SUB-BASIN 170H
 159          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 160          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 161          BA    .009
 162          LG    .114    .250   5.700    .178  22.730
 163          UC    .108    .090
 164          UA       0       5      16      30      65      77      84      90      94      97
 165          UA     100

 166          KK    MLT5
 167          KM   MALTA DRAIN CONCENTRATION POINT 5 - COBINE RMLT4A, 170H
 168          HC       2

 169          KK   SMLT5
 170          KM   ROUTE MLT5 THROUGH 2-48" CMP CULVERT AT SAGUARO BLV.
 171          RS       1    ELEV 1516.23
 172          SQ       0      44     132     240     560
 173          SE  1516.2  1518.2  1520.2  1523.8  1524.2
 174          SA    0.02     0.1
 175          SE    1516    1524

 176          KK   RMLT5
 177          KM   ROUTE MLT5 THROUGH SUB-BASIN 170I-3 TO POINT OF CON. MLT6
 178          RS       1    FLOW       0
 179          RC    0.04    0.04    0.04     296   0.017
 180          RX    9890    9930    9950    9995   10007   10035   10060   10110
 181          RY    1522    1522    1518    1514    1514    1516    1523    1524
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 182          KK   170I1
 183          KM   SUB-BASIN 170I-1
 184          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 185          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 186          BA    .022
 187          LG    .075    .250   5.700    .170  38.250
 188          UC    .192    .260
 189          UA       0       5      16      30      65      77      84      90      94      97
 190          UA     100

 191          KK  D179I1
 192          KM   DIVERSION AT INTERSECTION OF SAGUARO AND PANORAME
 193          DT  D0180S
 194          DI       1      10     100    1000
 195          DQ     0.5       5      50     500

 196          KK  R170I1
 197          KM   ROUTE 170I1 (NON-DIVERTED) THROUGH SUB-BASIN 170I2 TO MLT6A
 198          RS       4    FLOW       0
 199          RC    0.02    0.02    0.02    1738   0.025
 200          RX    9945    9952    9960  9960.5 10039.5   10040   10048   10055
 201          RY  1570.5  1570.5  1570.5    1570    1570  1570.5  1570.5  1570.5

 202          KK   170I2
 203          KM   SUB-BASIN 170I-2
 204          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 205          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 206          BA    .012
 207          LG    .050    .250   5.700    .170  62.990
 208          UC    .125    .184
 209          UA       0       5      16      30      65      77      84      90      94      97
 210          UA     100

 211          KK   MLT6A
 212          KM   MALTA DRAIN CONCENTRATION POINT 6A - COBINE R170I1, 170I2
 213          HC       2

 214          KK  DMLT6A
 215          KM   DIVERSION AT INTERSECTION OF SAGUARO AND EL PUEBLO
 216          DT  D0180R
 217          DI       1      10     100    1000
 218          DQ     0.5       5      50     500

 219          KK  RMLT6A
 220          KM   ROUTE MLT6A (NON-DIVERDED) THROUGH SUB-BASIN 170I3 TO MLT6
 221          RS       2    FLOW       0
 222          RC    0.02    0.02    0.02    1040   0.040
 223          RX    9945    9952    9960  9960.5 10039.5   10040   10048   10055
 224          RY  1576.5  1576.5  1576.5    1576    1576  1576.5  1576.5  1576.5
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 225          KK   17013
 226          KM   SUB-BASIN 1701-3
 227          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 228          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 229          BA    .006
 230          LG    .066    .250   5.700    .170  46.990
 231          UC    .142    .241
 232          UA       0       5      16      30      65      77      84      90      94      97
 233          UA     100

 234          KK    MLT6
 235          KM   MALTA DRAIN CONCENTRATION POINT 6 - COBINE RMLT5, RMLT6A, 17013
 236          HC       3
 237          ZZ
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                SCHEMATIC DIAGRAM OF STREAM NETWORK
 OUT
LINE      (V) ROUTING          (--->) DIVERSION OR PUMP FLOW

 NO.      (.) CONNECTOR        (<---) RETURN OF DIVERTED OR PUMPED FLOW

 17         160V
               V
               V
 26        R160V
               .
               .
 32            .        160W
               .           .
               .           .
 41       EMR13A............
               .
               .
 46            .-------> DO160W
 44        D160W
               V
               V
 49        R160W
               .
               .
 55            .        170A
               .           .
               .           .
 64            .           .       170B
               .           .          .
               .           .          .
 73         MLT1........................
               V
               V
 76        RMLT1
               .
               .
 82            .        170C
               .           .
               .           .
 91         MLT2............
               .
               .
 94            .        170D
               .           .
               .           .
103         MLT3............
               V
               V
106        RMLT3
               .
               .
112           .        170E
               .           .
               .           .
121         MLT4............
               .
               .
124           .        170F
               .           V
               .           V
133           .       R170F
               .           .
               .           .
139           .           .       170G
               .           .          .
               .           .          .
148        MLT4A........................
               V
               V
151       RMLT4A
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            .
            .
            .        170H
            .           .
            .           .
166       MLT5............
            V
            V
169      SMLT5
            V
            V
176      RMLT5
            .
            .
182         .       170I1
            .           .
            .           .
193         .           .-------> D0180S
191         .      D179I1
            .           V
            .           V
196         .      R170I1
            .           .
            .           .
202         .           .       170I2
            .           .           .
            .           .           .
211         .       MLT6A............
            .           .
            .           .
216         .           .-------> D0180R
214         .      DMLT6A
            .           V
            .           V
219         .      RMLT6A
            .           .
            .           .
225         .           .       170I3
            .           .           .
            .           .           .
234       MLT6........................
```

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

```
*****************************************
*                                       *
*  FLOOD HYDROGRAPH PACKAGE  (HEC-1)    *
*            MAY   1991                 *
*          VERSION 4.0.1E               *
*    Lahey F77L-EM/32 version 5.01      *
*      Dodson & Associates, Inc.        *
* RUN DATE  04/11/95  TIME  13:15:29    *
*****************************************
```

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*****************************************
*                                       *
*    U.S. ARMY CORPS OF ENGINEERS       *
*    HYDROLOGIC ENGINEERING CENTER      *
*          609 SECOND STREET            *
*       DAVIS, CALIFORNIA 95616         *
*           (916) 551-1748              *
*                                       *
*****************************************
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                    MALTA DRAIN - EXISTING CONDITIONS, AGK ENGINEERS, 04-11-95
                    first routing 7-20-93
                    100-Year 24-Hour storm
                    24-Hour SCS Type II distribution
                    2 minutes time step
                    File: 170-24CE.DAT

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

   IT        HYDROGRAPH TIME DATA
                   NMIN          2  MINUTES IN COMPUTATION INTERVAL
                  IDATE      1   0  STARTING DATE
                  ITIME       0000  STARTING TIME
                     NQ        720  NUMBER OF HYDROGRAPH ORDINATES
                 NDDATE      1   0  ENDING DATE
                 NDTIME       2358  ENDING TIME
                  ICENT         19  CENTURY MARK

            COMPUTATION INTERVAL    0.03 HOURS
                 TOTAL TIME BASE   23.97 HOURS

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

11 JD        INDEX STORM NO. 1
                  STRM       4.00  PRECIPITATION DEPTH
                  TRDA       0.00  TRANSPOSITION DRAINAGE AREA

12 PI          PRECIPITATION PATTERN
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
```

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

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

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	160V	8.	12.00	1.	0.	0.	0.00		
+	ROUTED TO	R160V	8.	12.03	1.	0.	0.	0.00		
+									1730.11	12.03
+	HYDROGRAPH AT	160W	3.	12.00	0.	0.	0.	0.00		
+	2 COMBINED AT	EMR13A	11.	12.00	1.	0.	0.	0.01		
+	DIVERSION TO	DO160W	2.	12.00	0.	0.	0.	0.01		
+	HYDROGRAPH AT	D160W	2.	12.00	0.	0.	0.	0.01		
+	ROUTED TO	R160W	2.	12.03	0.	0.	0.	0.01		
+									1700.03	12.03
+	HYDROGRAPH AT	170A	40.	12.00	4.	1.	1.	0.02		
	HYDROGRAPH AT	170B	7.	12.00	1.	0.	0.	0.00		
+	3 COMBINED AT	MLT1	49.	12.00	5.	1.	1.	0.04		
+	ROUTED TO	RMLT1	48.	12.07	5.	1.	1.	0.04		
+									1656.36	12.07
+	HYDROGRAPH AT	170C	53.	12.03	6.	2.	2.	0.03		
+	2 COMBINED AT	MLT2	101.	12.03	11.	3.	3.	0.07		
+	HYDROGRAPH AT	170D	10.	12.03	1.	0.	0.	0.01		
+	2 COMBINED AT	MLT3	112.	12.03	12.	3.	3.	0.08		
+	ROUTED TO	RMLT3	109.	12.13	12.	3.	3.	0.08		
+									1563.07	12.13
+	HYDROGRAPH AT	170E	138.	12.07	18.	5.	5.	0.09		
+	2 COMBINED AT	MLT4	244.	12.07	30.	9.	9.	0.17		
+	HYDROGRAPH AT	170F	30.	12.03	4.	1.	1.	0.02		
	ROUTED TO	R170F	30.	12.03	4.	1.	1.	0.02		

```
+                                                                                  1462.65      12.03
        HYDROGRAPH AT
+                170G      4.  12.03      1.     0.     0.    0.00
        3 COMBINED AT
+                MLT4A   277.  12.07     34.    10.    10.    0.19
        ROUTED TO
+               RMLT4A   277.  12.07     34.    10.    10.    0.19
+                                                                                  1539.00      12.07
        HYDROGRAPH AT
+                170H     16.  12.00      2.     0.     0.    0.01
        2 COMBINED AT
+                 MLT5   289.  12.07     36.    10.    10.    0.20
        ROUTED TO
+                SMLT5   292.  12.10     36.    10.    10.    0.20
+                                                                                  1523.86      12.10
        ROUTED TO
+                RMLT5   288.  12.07     36.    10.    10.    0.20
+                                                                                  1522.45      12.07
        HYDROGRAPH AT
+                170I1    33.  12.03      5.     1.     1.    0.02
        DIVERSION TO
+               DO180S    16.  12.03      2.     1.     1.    0.02
        HYDROGRAPH AT
+               D179I1    16.  12.03      2.     1.     1.    0.02
        ROUTED TO
                R170I1    16.  12.13      2.     1.     1.    0.02
                                                                                  1570.09      12.13
        HYDROGRAPH AT
+                170I2    21.  12.00      3.     1.     1.    0.01
        2 COMBINED AT
+                 MLT6A   34.  12.03      5.     2.     2.    0.03
        DIVERSION TO
+               DO180R    17.  12.03      3.     1.     1.    0.03
        HYDROGRAPH AT
+               DMLT6A    17.  12.03      3.     1.     1.    0.03
        ROUTED TO
+               RMLT6A    17.  12.10      3.     1.     1.    0.03
+                                                                                  1576.08      12.10
        HYDROGRAPH AT
+                170I3     9.  12.03      1.     0.     0.    0.01
        3 COMBINED AT
+                 MLT6   313.  12.07     40.    11.    11.    0.24

*** NORMAL END OF HEC-1 ***
```

K.7

COLONY WASH

```
*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*              MAY   1991               *
*            VERSION 4.0.1E             *
*     Lahey F77L-EM/32 version 5.01     *
*       Dodson & Associates, Inc.       *
*  RUN DATE  04/11/95  TIME  13:17:14   *
*****************************************
```

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*****************************************
*                                       *
*    U.S. ARMY CORPS OF ENGINEERS       *
*    HYDROLOGIC ENGINEERING CENTER      *
*          609 SECOND STREET            *
*       DAVIS, CALIFORNIA 95616         *
*           (916) 551-1748              *
*                                       *
*****************************************
```

```
X     X  XXXXXXX   XXXXX          X
X     X  X        X     X        XX
X     X  X        X              X
XXXXXXX  XXXX     X        XXXXX  X
X     X  X        X              X
X     X  X        X     X        X
X     X  XXXXXXX   XXXXX         XXX
```

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

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

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

  1           ID   COLONY WASH - EXISTING CONDITIONS, AGK ENGINEERS, 04-11.95
  2           ID   100-Year 24-Hour storm
  3           ID   24-Hour SCS Type II distribution
  4           ID   2 minutes time step
  5           ID   File:180-24CD.DAT
  6           ID
  7           IT       2                    720
  8           IO       5
              *DIAGRAM
  9           IN      30
 10           JD     4.0
 11           PC    .000    .005    .011    .016    .022    .028    .035    .041    .048    .056
 12           PC    .063    .071    .080    .089    .098    .109    .120    .133    .147    .163
 13           PC    .181    .204    .235    .283    .663    .735    .772    .799    .820    .838
 14           PC    .854    .868    .880    .891    .902    .912    .921    .929    .937    .945
 15           PC    .952    .959    .965    .972    .978    .984    .989    .995   1.000

 16           KK    185A
 17           KM   SUB-BASIN 185A
 18           KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 19           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 20           BA    .041
 21           LG    .100    .250   5.700    .189  22.500
 22           UC    .175    .193
 23           UA       0       5      16      30      65      77      84      90      94      97
 24           UA     100

 25           KK   R185A
 26           KM   ROUTE 185A THROUGH SUB-BASIN 185B TO CON. POINT IRW1
 27           RS       7    FLOW       0
 28           RC    0.04    0.04    0.04    4042    0.04
 29           RX    9885    9940    9980   10000   10015   10105   10120   10170
 30           RY    1710    1700    1696    1692    1692    1704    1710    1720

 31           KK    185B
 32           KM   SUB-BASIN 185B
 33           KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 34           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 35           BA    .081
 36           LG    .150    .250   5.700    .207   8.940
 37           UC    .313    .335
 38           UA       0       5      16      30      65      77      84      90      94      97
 39           UA     100

 40           KK    IRW1
 41           KM   IRONWOOD WASH CONCENTRATION POINT 1 - COMBINES R185A, 185B
 42           HC       2

 43           KK   SIRW1
 44           KM   ROUTE THROUGH A 48" CMP CULVERT UNDER CHOLA DRIVE BY FOUNTAIN HILLS BLVD
 45           RS       1    ELEV  1663.5
 46           SQ       0      25      76     150     180
 47           SE  1663.5  1665.5  1667.5  1671.5    1674
 48           SA       0    0.11    0.69    1.70
 49           SE  1663.5    1664    1668    1676
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  50          KK    180A
  51          KM   SUB-BASIN 180A
  52          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
  53          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
  54          BA    .025
  55          LG    .150    .250   5.700    .207  13.750
  56          UC    .158    .184
  57          UA       0       5      16      30      65      77      84      90      94      97
  58          UA     100

  59          KK   R180A
  60          KM   ROUTE 180A THROUGH SUB-BASIN 180B TO CON. POINT IRW2
  61          RS       1    FLOW       0
  62          RC    0.02    0.02    0.02     366   0.045
  63          RX    9975    9980    9985    9986   10014   10015   10020   10025
  64          RY  1680.5  1680.5  1680.5    1680    1680  1680.5  1680.5  1680.5

  65          KK    180B
  66          KM   SUB-BASIN 180B
  67          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
  68          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
  69          BA    .029
  70          LG    .067    .250   5.700    .183  26.710
  71          UC    .300    .858
  72          UA       0       5      16      30      65      77      84      90      94      97
  73          UA     100

  74          KK    IRW2
  75          KM   IRONWOOD WASH CONCENTRATION POINT 2 - COMBINE SIRW1, R108A, 180B
  76          HC       3

  77          KK   RIRW2
  78          KM   ROUTE IRW2 THROUGH SUB-BASIN 180F TO CON. POIT CLN1
  79          RS       1    FLOW       0
  80          RC    0.04    0.04    0.04     283   0.060
  81          RX    9870    9960    9980    9995   10010   10055   10085   10090
  82          RY    1668    1665    1664    1658    1658    1666    1670    1674

  83          KK    186A
  84          KM   SUB-BASIN 186A
  85          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
  86          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
  87          BA    .099
  88          LG    .142    .250   5.700    .203   1.400
  89          UC    .267    .223
  90          UA       0       5      16      30      65      77      84      90      94      97
  91          UA     100

  92          KK    186B
  93          KM   SUB-BASIN 186B
  94          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
  95          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
  96          BA    .005
  97          LG    .149    .250   5.700    .207    .190
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 98           UC    .142    .169
 99           UA       0       5      16      30      65      77      84      90      94      97
100           UA     100

101           KK   R186B
102           KM   ROUTE R186B THROUGH SUB-BASIN 186D (PALISADES BLV)
103           RS       3    FLOW       0
104           RC    0.02    0.02    0.02    1349    0.08
105           RX    9975    9980    9985    9986   10014   10015   10020   10025
106           RY  1900.6  1900.5  1900.5    1900    1900  1900.5  1900.5  1900.6

107           KK   SNB1A
108           KM   SUNBURST CONCENTRATION POINT 1A - COMBINE 186A, R186B
109           HC       2

110           KK  RSNB1A
111           KM   ROUTE SNB1A THROUGH SUB-BASIN 186D (WASH) TO CON. POINT SNB1
112           RS       7    FLOW       0
113           RC    0.04    0.04    0.04    3780   0.055
114           RX    9850    9910    9970    9995   10005   10030   10060   10090
115           RY    1920    1904    1899    1892    1892    1900    1910    1920

116           KK    186C
117           KM   SUB-BASIN 186C
118           KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
119           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
120           BA    .017
121           LG    .081    .250   5.700    .175  25.670
122           UC    .158    .225
123           UA       0       5      16      30      65      77      84      90      94      97
124           UA     100

125           KK   R186C
126           KM   ROUTE 186C THROUGH SUB-BASIN 186D (MANCHESTER DR.) TO CON. POINT SNB1
127           RS       1    FLOW       0
128           RC    0.02    0.02    0.02     407   0.125
129           RX  9947.5  9952.5  9957.5    9960   10040 10042.5 10047.5 10052.5
130           RY  2040.5  2040.5  2040.5    2040    2040  2040.5  2040.5  2040.5

131           KK    186D
132           KM   SUB-BASIN 186D
133           KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
134           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
135           BA    .081
136           LG    .150    .250   5.800    .195   9.320
137           UC    .308    .334
138           UA       0       5      16      30      65      77      84      90      94      97
139           UA     100

140           KK    SNB1
141           KM   SUNBURST WASH CONSENTRATION POINT 1 - COMBINE RSNB1A, R186C, 186D
142           HC       3
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 143          KK   RSNB1
 144          KM   ROUTE SNB1 THROUGH SUB-BASIN 186F  TO CON. POINT SNB2
 145          RS       4    FLOW       0
 146          RC    0.04    0.04    0.04    1961   0.042
 147          RX    9935    9963    9985    9997   10003   10050   10090   10125
 148          RY    1840    1830    1820    1814    1814    1820    1830    1840

 149          KK    186E
 150          KM   SUB-BASIN 186E
 151          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 152          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 153          BA    .036
 154          LG    .144    .250   5.700    .205   1.920
 155          UC    .200    .178
 156          UA       0       5      16      30      65      77      84      90      94      97
 157          UA     100

 158          KK    186F
 159          KM   SUB-BASIN 186F
 160          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 161          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 162          BA    .029
 163          LG    .150    .250   5.800    .195   4.820
 164          UC    .221    .240
 165          UA       0       5      16      30      65      77      84      90      94      97
 166          UA     100

 167          KK    SNB2
 168          KM   SUNBURST WASH CONSENTRATION POINT 2 - COMBINE RSNB1, 186E, 186F
 169          HC       3

 170          KK   RSNB2
 171          KM   ROUTE SNB2 THROUGH SUB-BASIN 186G  TO CON. POINT SNB3
 172          RS       5    FLOW       0
 173          RC    0.04    0.04    0.04    2408   0.026
 174          RX    9865    9930    9960    9995   10005   10040   10060   10140
 175          RY    1790    1772    1766    1762    1762    1764    1772    1790

 176          KK    186G
 177          KM   SUB-BASIN 186G
 178          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 179          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 180          BA    .066
 181          LG    .150    .250   5.700    .207   1.250
 182          UC    .262    .259
 183          UA       0       5      16      30      65      77      84      90      94      97
 184          UA     100

 185          KK    SNB3
 186          KM   SUNBURST WASH CONSENTRATION POINT 3 - COMBINE RSNB2, 186G
 187          HC       2
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 188          KK   SSNB3
 189          KM   ROUTE SNB3 THROUGH CULVERT AT SYCAMORE DRIVE
 190          RS       1    ELEV  1746.4
 191          SQ       0      21      66     127     185
 192          SE  1746.4  1748.4  1750.4  1754.4  1761.1
 193          SA       0    0.02    2.03
 194          SE  1746.4    1722    1740

 195          KK    186H
 196          KM   SUB-BASIN 186H
 197          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 198          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 199          BA    .025
 200          LG    .050    .250   5.700    .170  20.540
 201          UC    .258    .575
 202          UA       0       5      16      30      65      77      84      90      94      97
 203          UA     100

 204          KK    160E
 205          KM   SUB-BASIN 160E
 206          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 207          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 208          BA    .004
 209          LG    .092    .250   5.700    .170  26.390
 210          UC    .129    .255
 211          UA       0       5      16      30      65      77      84      90      94      97
 212          UA     100

 213          KK   R160E
 214          KM   ROUTE 160E THROUGH SUB-BASIN 186H TO CON. POINT SNB4
 215          RS       2    FLOW       0
 216          RC    0.02    0.02    0.02     700   0.174
 217          RX    9975    9980    9985    9986   10014   10015   10020   10025
 218          RY  1733.5  1733.5  1733.5    1733    1733  1733.5  1733.5  1733.5

 219          KK    SNB4
 220          KM   SUNBURST WASH CONSENTRATION POINT 4 - COMBINE SSNB3, 186H, R160E
 221          HC       3

 222          KK   RSNB4
 223          KM   ROUTE SNB4 THROUGH SUB-BASIN 186I  TO CON. POINT SNB5
 224          RS       2    FLOW       0
 225          RC    0.04    0.04    0.04    1004   0.023
 226          RX    9905    9945    9965    9990   10015   10070   10100   10140
 227          RY    1726    1716    1710    1702    1702    1704    1716    1724

 228          KK    186I
 229          KM   SUB-BASIN 186I
 230          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 231          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 232          BA    .029
 233          LG    .150    .250   5.700    .207   2.500
 234          UC    .200    .197
 235          UA       0       5      16      30      65      77      84      90      94      97
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 236          UA     100

 237          KK   *SNB5
 238          KM   SUNBURST WASH CONCENTRATION POINT *5 - RSNB4, 186I
 239          HC       2

 240          KK    187A
 241          KM   SUB-BASIN 187A
 242          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 243          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 244          BA    .009
 245          LG    .150    .250   5.800    .195  10.810
 246          UC    .125    .092
 247          UA       0       5      16      30      65      77      84      90      94      97
 248          UA     100

 249          KK   R187A
 250          KM   ROUTE 187A THROUGHT SUB-BASIN 187B TO POINT OF CON. GRS1
 251          RS       1    FLOW       0
 252          RC    0.04    0.04    0.04     445   0.022
 253          RX    9785    9845    9940    9988   10010   10030   10125   10170
 254          RY    1870    1861    1858    1852    1852    1858    1872    1876

 255          KK    187B
 256          KM   SUB-BASIN 187B
 257          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 258          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 259          BA    .008
 260          LG    .150    .250   5.800    .195  12.740
 261          UC    .162    .204
 262          UA       0       5      16      30      65      77      84      90      94      97
 263          UA     100

 264          KK    GRS1
 265          KM    GREYSTONE WASH CONCENTRATION POINT 1 - COMBINE R187A, 187B
 266          HC       2

 267          KK   RGRS1
 268          KM   ROUTE GRS1 THROUGHT SUB-BASIN 187D TO POINT OF CON. GRS2
 269          RS       6    FLOW       0
 270          RC    0.04    0.04    0.04    3514    .044
 271          RX    9920    9955    9980    9995   10005   10040   40075   10110
 272          RY    1780    1770    1760    1754    1754    1760    1770    1780

 273          KK    187C
 274          KM   SUB-BASIN 187C
 275          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 276          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 277          BA    .012
 278          LG    .150    .250   5.700    .198  19.380
 279          UC    .125    .141
 280          UA       0       5      16      30      65      77      84      90      94      97
 281          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 282          KK   R187C
 283          KM   ROUTE 187C THROUGHT SUB-BASIN 187D TO POINT OF CON. GRS2
 284          RS       4    FLOW       0
 285          RC    0.04    0.04    0.04    2181    .061
 286          RX    9920    9955    9980    9995   10005   10040   40075   10110
 287          RY    1780    1770    1760    1754    1754    1760    1770    1780

 288          KK    187D
 289          KM   SUB-BASIN 187D
 290          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 291          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 292          BA    .070
 293          LG    .150    .250   5.700    .207   9.830
 294          UC    .313    .368
 295          UA       0       5      16      30      65      77      84      90      94      97
 296          UA     100

 297          KK   *GRS2
 298          KM   GREYSTONE WASH CONCENTRATION POINT *2 - RGRS1, R187C, 187D
 299          HC       3

 300          KK    188A
 301          KM   SUB-BASIN 188A
 302          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 303          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 304          BA    .009
 305          LG    .086    .250   5.700    .185  28.530
 306          UC    .129    .185
 307          UA       0       5      16      30      65      77      84      90      94      97
 308          UA     100

 309          KK   R188A
 310          KM   ROUTE 188A THROUGH SUB-BASIN 188B TO CON. POINT SYC1
 311          RS       2    FLOW       0
 312          RC    0.04    0.04    0.04     747   0.173
 313          RX    9770    9810    9940    9960   10020   10045   10120   10180
 314          RY    1716    1711    1708    1708    1709    1712    1720    1728

 315          KK    188B
 316          KM   SUB-BASIN 188B
 317          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 318          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 319          BA    .066
 320          LG    .149    .250   6.000    .183  13.070
 321          UC    .221    .175
 322          UA       0       5      16      30      65      77      84      90      94      97
 323          UA     100

 324          KK    188C
 325          KM   SUB-BASIN 188C
 326          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 327          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 328          BA    .022
 329          LG    .145    .250   5.800    .194   9.950
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 330          UC    .200    .230
 331          UA       0       5      16      30      65      77      84      90      94      97
 332          UA     100

 333          KK    SYR1
 334          KM   SYCAMORE WASH CONCENTRATION POINT 1 - COMBINE SUB-BASINS R188A, 188B, 188C
 335          HC       3

 336          KK   RSYC1
 337          KM   ROUTE SYC1 THROUGH SUB-BASIN 188D TO CON. POINT SYC2
 338          RS       4    FLOW       0
 339          RC    0.04    0.04    0.04    2280   0.034
 340          RX    9915    9950    9985   10000   10008   10020   10055   10085
 341          RY    1850    1840    1830    1826    1826    1830    1840    1850

 342          KK    188D
 343          KM   SUB-BASIN 188D
 344          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 345          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 346          BA    .055
 347          LG    .150    .250   5.800    .195   8.640
 348          UC    .242    .248
 349          UA       0       5      16      30      65      77      84      90      94      97
 350          UA     100

 351          KK    188E
 352          KM   SUB-BASIN 188E
 353          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 354          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 355          BA    .052
 356          LG    .136    .250   5.700    .202   5.140
 357          UC    .271    .328
 358          UA       0       5      16      30      65      77      84      90      94      97
 359          UA     100

 360          KK    SYR2
 361          KM   SYCAMORE WASH CONCENTRATION POINT 2 - COMBINE SUB-BASINS RSYC1, 188D, 188E
 362          HC       3

 363          KK   RSYC2
 364          KM   ROUTE SYC2 THROUGH SUB-BASIN 188F TO CON. POINT SYC3
 365          RS       6    FLOW       0
 366          RC    0.04    0.04    0.04    3003    0.02
 367          RX    9910    9935    9950    9980   10010   10060   10075   10110
 368          RY    1780    1770    1764    1760    1760    1766    1770    1780

 369          KK    188F
 370          KM   SUB-BASIN 188F
 371          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 372          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 373          BA    .072
 374          LG    .146    .250   5.700    .205   4.640
 375          UC    .271    .272
 376          UA       0       5      16      30      65      77      84      90      94      97
 377          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 378          KK   SYR3
 379          KM   SYCAMORE WASH CONCENTRATION POINT 3 - COMBINE SUB-BASINS RSYC2, 188F
 380          HC      2

 381          KK   SSYC3
 382          KM   ROUTE SYC3 THROUGH 60" CMP CULVERT AT GREYSTONE DRIVE
 383          RS      1    ELEV    1708
 384          SQ      0      37     115     222     280
 385          SE   1708  1710.5    1713    1718    1722
 386          SA   0.05    1.29
 387          SE   1708    1717

 388          KK   RSYC3
 389          KM   ROUTE SSYC3 THROUGH SUB-BASIN 188G TO CON. POINT SYC4
 390          RS      1    FLOW       0
 391          RC   0.04    0.04    0.04     249   0.024
 392          RX   9770    9810    9940    9960   10020   10045   10120   10180
 393          RY   1716    1711    1708    1702    1702    1712    1720    1728

 394          KK   188G
 395          KM   SUB-BASIN 188G
 396          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 397          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 398          BA   .001
 399          LG   .150    .250   5.700    .207    .000
 400          UC   .100    .176
 401          UA      0       3       5       8      12      20      43      75      90      96
 402          UA    100

 403          KK   SYR4
 404          KM   SYCAMORE WASH CONCENTRATION POINT 4 - COMBINE SUB-BASINS RSYC3, 188G
 405          HC      2

 406          KK   GRS2
 407          KM   GREYSTONE WASH POINT OF CONCENTRATION 2 - COMBINE (RGRS1,R187C,187D),SYR4
 408          HC      2

 409          KK   SGRS2
 410          KM   ROUTE GRS2 THROUGH 2-60" AND 48" CULVERT AT SYCAMORE DRIVE TO GRS3
 411          RS      1    ELEV  1595.5
 412          SQ      0     106     226     317     500     594
 413          SE  1595.5    1598  1599.5  1600.5  1603.5  1605.4
 414          SA      0    0.01    0.47    0.73
 415          SE  1595.5    1698    1700 1705.75

 416          KK   187E
 417          KM   SUB-BASIN 187E
 418          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 419          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 420          BA   .005
 421          LG   .050    .250   5.700    .170  33.620
 422          UC   .121    .292
 423          UA      0       5      16      30      65      77      84      90      94      97
 424          UA    100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 425          KK   R187E
 426          KM   ROUTE 187E THROUGHT SUB-BASIN 187F TO POINT OF CON. GRS3A
 427          RS       3    FLOW       0
 428          RC    0.02    0.02    0.02    1707   0.076
 429          RX    9975    9980    9985    9986   10014   10015   10020   10025
 430          RY  1780.5  1780.5  1780.5    1810    1810  1810.5  1780.5  1780.5

 431          KK    187F
 432          KM   SUB-BASIN 187F
 433          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 434          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 435          BA    .003
 436          LG    .050    .250   5.700    .170  25.000
 437          UC    .154    .524
 438          UA       0       5      16      30      65      77      84      90      94      97
 439          UA     100

 440          KK   GRS3A
 441          KM   GREYSTONE WASH POINT OF CONCENTRATION 3A - COMBINE R187E, 187F
 442          HC       2

 443          KK  RGRS3A
 444          KM   ROUTE GRS3A THROUGHT SUB-BASIN 187G TO POINT OF CON. GRS3
 445          RS       1    FLOW       0
 446          RC    0.02    0.02    0.02     337   0.033
 447          RX    9975    9980    9985    9986   10014   10015   10020   10025
 448          RY  1710.5  1710.5  1710.5    1710    1710  1710.5  1710.5  1710.5

 449          KK    187G
 450          KM   SUB-BASIN 187G
 451          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 452          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 453          BA    .043
 454          LG    .100    .250   5.700    .189  18.020
 455          UC    .354    .652
 456          UA       0       5      16      30      65      77      84      90      94      97
 457          UA     100

 458          KK    GRS3
 459          KM   GREYSTONE WASH POINT OF CONCENTRATION 3 - COMBINE SGRS2, RGRS3A, 187G
 460          HC       3

 461          KK   RGRS3
 462          KM   ROUTE GRS3 THROUGHT SUB-BASIN 187H TO POINT OF CON. GRS4
 463          RS       4    FLOW       0
 464          RC    0.04    0.04    0.04     442   0.045
 465          RX    9705    9755    9965    9990   10030   10065   10085   10130
 466          RY    1708  1699.3  1699.3    1690    1690    1696    1700    1710
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 467          KK    187H
 468          KM   SUB-BASIN 187H
 469          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 470          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 471          BA    .004
 472          LG    .150    .250   5.700    .207   3.750
 473          UC    .138    .186
 474          UA       0       5      16      30      65      77      84      90      94      97
 475          UA     100

 476          KK   *SNB5
 477          KM   SUNBURST WASH CONCENTRATION POINT *5 - RGRS3, 187H
 478          HC       2

 479          KK    SNB5
 480          KM   SUNBURST WASH CONSENTRATION POINT 5 - COMBINE (RSNB4, 186I),(RGRS3, 187H)
 481          HC       2

 482          KK   RSNB5
 483          KM   ROUTE SNB5 THROUGH SUB-BASIN 187I  TO CON. POINT SNB6
 484          RS       1    FLOW       0
 485          RC    0.04    0.04    0.04     295    0.02
 486          RX    9685    9760    9870    9950   10005   10035   10225   10255
 487          RY    1710  1691.5  1691.5    1682    1682    1692    1700    1710

 488          KK    187I
 489          KM   SUB-BASIN 187I
 490          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 491          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 492          BA    .024
 493          LG    .150    .250   5.700    .207   7.500
 494          UC    .171    .144
 495          UA       0       5      16      30      65      77      84      90      94      97
 496          UA     100

 497          KK    SNB6
 498          KM   SUNBURST WASH CONSENTRATION POINT 6 - COMBINE RSNB5, 187I
 499          HC       2

 500          KK   SSNB6
 501          KM   ROUTE THROUGH 30" CMP UNDER DAM AT SUB-BASIN 187I
 502          RS       1    ELEV 1678.86
 503          SQ       0     7.2      22      45      85     100     379     886    1540
 504          SE  1678.9  1680.2  1681.4  1683.9  1693.9  1702.7  1703.7  1704.7  1705.7
 505          SA       0    0.01    0.93    3.47    8.55
 506          SE  1678.9    1680    1686    1694    1704

 507          KK   RSNB6
 508          KM   ROUTE SSNB6 THROUGH SUB-BASIN 180F TO CON. POINT CLN1
 509          RS       4    FLOW       0
 510          RC    0.04    0.04    0.04    1840   0.014
 511          RX    9870    9960    9980    9995   10010   10055   10085   10090
 512          RY    1668    1665    1664    1658    1658    1666    1670    1674
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 513          KK    180F
 514          KM   SUB-BASIN 180F
 515          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 516          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 517          BA    .074
 518          LG    .150    .250   5.700    .207  10.070
 519          UC    .225    .165
 520          UA       0       5      16      30      65      77      84      90      94      97
 521          UA     100

 522          KK   *CLN1
 523          KM   COLONY WASH CONCENTRATION POINT *1 - RSNB6, 180F
 524          HC       2

 525          KK    CLN1
 526          KM   COLONY WASH CONCENTRATION POINT 1 - COMBINE RIRW2, (180F, RSNB6)
 527          HC       2

 528          KK   SCLN1
 529          KM   ROUTE CLN1 THROUGH 2-60" ONE WITH SEWER LINE CULVERTS AT FOUNTAIN HILL BLV.
 530          RS       1    ELEV 1649.63
 531          SQ       0      16      68     215     345     415
 532          SE  1649.6  1650.6  1652.1  1654.6  1657.1  1659.1
 533          SA       0    0.13    1.06    8.03
 534          SE  1649.6    1652    1654    1664

 535          KK    180C
 536          KM   SUB-BASIN 180C
 537          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 538          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 539          BA    .010
 540          LG    .098    .250   5.700    .179  15.220
 541          UC    .112    .125
 542          UA       0       5      16      30      65      77      84      90      94      97
 543          UA     100

 544          KK   R180C
 545          KM   ROUTE 180C THROUGH SUB-BASIN 180D TO CON. POIT CLN2
 546          RS       3    FLOW       0
 547          RC    0.02    0.02    0.02    1228    0.05
 548          RX    9975    9980    9985    9986   10014   10015   10020   10025
 549          RY  1670.5  1670.5  1670.5    1670    1670  1670.5  1670.5  1670.5

 550          KK    180D
 551          KM   SUB-BASIN 180D
 552          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 553          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 554          BA    .003
 555          LG    .064    .250   5.700    .170  30.520
 556          UC    .138    .370
 557          UA       0       5      16      30      65      77      84      90      94      97
 558          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 559          KK    180E
 560          KM   SUB-BASIN 180E
 561          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 562          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 563          BA    .019
 564          LG    .100    .250   5.700    .183  18.770
 565          UC    .146    .168
 566          UA       0       5      16      30      65      77      84      90      94      97
 567          UA     100

 568          KK    CLN2
 569          KM   COLONY WASH CONCENTRATION POINT 2 - COMBINE SCLN1, R180C, 180D, 180E
 570          HC       4

 571          KK   RCLN2
 572          KM   ROUTE CLN2 THROUGH SUB-BASIN 180G TO CON. POIT CLN3
 573          RS       3    FLOW       0
 574          RC    0.04    0.04    0.04    1364   0.022
 575          RX    9840    9940    9958    9990   10010   10030   10120   10140
 576          RY    1640    1638    1634    1624    1624    1628    1628    1640

 577          KK    180G
 578          KM   SUB-BASIN 180G
 579          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 580          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 581          BA    .029
 582          LG    .150    .250   5.700    .207  15.200
 583          UC    .204    .187
 584          UA       0       5      16      30      65      77      84      90      94      97
 585          UA     100

 586          KK    CLN3
 587          KM   COLONY WASH CONCENTRATION POINT 3 - COMBINE RCLN2, 180G
 588          HC       2

 589          KK   SCLN3
 590          KM   ROUTE CLN1 THROUGH 2-60" CMP CULVERT AT ARROLLO VISTA DRIVE.
 591          RS       1    ELEV 1616.64
 592          SQ       0      74     230     444     470
 593          SE  1616.6  1619.1  1621.6  1626.6  1628.8
 594          SA       0    0.01    1.09    3.99
 595          SE  1616.6    1618    1622    1630

 596          KK    180H
 597          KM   SUB-BASIN 180H
 598          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 599          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 600          BA    .021
 601          LG    .150    .250   5.700    .207  26.000
 602          UC    .246    .352
 603          UA       0       5      16      30      65      77      84      90      94      97
 604          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 605          KK   R180H
 606          KM   ROUTE 180H THROUGH SUB-BASIN 180J TO CON. POIT CLN6B
 607          RS       1    FLOW       0
 608          RC    0.02    0.02    0.02     394   0.010
 609          RX    9975    9980    9985    9986   10014   10015   10020   10025
 610          RY  1670.5  1670.5  1670.5    1670    1670  1670.5  1670.5  1670.5

 611          KK    180I
 612          KM   SUB-BASIN 180I
 613          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 614          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 615          BA    .004
 616          LG    .050    .250   5.700    .170  48.750
 617          UC    .121    .190
 618          UA       0       5      16      30      65      77      84      90      94      97
 619          UA     100

 620          KK   R180I
 621          KM   ROUTE 180I THROUGH SUB-BASIN 180J TO CON. POIT CLN6B
 622          RS       2    FLOW       0
 623          RC    0.02    0.02    0.02    1161   0.051
 624          RX    9975    9980    9985    9986   10014   10015   10020   10025
 625          RY  1670.5  1670.5  1670.5    1670    1670  1670.5  1670.5  1670.5

 626          KK    180J
 627          KM   SUB-BASIN 180J
 628          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 629          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 630          BA    .034
 631          LG    .100    .250   5.700    .189  27.300
 632          UC    .204    .246
 633          UA       0       5      16      30      65      77      84      90      94      97
 634          UA     100

 635          KK   CLN4B
 636          KM   COLONY WASH CONCENTRATION POINT 4B - COMBINE R180I, 180H, 180J
 637          HC       3

 638          KK  RCLN4B
 639          KM   ROUTE CLN4B THROUGH SUB-BASIN 180M TO CON. POINT CLN4
 640          RS       1    FLOW       0
 641          RC    0.02    0.02    0.02     217   0.010
 642          RX    9977    9980    9985    9990   10010   10015   10020   10027
 643          RY  1630.8  1630.6  1630.3    1630    1630  1630.3  1630.6  1630.8

 644          KK    180M
 645          KM   SUB-BASIN 180M
 646          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 647          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 648          BA    .005
 649          LG    .050    .250   5.700    .170  21.690
 650          UC    .150    .362
 651          UA       0       5      16      30      65      77      84      90      94      97
 652          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 653          KK   CLN4
 654          KM   COLONY WASH CONCENTRATION POINT 4 - COMBINE SCLN3, RCLN4A, 180M
 655          HC      3

 656          KK   RCLN4
 657          KM   ROUTE CLN4 THROUGH SUB-BASIN 180N TO CON. POIT CLN5
 658          RS      4    FLOW       0
 659          RC   0.04    0.04    0.04    1882   0.014
 660          RX   9890    9915    9940    9990   10010   10050   10080   10115
 661          RY   1610    1598    1596    1590    1590    1596    1598    1612

 662          KK   180N
 663          KM   SUB-BASIN 180N
 664          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 665          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 666          BA   .041
 667          LG   .142    .250   5.700    .205   7.030
 668          UC   .204    .153
 669          UA      0       5      16      30      65      77      84      90      94      97
 670          UA    100

 671          KK   184C
 672          KM   SUB-BASIN 184C
 673          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 674          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 675          BA   .014
 676          LG   .097    .250   5.700    .170  24.400
 677          UC   .133    .163
 678          UA      0       5      16      30      65      77      84      90      94      97
 679          UA    100

 680          KK   184D
 681          KM   SUB-BASIN 184D
 682          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 683          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 684          BA   .007
 685          LG   .050    .250   5.700    .170  23.860
 686          UC   .171    .440
 687          UA      0       5      16      30      65      77      84      90      94      97
 688          UA    100

 689          KK   NCL1
 690          KM   NORTH COLONY WASH CONCENTRATION POINT 1 - COMBINES 184C, 184D
 691          HC      2

 692          KK   RNCL1
 693          KM   ROUTE NCL1 THROUGH SUB-BASIN 184E TO CON. POINT NCL2
 694          RS      1    FLOW       0
 695          RC   0.04    0.04    0.04     321    .097
 696          RX   9795    9850    9925    9970   10010   10055   10080   10115
 697          RY   1566    1562    1558    1544    1544    1552    1560    1570
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 698          KK    184E
 699          KM   SUB-BASIN 184E
 700          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 701          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 702          BA    .109
 703          LG    .148    .250   5.700    .206   7.710
 704          UC    .396    .494
 705          UA       0       5      16      30      65      77      84      90      94      97
 706          UA     100

 707          KK    NCL2
 708          KM   NORTH COLONY WASH CONCENTRATION POINT 2 - COMBINES RNCL1, 184E
 709          HC       2

 710          KK   SNCL2
 711          KM   ROUTE THROUGH 60" CMP CULVER AT MIMOSA DRIVE
 712          RS       1    ELEV 1739.67
 713          SQ       0      37     115     222     350
 714          SE  1739.7  1742.2  1744.7  1749.7  1759.9
 715          SA   0.001    0.04     1.4
 716          SE    1742    1744    1758

 717          KK    184F
 718          KM   SUB-BASIN 184F
 719          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 720          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 721          BA    .007
 722          LG    .050    .250   5.700    .170  29.320
 723          UC    .162    .384
 724          UA       0       5      16      30      65      77      84      90      94      97
 725          UA     100

 726          KK   R184F
 727          KM   ROUTE 184F THROUGH SUB-BASIN 184G TO CON. POINT NCL3
 728          RS       1    FLOW       0
 729          RC    0.04    0.04    0.04     349   0.136
 730          RX    9975    9980    9985    9986   10014   10015   10020   10025
 731          RY  1725.5  1725.5  1725.5    1725    1725  1725.5  1725.5  1725.5

 732          KK    NCL3
 733          KM   NORTH COLONY WASH CONCENTRATION POINT 3 - COMBINES SNCL2, R184F
 734          HC       2

 735          KK   RNCL3
 736          KM   ROUTE NCL3 THROUGH SUB-BASIN 184G TO MOUNTAIN SITE CULVERT INLET
 737          RS       1    FLOW       0
 738          RC    0.04    0.04    0.04     365   0.016
 739          RX    9875    9950    9970    9995   10010   10020   10055   10130
 740          RY    1756    1752    1740    1736    1736    1738    1758    1762
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 741          KK   SNCL3
 742          KM   ROUTE THROUGH 60" CMP CULVER AT MOUNTAIN SIDE DRIVE
 743          RS       1    ELEV 1732.65
 744          SQ       0      37     115     222     255
 745          SE  1732.7  1735.2  1737.7  1742.7  1744.7
 746          SA       0    0.03    0.32
 747          SE    1732    1734    1746

 748          KK    184A
 749          KM   SUB-BASIN 184A
 750          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 751          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 752          BA    .019
 753          LG    .051    .250   5.700    .170  32.210
 754          UC    .162    .213
 755          UA       0       5      16      30      65      77      84      90      94      97
 756          UA     100

 757          KK   R184A
 758          KM   ROUTE 184A THROUGH SUB-BASIN 184B TO CON. POINT NCL4A
 759          RS            FLOW       0
 760          RC    0.02    0.02    0.02    4359   0.037
 761          RX    9975    9980    9985    9986   10014   10015   10020   10025
 762          RY  1870.5  1870.5  1870.5    1870    1870  1870.5  1870.5  1870.5

 763          KK    184B
 764          KM   SUB-BASIN 184B
 765          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 766          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 767          BA    .023
 768          LG    .099    .250   5.700    .188  23.090
 769          UC    .204    .376
 770          UA       0       5      16      30      65      77      84      90      94      97
 771          UA     100

 772          KK   NCL4A
 773          KM   NORTH COLONY WASH CONCENTRATION POINT 4A - COMBINES R184A, 184B
 774          HC       2

 775          KK  RNCL4A
 776          KM   ROUTE NCL4A THROUGH SUB-BASIN 184G TO CON. POINT NCL4
 777          RS       3    FLOW       0
 778          RC    0.02    0.02    0.02     863   0.103
 779          RX    9975    9980    9985    9986   10014   10015   10020   10025
 780          RY  1810.5  1810.5  1810.5    1810    1810  1810.5  1810.5  1810.5

 781          KK    NCL4
 782          KM   NORTH COLONY WASH CONCENTRATION POINT 4 - COMBINES SNCL3, RNC4A
 783          HC       2
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 784          KK   RNCL4
 785          KM   ROUTE NCL4 THROUGH SUB-BASIN 184G TO CON. POINT NCL5
 786          RS       3    FLOW       0
 787          RC    0.04    0.04    0.04    1350   0.027
 788          RX    9865    9930    9960    9995   10005   10020   10133   10200
 789          RY    1730    1720    1716    1708    1708    1710    1714    1730

 790          KK    184G
 791          KM   SUB-BASIN 184G
 792          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 793          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 794          BA    .053
 795          LG    .150    .250   5.700    .207   4.120
 796          UC    .221    .181
 797          UA       0       5      16      30      65      77      84      90      94      97
 798          UA     100

 799          KK    NCL5
 800          KM   NORTH COLONY WASH CONCENTRATION POINT 5 - COMBINES RNCL4, 184G
 801          HC       2

 802          KK   SNCL5
 803          KM   ROUTE THROUGH 60" CMP CULVER AT FOUNTAIN HILL BLV
 804          RS       1    ELEV 1691.39
 805          SQ       0      37     115     222     340
 806          SE  1691.4  1693.9  1696.4  1701.4    1706
 807          SA       0   0.005    2.15
 808          SE  1691.4    1694    1706

 809          KK    184H
 810          KM   SUB-BASIN 184H
 811          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 812          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 813          BA    .012
 814          LG    .100    .250   5.700    .179  35.750
 815          UC    .179    .295
 816          UA       0       5      16      30      65      77      84      90      94      97
 817          UA     100

 818          KK    183A
 819          KM   SUB-BASIN 183A
 820          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 821          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 822          BA    .043
 823          LG    .150    .250   5.700    .198  24.050
 824          UC    .146    .118
 825          UA       0       5      16      30      65      77      84      90      94      97
 826          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 827          KK   R183A
 828          KM   ROUTE 183A THROUGH SUB-BASIN 183B TO CON. POINT NCL6A
 829          RS       4    FLOW       0
 830          RC    0.04    0.04    0.04    1450    0.03
 831          RX    9870    9925    9960    9985   10040   10108   10155   10210
 832          RY    1750    1740    1734    1732    1732    1734    1742    1754

 833          KK    183B
 834          KM   SUB-BASIN 183B
 835          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 836          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 837          BA    .041
 838          LG    .150    .250   5.700    .207    .650
 839          UC    .217    .181
 840          UA       0       5      16      30      65      77      84      90      94      97
 841          UA     100

 842          KK   NCL6A
 843          KM   NORTH COLONY CONCENTRATION POINT 6A - COMBINE R183A, 183B
 844          HC       2

 845          KK  SNCL6A
 846          KM   STORAGE PONDING BY FOUNTAIN HILLS BLVD
 847          RS       1    ELEV    1722
 848          SQ       0       1     120    1030
 849          SE    1722    1729    1730    1731
 850          SA    0.99    3.14    3.24
 851          SE    1722    1729    1730

 852          KK  RNCL6A
 853          KM   ROUTE SNCL6A THROUGH SUB-BASIN 184H TO CON. POINT NCL6
 854          RS       2    FLOW       0
 855          RC    0.02    0.02    0.02     910   0.027
 856          RX    9975    9980    9985    9986   10014   10015   10020   10025
 857          RY  1716.5  1716.5  1716.5    1716    1716  1716.5  1716.5  1716.5

 858          KK    NCL6
 859          KM   NORTH COLONY WASH CONCENTRATION POINT 6 - COMBINES SNCL5, RNCL6A
 860          HC       3

 861          KK   RNCL6
 862          KM   ROUTE NCL6 THROUGH SUB-BASIN 184I TO CON. POINT NCL7
 863          RS       3    FLOW       0
 864          RC    0.04    0.04    0.04    1492   0.032
 865          RX    9800    9865    9940    9975   10005   10040   10110   10190
 866          RY    1690    1680    1670    1666    1666    1676    1676    1690

 867          KK    184I
 868          KM   SUB-BASIN 184I
 869          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 870          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 871          BA    .031
 872          LG    .150    .250   5.700    .198  29.250
 873          UC    .179    .187
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 874          UA       0       5      16      30      65      77      84      90      94      97
 875          UA     100

 876          KK    NCL7
 877          KM   NORTH COLONY WASH CONCENTRATION POINT 7 - COMBINES RNCL6, 184I
 878          HC       2

 879          KK   SNCL7
 880          KM   ROUTE THROUGH A 66" AND 60" CMP CULVER AT LA MONTANA DRIVE
 881          RS       1    ELEV  1656.9
 882          SQ       0      90     240     278     525
 883          SE  1656.9  1659.7  1661.9  1662.4  1667.9
 884          SA       0    0.06    1.11
 885          SE  1656.9    1660    1668

 886          KK   RNCL7
 887          KM   ROUTE SNCL7 THROUGH SUB-BASIN 184J TO CON. POINT NCL8
 888          RS       2    FLOW       0
 889          RC    0.04    0.04    0.04     885    0.02
 890          RX    9955    9963    9980    9995   10005   10040   10070   10240
 891          RY    1678    1674    1666    1660    1660    1674    1686    1688

 892          KK    184J
 893          KM   SUB-BASIN 184J
 894          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 895          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 896          BA    .008
 897          LG    .150    .250   5.700    .187  22.750
 898          UC    .162    .204
 899          UA       0       5      16      30      65      77      84      90      94      97
 900          UA     100

 901          KK    NCL8
 902          KM   NORTH COLONY WASH CONCENTRATION POINT 8 - COMBINES RNCL7, 184J
 903          HC       2

 904          KK   SNCL8
 905          KM   ROUTE THROUGH 60" CMP CULVER AT CHANA
 906          RS       1    ELEV 1629.38
 907          SQ       0      37     115     195     952
 908          SE  1629.4  1631.9  1634.4  1637.8  1639.4
 909          SA       0   .0002     .08
 910          SE  1639.4    1632    1638

 911          KK   RNCL8
 912          KM   ROUTE SNCL8 THROUGH SUB-BASIN 184K TO CON. POINT NCL9
 913          RS       1    FLOW       0
 914          RC    0.04    0.04    0.04     448   0.084
 915          RX    9930    9945    9970    9990   10000   10035   10065   10080
 916          RY    1646    1640    1628    1618    1618    1622    1630    1632
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 917          KK    184K
 918          KM   SUB-BASIN 184K
 919          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 920          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 921          BA    .004
 922          LG    .150    .250   5.700    .198  26.000
 923          UC    .121    .141
 924          UA       0       5      16      30      65      77      84      90      94      97
 925          UA     100

 926          KK    NCL9
 927          KM   NORTH COLONY WASH CONCENTRATION POINT 9 - COMBINES RNCL9, 184K
 928          HC       2

 929          KK   RNCL9
 930          KM   ROUTE NCL  THROUGH SUB-BASIN 180N
 931          RS       2    FLOW       0
 932          RC    0.04    0.04    0.04    1065   0.011
 933          RX    9890    9915    9940    9990   10010   10050   10080   10115
 934          RY    1610    1598    1596    1590    1590    1596    1598    1612

 935          KK    CLN5
 936          KM   COLONY WASH CONCENTRATION POINT 5 - COMBINE  RCLN4, 180N, RNCL9
 937          HC       3

 938          KK   SCLN5
 939          KM   ROUTE CLN5 THROUGH 72" CMP CULVERT AT SAGUARO BLV.
 940          RS       1    ELEV 1584.83
 941          SQ       0      45     145     310     345     755
 942          SE  1584.8  1587.3  1589.8  1594.8  1595.9    1598
 943          SA       0    0.18    2.09
 944          SE  1584.8    1588    1596

 945          KK    180K
 946          KM   SUB-BASIN 180K
 947          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 948          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 949          BA    .029
 950          LG    .050    .250   5.700    .170  46.930
 951          UC    .183    .208
 952          UA       0       5      16      30      65      77      84      90      94      97
 953          UA     100

 954          KK   R180K
 955          KM   ROUTE 180K THROUGH SUB-BASIN 180L TO CON. POINT CLN6
 956          RS       1    FLOW       0
 957          RC    0.02    0.02    0.02     390  0.0018
 958          RX    9945    9952    9960  9960.5 10039.5   10040   10048   10055
 959          RY  1600.5  1600.5  1600.5    1600    1600  1600.5  1600.5  1600.5
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  960         KK    180L
  961         KM   SUB-BASIN 180L
  962         KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
  963         KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
  964         BA    .013
  965         LG    .061    .250   5.700    .170  49.940
  966         UC    .112    .103
  967         UA       0       5      16      30      65      77      84      90      94      97
  968         UA     100

  969         KK    CLN6
  970         KM   COLONY WASH CONCENTRATION POINT 6 - COMBINE RCLN6A, SCLN5, 180L
  971         HC       3

  972         KK   RCLN6
  973         KM   ROUTE CLN6 THROUGH SUB-BASIN 1800 TO CON. POINT CLN7
  974         RS       3    FLOW       0
  975         RC    0.04    0.04    0.04    1427   0.018
  976         RX    9790    9900    9920    9993   10000   10045   10085   10100
  977         RY    1586    1584    1580    1572    1572    1586    1588    1590

  978         KK    1800
  979         KM   SUB-BASIN 1800
  980         KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
  981         KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
  982         BA    .019
  983         LG    .080    .250   5.700    .176  42.300
  984         UC    .162    .185
  985         UA       0       5      16      30      65      77      84      90      94      97
  986         UA     100

  987         KK   *CLN7
  988         KM   COLONY WASH CONCENTRATION POINT *7 - RCLN6, 1800
  989         HC       2

  990         KK    182G
  991         KM   SUB-BASIN 182G
  992         KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
  993         KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
  994         BA    .048
  995         LG    .061    .250   5.700    .170  51.890
  996         UC    .279    .398
  997         UA       0       5      16      30      65      77      84      90      94      97
  998         UA     100

  999         KK    182I
 1000         KM   SUB-BASIN 182I
 1001         KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 1002         KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 1003         BA    .040
 1004         LG    .070    .250   5.700    .170  47.410
 1005         UC    .271    .352
 1006         UA       0       5      16      30      65      77      84      90      94      97
 1007         UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1008          KK     FC1
1009          KM   FOUNTAIN CHANNEL CONC. POINT 1 - COMBINE 182G, 182I
1010          HC       2

1011          KK    RFC1
1012          KM   ROUTE FC1 THROUGH SUB-BASIN 182E
1013          RS       1    FLOW       0
1014          RC     .02     .02     .02     570    .012
1015          RX    9958    9963    9968  9968.5 10031.5   10032   10037   10042
1016          RY  1610.6  1610.5  1610.5    1610    1610  1610.5  1610.5  1610.6

1017          KK    182D
1018          KM   SUB-BASIN 182D
1019          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1020          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
1021          BA    .094
1022          LG    .100    .250   5.700    .188  18.850
1023          UC    .221    .177
1024          UA       0       5      16      30      65      77      84      90      94      97
1025          UA     100

1026          KK   R182D
1027          KM   ROUTE 182D THROUGH SUB-BASIN 182E
1028          RS       4    FLOW       0
1029          RC     .02     .02     .02    1994    .021
1030          RX    9958    9963    9968  9968.5 10031.5   10032   10037   10042
1031          RY  1610.6  1610.5  1610.5    1610    1610  1610.5  1610.5  1610.6

1032          KK    182E
1033          KM   SUB-BASIN 182E
1034          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1035          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
1036          BA    .064
1037          LG    .091    .250   5.700    .170  40.860
1038          UC    .225    .191
1039          UA       0       5      16      30      65      77      84      90      94      97
1040          UA     100

1041          KK    182F
1042          KM   SUB-BASIN 182F
1043          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1044          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1045          BA    .015
1046          LG    .050    .250   5.700    .170  41.910
1047          UC    .233    .448
1048          UA       0       5      16      30      65      77      84      90      94      97
1049          UA     100

1050          KK     FC2
1051          KM   FOUNTAIN CHANNEL CONC. POINT 2 - COMBINE RFC1, R182D, 182E, 182F
1052          HC       4
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1053          KK    SFC2
1054          KM   CATCH BASIN (2X3 AND TRIANGULAR), CULVERT UNDER SAGUARO BLVD AND SPILLWAY
1055          RS       1    ELEV    1596
1056          SQ       0    10.4      41     181     482     913
1057          SE    1596  1596.2  1596.5    1597  1597.5    1598
1058          SA   0.001    0.48    0.80
1059          SE    1596  1596.5    1597

1060          KK    RFC2
1061          KM   ROUTE SFC2 TO THROUGH SUB-BASIN 182J TO FC3 IN MIDDLE OF 182J
1062          RS       2    FLOW       0
1063          RC     .04     .04     .04    1050    .011
1064          RX    9960    9970    9975    9980   10040   10090   10150   10220
1065          RY  1584.5    1584    1583    1582    1582    1590    1592    1594

1066          KK    DFC2
1067          KM   DIVERSION INTO FOUNTAIN LAKE
1068          DT   DOFC2
1069          DI       0     250     350     400     500     650     750     800
1070          DQ       0       0       4      19      63     184     274     320

1071          KK    182A
1072          KM   SUB-BASIN 182A
1073          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1074          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
1075          BA    .050
1076          LG    .150    .250   5.700    .189   4.500
1077          UC    .183    .143
1078          UA       0       5      16      30      65      77      84      90      94      97
1079          UA     100

1080          KK   R182A
1081          KM   ROUTE SUB-BASIN 182A THROUGH SUB-BASIN 182B
1082          RS       4    FLOW       0
1083          RC     .02     .02     .02    1950    .025
1084          RX    9975    9980    9985    9986   10014   10015   10020   10025
1085          RY  1620.6  1620.5  1620.5    1620    1620  1620.5  1620.5  1620.6

1086          KK    182B
1087          KM   SUB-BASIN 182B
1088          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1089          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
1090          BA    .039
1091          LG    .095    .250   5.700    .170  15.330
1092          UC    .217    .227
1093          UA       0       5      16      30      65      77      84      90      94      97
1094          UA     100

1095          KK    FC3A
1096          KM   FOUNTAIN CHANNEL CONC. POINT 3A - COMBINE R182A, 182B
1097          HC       2
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1098          KK   SFC3A
1099          KM   CATCH BASIN AND SPILL WAY AT SAGUARO BLVD
1100          RS       1    ELEV    1596
1101          SQ       0     6.4    18.1    45.6    68.2     820    1450
1102          SE    1596  1596.2  1596.4  1596.7    1597    1598  1598.5
1103          SA       0     0.6
1104          SE    1596    1597

1105          KK    182C
1106          KM   SUB-BASIN 182C
1107          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1108          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1109          BA    .022
1110          LG    .078    .250   5.700    .170  35.710
1111          UC    .204    .279
1112          UA       0       5      16      30      65      77      84      90      94      97
1113          UA     100

1114          KK    FC3B
1115          KM   FOUNTAIN CHANNEL CONC. POINT 3B - COMBINE 182C, SFC3A
1116          HC       2

1117          KK   RFC3B
1118          KM   ROUTE FC3B THROUGH 182J TO MAIN CHANNEL IN MIDDLE OF 182J
1119          RS       3    FLOW       0
1120          RC     .03     .02     .03     210   0.067
1121          RX    9900    9950    9993    9996   10004   10007   10050   10100
1122          RY    1583    1582  1581.5    1580    1580  1581.5    1582    1583

1123          KK     FC3
1124          KM   FOUNTAIN CHANNEL CONC. POINT 3 - COMBINE RFC3B, DFC2
1125          HC       2

1126          KK    RFC4
1127          KM   ROUTE FC5 THROUGH REMAINDER OF 182J
1128          RS       1    FLOW       0
1129          RC     .04     .04     .04     572    .009
1130          RX    9960    9970    9975    9980   10040   10090   10150   10220
1131          RY  1584.5    1584    1583    1582    1582    1590    1592    1594

1132          KK    182J
1133          KM   SUB-BASIN 182J
1134          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1135          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1136          BA    .015
1137          LG    .134    .250   5.700    .193   3.680
1138          UC    .242    .337
1139          UA       0       5      16      30      65      77      84      90      94      97
1140          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1141          KK     FC4
1142          KM   FOUNTAIN CHANNEL CONC. POINT 4 - COMBINE RFC3, 182J
1143          HC       2

1144          KK    SFC4
1145          KM   ROUTE FC4 THROUGH 2-4'X10' BOX CULVERTS UNDER EL LAGO BLVD
1146          RS       1    ELEV  1577.4
1147          SQ       0     170     460     780    1110
1148          SE  1577.4  1579.4  1581.4  1583.8  1585.4
1149          SA       0     .34       2
1150          SE  1577.4    1580    1584

1151          KK    DFHN
1152          KM   DIVERTED FLOW FROM FOUNTAIN HILLS NORTH
1153          BA       1
1154          QI       0

1155          KK    183F
1156          KM   SUB-BASIN 183F
1157          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1158          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
1159          BA    .049
1160          LG    .150    .250   5.700    .207   6.500
1161          UC    .213    .236
1162          UA       0       5      16      30      65      77      84      90      94      97
1163          UA     100

1164          KK    183G
1165          KM   SUB-BASIN 183G
1166          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1167          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
1168          BA    .093
1169          LG    .150    .250   5.700    .207  13.810
1170          UC    .258    .237
1171          UA       0       5      16      30      65      77      84      90      94      97
1172          UA     100

1173          KK    183H
1174          KM   SUB-BASIN 183H
1175          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1176          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1177          BA    .018
1178          LG    .150    .250   5.700    .204  34.450
1179          UC    .133    .125
1180          UA       0       5      16      30      65      77      84      90      94      97
1181          UA     100

1182          KK     LC1
1183          KM   LAGO CHANNEL CONC. POINT 2 - COMBINE 183F, 183G, 183H, DFHN
1184          HC       4
```

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

1185          KK    RLC1
1186          KM   ROUTE LC1 THROUGH SUB-BASIN 183I
1187          RS       4    FLOW       0
1188          RC     .02     .02     .02    2002    .023
1189          RX    9958    9963    9968  9968.5 10031.5   10032   10037   10042
1190          RY  1620.7  1620.6  1620.5    1620    1620  1620.5  1620.6  1620.7

1191          KK    183I
1192          KM   SUB-BASIN 183I
1193          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1194          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
1195          BA    .057
1196          LG    .100    .250   5.700    .170  21.010
1197          UC    .225    .201
1198          UA       0       5      16      30      65      77      84      90      94      97
1199          UA     100

1200          KK    183J
1201          KM   SUB-BASIN 183J
1202          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1203          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1204          BA    .005
1205          LG    .050    .250   5.700    .170  86.820
1206          UC    .100    .122
1207          UA       0       5      16      30      65      77      84      90      94      97
1208          UA     100

1209          KK     LC2
1210          KM   LAGO CHANNEL CONC. POINT 2 - COMBINE RLC1, 183I, 183J
1211          HC       3

1212          KK    SLC2
1213          KM   ROUTE LC3 THROUGH ACROSS ROAD CATCH BASIN AT SAGUARO BLVD & EL LAGO BLVD
1214          RS       1    ELEV    1598
1215          SQ       0      27     110     300     966
1216          SE    1598  1598.2  1598.5    1599    1600
1217          SA   0.002    0.37
1218          SE    1598    1599

1219          KK    RLC2
1220          KM   ROUTE SLC2 THROUGH SUB-BASIN 183K
1221          RS       1    FLOW       0
1222          RC     .02     .02     .02     521    .029
1223          RX    9958    9963    9968  9968.5 10031.5   10032   10037   10042
1224          RY  1592.7  1592.6  1592.5    1592    1592  1592.5  1592.6  1592.7

1225          KK    183K
1226          KM   SUB-BASIN 183K
1227          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1228          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1229          BA    .002
1230          LG    .050    .250   5.700    .170  90.000
1231          UC    .083    .128
1232          UA       0       5      16      30      65      77      84      90      94      97
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1233          UA     100

1234          KK     LC3
1235          KM   LAGO CHANNEL CONC. POINT 3 - COMBINE SLC2, 183K
1236          HC       2

1237          KK   D183K
1238          KM   DIVERSION OF 183K INTO 181B
1239          DT  DO183K
1240          DI       1      10     100    1000
1241          DQ       0       0       5     100

1242          KK     FC5
1243          KM   FOUNTAIN CHANNEL CONC. POINT 5 - COMBINE SFC4, RFC5
1244          HC       2

1245          KK    RFC5
1246          KM   ROUTE FC5 THROUGH SUB-BASIN 182K TO CONC. POINT
1247          RS       1    FLOW       0
1248          RC     .04     .04     .04     502    .005
1249          RX    9930    9940    9960    9980   10015   10035   10085   10180
1250          RY    1586    1584    1580    1576    1576    1578    1588    1590

1251          KK    182K
1252          KM   SUB-BASIN 182K
1253          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1254          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1255          BA    .024
1256          LG    .093    .250   5.700    .170  19.840
1257          UC    .142    .094
1258          UA       0       5      16      30      65      77      84      90      94      97
1259          UA     100

1260          KK     FC6
1261          KM   FOUNTAIN CHANNEL CONC. POINT 6 - COMBINE RFC5, 182K
1262          HC       2

1263          KK    RFC6
1264          KM   ROUTE FC6 THROUGH SUB-BASIN 182L TO CONC. POINT FC7
1265          RS       2    FLOW       0
1266          RC     .04     .04     .04     670    .021
1267          RX    9880    9920    9960    9975   10025   10035   10045   10250
1268          RY    1582    1581    1580    1574    1574    1576    1578    1580

1269          KK    182L
1270          KM   SUB-BASIN 182L
1271          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1272          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1273          BA    .005
1274          LG    .111    .250   5.700    .174  51.380
1275          UC    .108    .126
1276          UA       0       5      16      30      65      77      84      90      94      97
1277          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1278          KK     FC7
1279          KM   FOUNTAIN CHANNEL CONC. POINT 7 - COMBINE RFC6, 182L
1280          HC       2

1281          KK    CLN7
1282          KM   COLONY WASH CONCENTRATION POINT 7 - COMBINE (RCLN6, 180O) FC7
1283          HC       2

1284          KK   RCLN7
1285          KM   ROUTE CLN7 THROUGH SUB-BASIN 180P TO CON. POINT CLN8
1286          RS       2    FLOW       0
1287          RC    0.04    0.04    0.04     631   0.022
1288          RX    9847    9860    9985    9995   10005   10040   10075   10125
1289          RY    1562    1554    1552    1550    1550    1552    1558    1556

1290          KK    180P
1291          KM   SUB-BASIN 180P
1292          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1293          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1294          BA    .011
1295          LG    .092    .250   5.400    .202  26.090
1296          UC    .133    .131
1297          UA       0       5      16      30      65      77      84      90      94      97
1298          UA     100

1299          KK   *CLN8
1300          KM   COLONY WASH CONCENTRATION POINT *8 - RCLN7, 180P
1301          HC       2

1302          KK    181A
1303          KM   SUB-BASIN 181A
1304          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1305          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
1306          BA    .079
1307          QI       0

1308          KK   R181A
1309          KM   ROUTE R181A THROUGH SUB-BASIN 181B
1310          RS       3    FLOW       0
1311          RC     .04     .04     .04    1268    .022
1312          RX    9960    9960    9970    9985   10005   10035   10110   10220
1313          RY    1574    1568    1568    1566    1566    1572    1574    1578

1314          KK    181B
1315          KM   SUB-BASIN 181B
1316          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1317          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1318          BA    .022
1319          LG    .063    .250   5.300    .204  31.650
1320          UC    .225    .311
1321          UA       0       5      16      30      65      77      84      90      94      97
1322          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1323          KK   D183K
1324          KM   FLOW FROM DIVERSION AT 183K THROUGH SUB-BASIN 181B
1325          DR  DO183K

1326          KK   R183K
1327          KM   ROUTE DIVERTED FLOW FROM 183K THROUGH SUB-BASIN 181B THROUGH STREET
1328          RS       2    FLOW       0
1329          RC    0.02    0.02    0.02    1145   0.011
1330          RX    9955    9963    9968  9968.5 10031.5   10032   10034   10045
1331          RY  1580.7  1580.6  1580.5    1580    1580  1580.5  1580.6  1580.7

1332          KK   R183K
1333          KM   ROUTE DIVERTED FLOW FROM STREET THROUGH 181B
1334          RS       3    FLOW       0
1335          RC    0.04   0.004    0.04    1145   0.023
1336          RX    9960    9960    9970    9985   10005   10035   10110   10220
1337          RY    1574    1574    1568    1566    1566    1572    1574    1578

1338          KK    CLN8
1339          KM   COLONY WASH CONCENTRATION POINT 8 - COMBINE (RCLN7,180P),R181A,180B,RD183K
1340          HC       4

1341          KK   SCLN8
1342          KM   ROUTE CLN8 THROUGH 4-6'X8' BOX CULVERT AT PANORAMA BLV.
1343          RS       1    ELEV 1546.44
1344          SQ       0     416    1184    2368
1345          SE  1546.4  1549.4  1552.4    1558
1346          SA       0     0.1    1.71
1347          SE  1546.4    1548    1555

1348          KK    180S
1349          KM   SUB-BASIN 180S
1350          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1351          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1352          BA    .035
1353          LG    .052    .250   5.600    .180  69.060
1354          UC    .129    .124
1355          UA       0       5      16      30      65      77      84      90      94      97
1356          UA     100

1357          KK   170I1
1358          KM   SUB-BASIN 170I-1
1359          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1360          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1361          BA    .022
1362          LG    .075    .250   5.700    .170  38.250
1363          UC    .192    .260
1364          UA       0       5      16      30      65      77      84      90      94      97
1365          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1366          KK  D170I1
1367          KM   DIVERSION AT INTERSECTION OF SAGUARO AND PANORAMA
1368          DT  D170I1
1369          DI       1      10     100    1000
1370          DQ     0.5       5      50     500

1371          KK  R170I1
1372          KM   ROUTE 170I1 (DIVERTED FLOW) THROUGH SUB-BASIN 180S TO CLN9
1373          RS       2    FLOW       0
1374          RC    0.02    0.02    0.02    1088   0.035
1375          RX    9975    9980    9985    9986   10014   10015   10020   10025
1376          RY  1575.5  1575.5  1575.5    1575    1575  1575.5  1575.5  1575.5

1377          KK    CLN9
1378          KM   COLONY WASH CONCENTRATION POINT 9 - COMBINE SCLN8, RD170I-1, 180S
1379          HC       3

1380          KK   RCLN9
1381          KM   ROUTE CLN9 THROUGH SUB-BASIN 180U TO CON. POINT CLN10
1382          RS       4    FLOW       0
1383          RC    0.04    0.04    0.04    1999   0.015
1384          RX    9790    9805    9945    9965   10035   10060   10100   10110
1385          RY    1534    1532    1532    1528    1528    1530    1538  1538.5

1386          KK    180U
1387          KM   SUB-BASIN 180U
1388          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1389          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1390          BA    .019
1391          LG    .145    .250   3.810    .540  12.120
1392          UC    .217    .299
1393          UA       0       5      16      30      65      77      84      90      94      97
1394          UA     100

1395          KK  *CLN10
1396          KM   COLONY WASH CONCENTRATION POIT *10 - COMBINE RCLN9, 180U
1397          HC       2

1398          KK    180Q
1399          KM   SUB-BASIN 180Q
1400          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1401          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1402          BA    .032
1403          LG    .107    .250   5.400    .190  37.820
1404          UC    .200    .233
1405          UA       0       5      16      30      65      77      84      90      94      97
1406          UA     100

1407          KK    180R
1408          KM   SUB-BASIN 180R
1409          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1410          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1411          BA    .027
1412          LG    .150    .250   4.800    .305   4.500
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1413          UC    .179    .173
1414          UA       0       5      16      30      65      77      84      90      94      97
1415          UA     100

1416          KK   170I2
1417          KM   SUB-BASIN 170I-2
1418          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1419          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1420          BA    .012
1421          LG    .050    .250   5.700    .170  62.990
1422          UC    .125    .184
1423          UA       0       5      16      30      65      77      84      90      94      97
1424          UA     100

1425          KK  D170I1
1426          KM   FLOW FROM SUB-BASIN 170I-1
1427          DR  D170I1

1428          KK  R170I1
1429          KM   ROUTED FLOW FROM 170I1 THROUGH 170I2 TO MLT6A
1430          RS       4    FLOW       0
1431          RC    0.02    0.02    0.02    1738   0.025
1432          RX    9945    9952    9960  9960.5 10039.5   10040   10048   10055
1433          RY  1570.5  1570.5  1570.5    1570    1570  1570.5  1570.5  1570.5

1434          KK   MLT6A
1435          KM   MALTA DRAIN CONCENTRATION POINT 6A - COBINE R170I1, 170I2
1436          HC       2

1437          KK  DMLT6A
1438          KM   DIVERSION AT INTERSECTION OF SAGUARO AND EL PUEBLO
1439          DT  D170I2
1440          DI       1      10     100    1000
1441          DQ     0.5       5      50     500

1442          KK  RMLT6A
1443          KM   ROUTE MLT6A (DIVERTED FLOW) THROUGH SUB-BASIN 180R TO CLN10A
1444          RS       2    FLOW       0
1445          RC    0.02    0.02    0.02    1050   0.020
1446          RX    9975    9980    9985    9986   10014   10015   10020   10025
1447          RY  1540.5  1540.5  1540.5    1540    1540  1540.5  1540.5  1540.5

1448          KK   CL10A
1449          KM   COLONY WASH CONCENTRATION POINT 10A - COMBINE 180Q, 180R, RMLT6A
1450          HC       3

1451          KK  RCL10A
1452          KM   ROUTE CLN10A THROUGH SUB-BASIN 180U TO CON. POINT CLN10
1453          RS       1    FLOW       0
1454          RC    0.04    0.04    0.04     572   0.026
1455          RX    9790    9805    9945    9965   10035   10060   10100   10110
1456          RY    1534    1532    1532    1528    1528    1530    1538  1538.5
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1457          KK  *CLN10
1458          KM   COLONY WASH CONCENTRATION POINT *10 - COMBINE (RCLN9, 180U), RCLN10A
1459          HC       2

1460          KK    180T
1461          KM   SUB-BASIN 180T
1462          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1463          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
1464          BA    .023
1465          LG    .100    .250   5.000    .230  67.500
1466          UC    .158    .181
1467          UA       0       5      16      30      65      77      84      90      94      97
1468          UA     100

1469          KK   CLN10
1470          KM   COLONY WASH CONCENTRATION POINT 10 - COMBINE ((RCLN9,180U), RCLN10A), 180T
1471          HC       2
1472          ZZ
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SCHEMATIC DIAGRAM OF STREAM NETWORK

```
LINE     (V) ROUTING          (--->) DIVERSION OR PUMP FLOW

NO.      (.) CONNECTOR        (<---) RETURN OF DIVERTED OR PUMPED FLOW

 16        185A
            V
            V
 25       R185A
            .
            .
 31         .        185B
            .           .
            .           .
 40       IRW1............
            V
            V
 43       SIRW1
            .
            .
 50         .        180A
            .           V
            .           V
 59         .       R180A
            .           .
            .           .
 65         .           .        180B
            .           .           .
            .           .           .
 74       IRW2........................
            V
            V
 77       RIRW2
            .
            .
 83         .        186A
            .           .
            .           .
 92         .           .        186B
            .           .           V
            .           .           V
101         .           .       R186B
            .           .           .
            .           .           .
107         .       SNB1A............
            .           V
            .           V
110         .      RSNB1A
            .           .
            .           .
116         .           .        186C
            .           .           V
            .           .           V
125         .           .       R186C
            .           .           .
            .           .           .
131         .           .           .        186D
            .           .           .           .
            .           .           .           .
140         .        SNB1........................
            .           V
            .           V
143         .       RSNB1
            .           .
            .           .
149         .           .        186E
            .           .           .
            .           .           .
            .           .           .        186F
            .           .           .           .
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                 .          .          .
                 .          .          .
                 .   SNB2...............
                 .      V
                 .      V
170              .   RSNB2
                 .      .
                 .      .
176              .      .      186G
                 .      .        .
                 .      .        .
185              .   SNB3............
                 .      V
                 .      V
188              .   SSNB3
                 .      .
                 .      .
195              .      .      186H
                 .      .        .
                 .      .        .
204              .      .        .      160E
                 .      .        .        V
                 .      .        .        V
213              .      .        .     R160E
                 .      .        .        .
                 .      .        .        .
219              .   SNB4...............
                 .      V
                 .      V
222              .   RSNB4
                 .      .
                 .      .
228              .      .      186I
                 .      .        .
                 .      .        .
237              .   *SNB5...........
                 .      .
                 .      .
240              .      .      187A
                 .      .        V
                 .      .        V
249              .      .     R187A
                 .      .        .
                 .      .        .
255              .      .        .      187B
                 .      .        .        .
                 .      .        .        .
264              .      .      GRS1............
                 .      .        V
                 .      .        V
267              .      .     RGRS1
                 .      .        .
                 .      .        .
273              .      .        .      187C
                 .      .        .        V
                 .      .        .        V
282              .      .        .     R187C
                 .      .        .        .
                 .      .        .        .
288              .      .        .        .      187D
                 .      .        .        .        .
                 .      .        .        .        .
297              .      .     *GRS2...............
                 .      .        .
                 .      .        .
300              .      .        .      188A
                 .      .        .        V
                 .      .        .        V
309              .      .        .     R188A
                 .      .        .        .
                 .      .        .        .
                 .      .        .        .      188B
                 .      .        .        .        .
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```
                                                  188C
333                    SYR1.......................
                          V
                          V
336                   RSYC1
342                                     188D
351                                                188E
360                    SYR2.......................
                          V
                          V
363                   RSYC2
369                                     188F
378                    SYR3............
                          V
                          V
381                   SSYC3
                          V
                          V
388                   RSYC3
394                                     188G
403                    SYR4............
406                GRS2............
                      V
                      V
409                SGRS2
416                    187E
                          V
                          V
425                   R187E
431                                     187F
440                   GRS3A............
                          V
                          V
443                  RGRS3A
449                                     187G
458                GRS3........................
                      V
                      V
461                RGRS3

                       187H
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                .          .          .          .
                .          .       *SNB5.........
                .          .          .
                .          .          .
479             .       SNB5.........
                .          V
                .          V
482             .      RSNB5
                .          .
                .          .
488             .          .       187I
                .          .          .
                .          .          .
497             .       SNB6.........
                .          V
                .          V
500             .      SSNB6
                .          V
                .          V
507             .      RSNB6
                .          .
                .          .
513             .          .       180F
                .          .          .
                .          .          .
522             .      *CLN1.........
                .          .
                .          .
525          CLN1.........
                V
                V
528         SCLN1
                .
                .
535             .       180C
                .          V
                .          V
544             .      R180C
                .          .
                .          .
550             .          .       180D
                .          .          .
                .          .          .
559             .          .          .       180E
                .          .          .          .
                .          .          .          .
568          CLN2.................................
                V
                V
571         RCLN2
                .
                .
577             .       180G
                .          .
                .          .
586          CLN3.........
                V
                V
589         SCLN3
                .
                .
596             .       180H
                .          V
                .          V
605             .      R180H
                .          .
                .          .
611             .          .       180I
                .          .          V
                .          .          V
[illegible]     .          .      R180I
                .          .          .
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                 .          .          .
                 .          .          .        180J
                 .          .          .          .
                 .          .          .          .
635              .       CLN4B.......................
                 .          V
                 .          V
638              .      RCLN4B
                 .          .
                 .          .
644              .          .       180M
                 .          .          .
                 .          .          .
653          CLN4........................
                V
                V
656          RCLN4
                 .
                 .
662              .       180N
                 .          .
                 .          .
671              .          .       184C
                 .          .          .
                 .          .          .
680              .          .          .        184D
                 .          .          .          .
                 .          .          .          .
689              .          .       NCL1............
                 .          .          V
                 .          .          V
692              .          .      RNCL1
                 .          .          .
                 .          .          .
698              .          .          .        184E
                 .          .          .          .
                 .          .          .          .
707              .          .       NCL2............
                 .          .          V
                 .          .          V
710              .          .      SNCL2
                 .          .          .
                 .          .          .
717              .          .          .        184F
                 .          .          .          V
                 .          .          .          V
726              .          .          .       R184F
                 .          .          .          .
                 .          .          .          .
732              .          .       NCL3............
                 .          .          V
                 .          .          V
735              .          .      RNCL3
                 .          .          V
                 .          .          V
741              .          .      SNCL3
                 .          .          .
                 .          .          .
748              .          .          .        184A
                 .          .          .          V
                 .          .          .          V
757              .          .          .       R184A
                 .          .          .          .
                 .          .          .          .
763              .          .          .          .        184B
                 .          .          .          .          .
                 .          .          .          .          .
772              .          .          .       NCL4A............
                 .          .          .          V
                 .          .          .          V
                 .          .          .      RNCL4A
                 .          .          .          .
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                                  NCL4............
                                     V
                                     V
784                               RNCL4
                                     .
                                     .
790                                  .        184G
                                     .          .
                                     .          .
799                               NCL5............
                                     V
                                     V
802                               SNCL5
                                     .
                                     .
809                                  .        184H
                                     .          .
                                     .          .
818                                  .          .      183A
                                     .          .        V
                                     .          .        V
827                                  .          .     R183A
                                     .          .        .
                                     .          .        .
833                                  .          .        .        183B
                                     .          .        .          .
                                     .          .        .          .
842                                  .          .     NCL6A............
                                     .          .        V
                                     .          .        V
845                                  .          .    SNCL6A
                                     .          .        V
                                     .          .        V
852                                  .          .    RNCL6A
                                     .          .        .
                                     .          .        .
                                  NCL6........................
                                     V
                                     V
861                               RNCL6
                                     .
                                     .
867                                  .        184I
                                     .          .
                                     .          .
876                               NCL7............
                                     V
                                     V
879                               SNCL7
                                     V
                                     V
886                               RNCL7
                                     .
                                     .
892                                  .        184J
                                     .          .
                                     .          .
901                               NCL8............
                                     V
                                     V
904                               SNCL8
                                     V
                                     V
911                               RNCL8
                                     .
                                     .
917                                  .        184K
                                     .          .
                                     .          .
                                  NCL9............
                                     V
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                .          .          V
[illegible]     .          .       RNCL9
                .          .          .
                .          .          .
935          CLN5.......................
                V
                V
938         SCLN5
                .
                .
945             .       180K
                .          V
                .          V
954             .      R180K
                .          .
                .          .
960             .          .       180L
                .          .          .
                .          .          .
969          CLN6.......................
                V
                V
972         RCLN6
                .
                .
978             .       180O
                .          .
                .          .
987         *CLN7............
                .
                .
990             .       182G
                .          .
                .          .
999             .          .       182I
                .          .          .
                .          .          .
[illegible]     .        FC1............
                .          V
                .          V
1011            .      RFC1
                .          .
                .          .
1017            .          .       182D
                .          .          V
                .          .          V
1026            .          .      R182D
                .          .          .
                .          .          .
1032            .          .          .       182E
                .          .          .          .
                .          .          .          .
1041            .          .          .          .       182F
                .          .          .          .          .
                .          .          .          .          .
1050            .        FC2.................................
                .          V
                .          V
1053            .       SFC2
                .          V
                .          V
1060            .       RFC2
                .          .
                .          .
1068            .          .-------->   DOFC2
1066            .       DFC2
                .          .
                .          .
1071            .          .       182A
                .          .          V
                .          .          V
[illegible]     .          .      R182A
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                    .         .         .
                    .         .         .
                    .         .         .        182B
                    .         .         .          .
                    .         .         .          .
1095                .         .      FC3A..........
                    .         .         V
                    .         .         V
1098                .         .      SFC3A
                    .         .         .
                    .         .         .
1105                .         .         .        182C
                    .         .         .          .
                    .         .         .          .
1114                .         .      FC3B..........
                    .         .         V
                    .         .         V
1117                .         .      RFC3B
                    .         .         .
                    .         .         .
1123                .      FC3...........
                    .         V
                    .         V
1126                .      RFC4
                    .         .
                    .         .
1132                .         .      182J
                    .         .         .
                    .         .         .
1141                .      FC4...........
                    .         V
                    .         V
1144                .      SFC4
                    .         .
                    .         .
1151                .         .      DFHN
                    .         .         .
                    .         .         .
1155                .         .         .        183F
                    .         .         .          .
                    .         .         .          .
1164                .         .         .          .        183G
                    .         .         .          .          .
                    .         .         .          .          .
1173                .         .         .          .          .        183H
                    .         .         .          .          .          .
                    .         .         .          .          .          .
1182                .         .      LC1.................................
                    .         .         V
                    .         .         V
1185                .         .      RLC1
                    .         .         .
                    .         .         .
1191                .         .         .        183I
                    .         .         .          .
                    .         .         .          .
1200                .         .         .          .        183J
                    .         .         .          .          .
                    .         .         .          .          .
1209                .         .      LC2........................
                    .         .         V
                    .         .         V
1212                .         .      SLC2
                    .         .         V
                    .         .         V
1219                .         .      RLC2
                    .         .         .
                    .         .         .
1225                .         .         .        183K
                    .         .         .          .
                    .         .         .          .
                    .         .      LC3............
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                .          .          .
                .          .          .
                .          .          .-------> DO183K
1237            .          .      D183K
                .          .          .
                .          .          .
1242            .        FC5...........
                .          V
                .          V
1245            .       RFC5
                .          .
                .          .
1251            .          .       182K
                .          .          .
                .          .          .
1260            .        FC6...........
                .          V
                .          V
1263            .       RFC6
                .          .
                .          .
1269            .          .       182L
                .          .          .
                .          .          .
1278            .        FC7...........
                .          .
                .          .
1281         CLN7...........
                V
                V
1284        RCLN7
                .
                .
1290            .       180P
                .          .
                .          .
           *CLN8...........
                .
                .
1302            .       181A
                .          V
                .          V
1308            .      R181A
                .          .
                .          .
1314            .          .       181B
                .          .          .
                .          .          .
1325            .          .          .          .<------- DO183K
1323            .          .          .      D183K
                .          .          .          V
                .          .          .          V
1326            .          .          .      R183K
                .          .          .          V
                .          .          .          V
1332            .          .          .      R183K
                .          .          .          .
                .          .          .          .
1338         CLN8.................................
                V
                V
1341        SCLN8
                .
                .
1348            .       180S
                .          .
                .          .
1357            .          .      170I1
                .          .          .
                .          .          .
                .          .          .-------> D170I1
                .          .     D170I1
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                .          .          V
                .          .          V
                .          .     R17011
                .          .          .
                .          .          .
1377         CLN9.......................
                V
                V
1380        RCLN9
                .
                .
1386            .       180U
                .          .
                .          .
1395       *CLN10............
                .
                .
1398            .       180Q
                .          .
                .          .
1407            .          .       180R
                .          .          .
                .          .          .
1416            .          .          .      17012
                .          .          .          .
                .          .          .          .
1427            .          .          .          .          .<-------  D17011
1425            .          .          .          .     D17011
                .          .          .          .          V
                .          .          .          .          V
1428            .          .          .          .     R17011
                .          .          .          .          .
                .          .          .          .          .
1434            .          .          .      MLT6A............
                .          .          .          .
                .          .          .          .
                .          .          .          .-------> D17012
                .          .          .     DMLT6A
                .          .          .          V
                .          .          .          V
1442            .          .          .     RMLT6A
                .          .          .          .
                .          .          .          .
1448            .       CL10A........................
                .          V
                .          V
1451            .      RCL10A
                .          .
                .          .
1457       *CLN10............
                .
                .
1460            .       180T
                .          .
                .          .
1469         CLN10............
```

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

```
****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*             MAY   1991               *
*           VERSION 4.0.1E             *
*     Lahey F77L-EM/32 version 5.01    *
*       Dodson & Associates, Inc.      *
*  RUN DATE  04/11/95  TIME  13:17:14  *
****************************************
```

```
****************************************
*                                      *
*    U.S. ARMY CORPS OF ENGINEERS      *
*    HYDROLOGIC ENGINEERING CENTER     *
*          609 SECOND STREET           *
*       DAVIS, CALIFORNIA 95616        *
*           (916) 551-1748             *
*                                      *
****************************************
```

```
                    COLONY WASH - EXISTING CONDITIONS, AGK ENGINEERS, 04-11.95
                    100-Year 24-Hour storm
                    24-Hour SCS Type II distribution
                    2 minutes time step
                    File:180-24CD.DAT

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

    IT        HYDROGRAPH TIME DATA
                     NMIN          2  MINUTES IN COMPUTATION INTERVAL
                    IDATE      1   0  STARTING DATE
                    ITIME       0000  STARTING TIME
                       NQ        720  NUMBER OF HYDROGRAPH ORDINATES
                   NDDATE      1   0  ENDING DATE
                   NDTIME       2358  ENDING TIME
                    ICENT         19  CENTURY MARK

              COMPUTATION INTERVAL    0.03 HOURS
                   TOTAL TIME BASE   23.97 HOURS

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

 10 JD        INDEX STORM NO. 1
                   STRM        4.00  PRECIPITATION DEPTH
                   TRDA        0.00  TRANSPOSITION DRAINAGE AREA

 11 PI          PRECIPITATION PATTERN
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

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

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	185A	65.	12.03	8.	2.	2.	0.04		
+	ROUTED TO	R185A	63.	12.13	8.	2.	2.	0.04		
+									1692.33	12.13
+	HYDROGRAPH AT	185B	98.	12.10	13.	3.	3.	0.08		
+	2 COMBINED AT	IRW1	160.	12.10	20.	6.	6.	0.12		
+	ROUTED TO	SIRW1	109.	12.30	20.	6.	6.	0.12		
+									1669.26	12.30
+	HYDROGRAPH AT	180A	39.	12.03	4.	1.	1.	0.03		
+	ROUTED TO	R180A	39.	12.03	4.	1.	1.	0.03		
+									1680.23	12.03
+	HYDROGRAPH AT	180B	22.	12.13	6.	2.	2.	0.03		
+	3 COMBINED AT	IRW2	151.	12.10	30.	8.	8.	0.18		
+	ROUTED TO	RIRW2	151.	12.10	30.	8.	8.	0.18		
+									1658.96	12.10
+	HYDROGRAPH AT	186A	140.	12.07	15.	4.	4.	0.10		
+	HYDROGRAPH AT	186B	8.	12.00	1.	0.	0.	0.00		
+	ROUTED TO	R186B	8.	12.07	1.	0.	0.	0.00		
+									1900.07	12.07
+	2 COMBINED AT	SNB1A	147.	12.07	15.	4.	4.	0.10		
+	ROUTED TO	RSNB1A	144.	12.17	15.	4.	4.	0.10		
+									1893.05	12.17
+	HYDROGRAPH AT	186C	26.	12.03	3.	1.	1.	0.02		
+	ROUTED TO	R186C	26.	12.03	3.	1.	1.	0.02		
+									2040.07	12.03
+	HYDROGRAPH AT	186D	99.	12.10	13.	4.	4.	0.08		
+	3 COMBINED AT	SNB1	264.	12.10	32.	8.	8.	0.20		

+	ROUTED TO	RSNB1	262.	12.17	32.	8.	8.	0.20	
+									1815.82 12.17
+	HYDROGRAPH AT	186E	55.	12.03	5.	1.	1.	0.04	
+	HYDROGRAPH AT	186F	41.	12.03	4.	1.	1.	0.03	
+	3 COMBINED AT	SNB2	344.	12.10	42.	11.	11.	0.27	
+	ROUTED TO	RSNB2	342.	12.17	42.	11.	11.	0.27	
+									1763.62 12.17
+	HYDROGRAPH AT	186G	89.	12.07	10.	2.	2.	0.07	
+	2 COMBINED AT	SNB3	420.	12.13	51.	13.	13.	0.33	
+	ROUTED TO	SSNB3	74.	12.90	41.	13.	13.	0.33	
+									1750.95 12.90
+	HYDROGRAPH AT	186H	25.	12.10	5.	1.	1.	0.03	
+	HYDROGRAPH AT	160E	6.	12.03	1.	0.	0.	0.00	
+	ROUTED TO	R160E	6.	12.07	1.	0.	0.	0.00	
+									1733.05 12.03
+	3 COMBINED AT	SNB4	87.	12.60	45.	14.	14.	0.36	
+	ROUTED TO	RSNB4	87.	12.67	45.	14.	14.	0.36	
+									1702.38 12.67
+	HYDROGRAPH AT	186I	43.	12.03	4.	1.	1.	0.03	
+	2 COMBINED AT	*SNB5	92.	12.53	49.	15.	15.	0.39	
+	HYDROGRAPH AT	187A	15.	12.00	1.	0.	0.	0.01	
+	ROUTED TO	R187A	15.	12.00	1.	0.	0.	0.01	
+									1852.09 12.00
+	HYDROGRAPH AT	187B	12.	12.03	1.	0.	0.	0.01	
+	2 COMBINED AT	GRS1	27.	12.00	3.	1.	1.	0.02	
+	ROUTED TO	RGRS1	27.	12.10	3.	1.	1.	0.02	
+									1754.22 12.10
+	HYDROGRAPH AT	187C	20.	12.00	2.	1.	1.	0.01	
+	ROUTED TO	R187C	20.	12.03	2.	1.	1.	0.01	

+								1754.14	12.03
	HYDROGRAPH AT								
+		187D	82.	12.10	11.	3.	3.	0.07	
	3 COMBINED AT								
+		*GRS2	127.	12.10	16.	4.	4.	0.10	
	HYDROGRAPH AT								
+		188A	15.	12.00	2.	1.	1.	0.01	
	ROUTED TO								
+		R188A	15.	12.03	2.	1.	1.	0.01	
+									1708.02 12.03
	HYDROGRAPH AT								
+		188B	104.	12.03	11.	3.	3.	0.07	
	HYDROGRAPH AT								
+		188C	32.	12.03	4.	1.	1.	0.02	
	3 COMBINED AT								
+		SYR1	150.	12.03	17.	5.	5.	0.10	
	ROUTED TO								
+		RSYC1	148.	12.07	17.	5.	5.	0.10	
+									1827.47 12.07
	HYDROGRAPH AT								
+		188D	77.	12.07	9.	2.	2.	0.05	
	HYDROGRAPH AT								
+		188E	64.	12.07	8.	2.	2.	0.05	
	3 COMBINED AT								
+		SYR2	290.	12.07	33.	9.	9.	0.20	
	ROUTED TO								
+		RSYC2	284.	12.17	33.	9.	9.	0.20	
+									1761.25 12.17
	HYDROGRAPH AT								
+		188F	96.	12.07	11.	3.	3.	0.07	
	2 COMBINED AT								
+		SYR3	371.	12.13	44.	12.	12.	0.28	
	ROUTED TO								
+		SSYC3	222.	12.40	44.	12.	12.	0.28	
+									1718.01 12.40
	ROUTED TO								
+		RSYC3	222.	12.43	44.	12.	12.	0.28	
+									1702.51 12.43
	HYDROGRAPH AT								
+		188G	2.	12.03	0.	0.	0.	0.00	
	2 COMBINED AT								
+		SYR4	222.	12.43	45.	12.	12.	0.28	
	2 COMBINED AT								
+		GRS2	312.	12.20	61.	16.	16.	0.38	
	ROUTED TO								
+		SGRS2	312.	12.20	61.	16.	16.	0.38	
+									1600.44 12.20
	HYDROGRAPH AT								
+		187E	7.	12.03	1.	0.	0.	0.00	
	ROUTED TO								

+		R187E	7.	12.03	1.	0.	0.	0.00	
+									1780.52 12.03
	HYDROGRAPH AT								
+		187F	3.	12.07	1.	0.	0.	0.00	
	2 COMBINED AT								
+		GRS3A	10.	12.03	2.	0.	0.	0.01	
	ROUTED TO								
+		RGRS3A	10.	12.07	2.	0.	0.	0.01	
+									1710.11 12.07
	HYDROGRAPH AT								
+		187G	38.	12.13	8.	2.	2.	0.04	
	3 COMBINED AT								
+		GRS3	358.	12.17	70.	19.	19.	0.43	
	ROUTED TO								
+		RGRS3	358.	12.20	70.	19.	19.	0.43	
+									1691.05 12.20
	HYDROGRAPH AT								
+		187H	6.	12.00	1.	0.	0.	0.00	
	2 COMBINED AT								
+		*SNB5	361.	12.20	71.	19.	19.	0.43	
	2 COMBINED AT								
+		SNB5	445.	12.20	119.	34.	34.	0.82	
	ROUTED TO								
+		RSNB5	445.	12.20	119.	34.	34.	0.82	
+									1683.12 12.20
	HYDROGRAPH AT								
+		187I	38.	12.00	4.	1.	1.	0.02	
	2 COMBINED AT								
+		SNB6	464.	12.17	123.	35.	35.	0.85	
	ROUTED TO								
+		SSNB6	90.	13.63	88.	35.	35.	0.85	
+									1696.91 13.67
	ROUTED TO								
+		RSNB6	90.	13.73	87.	35.	35.	0.85	
+									1659.07 13.73
	HYDROGRAPH AT								
+		180F	115.	12.03	12.	3.	3.	0.07	
	2 COMBINED AT								
+		*CLN1	172.	12.07	95.	38.	38.	0.92	
	2 COMBINED AT								
+		CLN1	322.	12.07	124.	47.	47.	1.10	
	ROUTED TO								
+		SCLN1	254.	12.33	124.	47.	47.	1.10	
+									1655.34 12.33
	HYDROGRAPH AT								
+		180C	17.	12.00	2.	0.	0.	0.01	
	ROUTED TO								
+		R180C	17.	12.03	2.	0.	0.	0.01	
+									1670.14 12.03
	HYDROGRAPH AT								
		180D	4.	12.03	1.	0.	0.	0.00	

+	HYDROGRAPH AT	180E	31.	12.00	3.	1.	1.	0.02	
+	4 COMBINED AT	CLN2	281.	12.10	129.	48.	48.	1.13	
+	ROUTED TO	RCLN2	280.	12.17	129.	48.	48.	1.13	
+									1625.60 12.17
+	HYDROGRAPH AT	180G	45.	12.03	5.	1.	1.	0.03	
+	2 COMBINED AT	CLN3	317.	12.10	134.	50.	50.	1.16	
+	ROUTED TO	SCLN3	273.	12.47	133.	50.	50.	1.16	
+									1622.61 12.47
+	HYDROGRAPH AT	180H	26.	12.07	4.	1.	1.	0.02	
+	ROUTED TO	R180H	26.	12.10	4.	1.	1.	0.02	
+									1670.29 12.10
+	HYDROGRAPH AT	180I	7.	12.00	1.	0.	0.	0.00	
+	ROUTED TO	R180I	7.	12.07	1.	0.	0.	0.00	
+									1670.08 12.07
+	HYDROGRAPH AT	180J	50.	12.03	7.	2.	2.	0.03	
+	3 COMBINED AT	CLN4B	82.	12.07	11.	3.	3.	0.06	
+	ROUTED TO	RCLN4B	83.	12.07	11.	3.	3.	0.06	
+									1630.59 12.07
+	HYDROGRAPH AT	180M	6.	12.03	1.	0.	0.	0.00	
+	3 COMBINED AT	CLN4	340.	12.10	145.	53.	53.	1.22	
+	ROUTED TO	RCLN4	338.	12.20	145.	53.	53.	1.22	
+									1591.78 12.20
+	HYDROGRAPH AT	180N	65.	12.03	6.	2.	2.	0.04	
+	HYDROGRAPH AT	184C	23.	12.00	3.	1.	1.	0.01	
+	HYDROGRAPH AT	184D	8.	12.07	1.	0.	0.	0.01	
+	2 COMBINED AT	NCL1	31.	12.03	4.	1.	1.	0.02	
+	ROUTED TO	RNCL1	31.	12.03	4.	1.	1.	0.02	
+									1544.05 12.03
	HYDROGRAPH AT	184E	107.	12.13	17.	5.	5.	0.11	

+	2 COMBINED AT	NCL2	133.	12.10	21.	6.	6.	0.13	
+	ROUTED TO	SNCL2	127.	12.17	21.	6.	6.	0.13	1745.26 12.17
+	HYDROGRAPH AT	184F	9.	12.03	1.	0.	0.	0.01	
+	ROUTED TO	R184F	9.	12.07	1.	0.	0.	0.01	1725.10 12.07
+	2 COMBINED AT	NCL3	135.	12.17	23.	6.	6.	0.14	
+	ROUTED TO	RNCL3	135.	12.17	23.	6.	6.	0.14	1737.25 12.17
+	ROUTED TO	SNCL3	132.	12.23	23.	6.	6.	0.14	1738.49 12.23
+	HYDROGRAPH AT	184A	30.	12.03	4.	1.	1.	0.02	
+	ROUTED TO	R184A	25.	12.13	4.	1.	1.	0.02	1870.19 12.13
+	HYDROGRAPH AT	184B	29.	12.07	4.	1.	1.	0.02	
+	2 COMBINED AT	NCL4A	53.	12.07	8.	2.	2.	0.04	
+	ROUTED TO	RNCL4A	53.	12.10	8.	2.	2.	0.04	1810.22 12.10
+	2 COMBINED AT	NCL4	179.	12.17	31.	9.	9.	0.18	
+	ROUTED TO	RNCL4	179.	12.20	31.	9.	9.	0.18	1709.41 12.20
+	HYDROGRAPH AT	184G	80.	12.03	8.	2.	2.	0.05	
+	2 COMBINED AT	NCL5	245.	12.07	39.	11.	11.	0.23	
+	ROUTED TO	SNCL5	205.	12.30	39.	11.	11.	0.23	1700.60 12.30
+	HYDROGRAPH AT	184H	17.	12.03	2.	1.	1.	0.01	
+	HYDROGRAPH AT	183A	73.	12.00	8.	2.	2.	0.04	
+	ROUTED TO	R183A	72.	12.03	8.	2.	2.	0.04	1732.15 12.03
	HYDROGRAPH AT	183B	62.	12.03	6.	2.	2.	0.04	

+	2 COMBINED AT	NCL6A	134.	12.03	14.	4.	4.	0.08	
+	ROUTED TO	SNCL6A	1.	15.87	1.	0.	0.	0.08	
+									1725.62 17.63
+	ROUTED TO	RNCL6A	1.	17.03	1.	0.	0.	0.08	
+									1716.02 17.33
+	3 COMBINED AT	NCL6	215.	12.27	41.	12.	12.	0.33	
+	ROUTED TO	RNCL6	214.	12.33	41.	12.	12.	0.33	
+									1666.83 12.33
+	HYDROGRAPH AT	184I	49.	12.03	6.	2.	2.	0.03	
+	2 COMBINED AT	NCL7	234.	12.27	47.	13.	13.	0.36	
+	ROUTED TO	SNCL7	233.	12.27	47.	13.	13.	0.36	
+									1661.80 12.27
+	ROUTED TO	RNCL7	233.	12.30	47.	13.	13.	0.36	
+									1662.04 12.30
+	HYDROGRAPH AT	184J	12.	12.03	1.	0.	0.	0.01	
+	2 COMBINED AT	NCL8	239.	12.27	49.	14.	14.	0.37	
+	ROUTED TO	SNCL8	239.	12.30	49.	14.	14.	0.37	
+									1637.89 12.30
+	ROUTED TO	RNCL8	239.	12.30	49.	14.	14.	0.37	
+									1619.23 12.27
+	HYDROGRAPH AT	184K	7.	12.00	1.	0.	0.	0.00	
+	2 COMBINED AT	NCL9	241.	12.27	50.	14.	14.	0.37	
+	ROUTED TO	RNCL9	240.	12.33	50.	14.	14.	0.37	
+									1591.57 12.33
+	3 COMBINED AT	CLN5	608.	12.17	199.	69.	69.	1.63	
+	ROUTED TO	SCLN5	545.	12.53	199.	69.	69.	1.63	
+									1596.92 12.53
+	HYDROGRAPH AT	180K	47.	12.03	7.	2.	2.	0.03	
+	ROUTED TO	R180K	46.	12.07	7.	2.	2.	0.03	
+									1600.36 12.07
	HYDROGRAPH AT	180L	24.	12.00	3.	1.	1.	0.01	

	3 COMBINED AT								
+		CLN6	563.	12.50	207.	72.	72.	1.67	
	ROUTED TO								
+		RCLN6	562.	12.53	207.	72.	72.	1.67	
+									1575.00 12.53
	HYDROGRAPH AT								
+		180O	32.	12.03	4.	1.	1.	0.02	
	2 COMBINED AT								
+		*CLN7	569.	12.53	211.	73.	73.	1.69	
	HYDROGRAPH AT								
+		182G	61.	12.10	11.	4.	4.	0.05	
	HYDROGRAPH AT								
+		182I	53.	12.07	9.	3.	3.	0.04	
	2 COMBINED AT								
+		FC1	114.	12.07	20.	6.	6.	0.09	
	ROUTED TO								
+		RFC1	114.	12.10	20.	6.	6.	0.09	
+									1610.40 12.10
	HYDROGRAPH AT								
+		182D	149.	12.03	17.	5.	5.	0.09	
	ROUTED TO								
+		R182D	147.	12.07	17.	5.	5.	0.09	
+									1610.40 12.07
	HYDROGRAPH AT								
+		182E	104.	12.03	14.	4.	4.	0.06	
	HYDROGRAPH AT								
+		182F	18.	12.07	3.	1.	1.	0.01	
	4 COMBINED AT								
+		FC2	381.	12.07	54.	16.	16.	0.26	
	ROUTED TO								
+		SFC2	378.	12.10	54.	16.	16.	0.26	
+									1597.33 12.10
	ROUTED TO								
+		RFC2	375.	12.13	54.	16.	16.	0.26	
+									1583.28 12.13
	DIVERSION TO								
+		DOFC2	364.	12.13	54.	16.	16.	0.26	
	HYDROGRAPH AT								
+		DFC2	364.	12.13	54.	16.	16.	0.26	
	HYDROGRAPH AT								
+		182A	81.	12.00	8.	2.	2.	0.05	
	ROUTED TO								
+		R182A	80.	12.07	8.	2.	2.	0.05	
+									1620.43 12.07
	HYDROGRAPH AT								
+		182B	58.	12.03	7.	2.	2.	0.04	
	2 COMBINED AT								
+		FC3A	138.	12.03	15.	4.	4.	0.09	
	ROUTED TO								
		SFC3A	138.	12.07	15.	4.	4.	0.09	
									1597.09 12.07

+	HYDROGRAPH AT	182C	32.	12.03	5.	1.	1.	0.02	
+	2 COMBINED AT	FC3B	170.	12.07	19.	5.	5.	0.11	
+	ROUTED TO	RFC3B	170.	12.07	19.	5.	5.	0.11	
+									1581.01 12.07
+	2 COMBINED AT	FC3	528.	12.10	73.	22.	22.	0.37	
+	ROUTED TO	RFC4	524.	12.13	73.	22.	22.	0.37	
+									1583.62 12.13
+	HYDROGRAPH AT	182J	19.	12.07	2.	1.	1.	0.01	
+	2 COMBINED AT	FC4	542.	12.10	75.	22.	22.	0.39	
+	ROUTED TO	SFC4	515.	12.20	75.	22.	22.	0.39	
+									1581.82 12.20
+	HYDROGRAPH AT	DFHN	0.	0.03	0.	0.	0.	1.00	
+	HYDROGRAPH AT	183F	69.	12.03	8.	2.	2.	0.05	
+	HYDROGRAPH AT	183G	132.	12.07	16.	4.	4.	0.09	
+	HYDROGRAPH AT	183H	31.	12.00	4.	1.	1.	0.02	
+	4 COMBINED AT	LC1	231.	12.03	27.	7.	7.	1.16	
+	ROUTED TO	RLC1	229.	12.07	27.	7.	7.	1.16	
+									1620.51 12.07
+	HYDROGRAPH AT	183I	89.	12.03	11.	3.	3.	0.06	
+	HYDROGRAPH AT	183J	9.	12.00	1.	0.	0.	0.00	
+	3 COMBINED AT	LC2	325.	12.07	39.	11.	11.	1.22	
+	ROUTED TO	SLC2	324.	12.07	39.	11.	11.	1.22	
+									1599.04 12.07
+	ROUTED TO	RLC2	324.	12.07	39.	11.	11.	1.22	
+									1592.00 11.97
+	HYDROGRAPH AT	183K	4.	12.00	1.	0.	0.	0.00	
+	2 COMBINED AT	LC3	327.	12.07	39.	11.	11.	1.22	
	DIVERSION TO	DO183K	298.	12.07	37.	10.	10.	1.22	

+	HYDROGRAPH AT	D183K	298.	12.07	37.	10.	10.	1.22	
+	2 COMBINED AT	FC5	790.	12.13	112.	33.	33.	1.61	
+	ROUTED TO	RFC5	790.	12.13	112.	33.	33.	1.61	
+									1578.99 12.13
+	HYDROGRAPH AT	182K	42.	12.00	4.	1.	1.	0.02	
+	2 COMBINED AT	FC6	812.	12.10	116.	34.	34.	1.63	
+	ROUTED TO	RFC6	812.	12.13	116.	34.	34.	1.63	
+									1575.87 12.13
+	HYDROGRAPH AT	182L	9.	12.00	1.	0.	0.	0.00	
+	2 COMBINED AT	FC7	818.	12.13	117.	34.	34.	1.64	
+	2 COMBINED AT	CLN7	1209.	12.17	325.	108.	108.	3.33	
+	ROUTED TO	RCLN7	1208.	12.17	325.	108.	108.	3.33	
+									1552.95 12.17
+	HYDROGRAPH AT	180P	19.	12.00	2.	1.	1.	0.01	
+	2 COMBINED AT	*CLN8	1217.	12.17	327.	108.	108.	3.35	
+	HYDROGRAPH AT	181A	0.	0.03	0.	0.	0.	0.08	
+	ROUTED TO	R181A	0.	0.03	0.	0.	0.	0.08	
+									1566.00 0.00
+	HYDROGRAPH AT	181B	30.	12.07	4.	1.	1.	0.02	
+	HYDROGRAPH AT	D183K	29.	12.07	3.	1.	1.	1.22	
+	ROUTED TO	R183K	28.	12.13	3.	1.	1.	1.22	
+									1580.18 12.13
+	ROUTED TO	R183K	28.	12.13	3.	1.	1.	1.22	
+									1566.03 12.13
+	4 COMBINED AT	CLN8	1271.	12.17	333.	110.	110.	3.45	
+	ROUTED TO	SCLN8	1249.	12.23	333.	110.	110.	3.45	
+									1552.71 12.23
+	HYDROGRAPH AT	180S	64.	12.00	9.	3.	3.	0.04	
	HYDROGRAPH AT	170I1	33.	12.03	5.	1.	1.	0.02	

	DIVERSION TO								
+		D170I1	16.	12.03	2.	1.	1.	0.02	
	HYDROGRAPH AT								
+		D170I1	16.	12.03	2.	1.	1.	0.02	
	ROUTED TO								
+		R170I1	16.	12.07	2.	1.	1.	0.02	
+									1575.15 12.07
	3 COMBINED AT								
+		CLN9	1286.	12.20	344.	114.	114.	3.50	
	ROUTED TO								
+		RCLN9	1284.	12.27	343.	114.	114.	3.50	
+									1530.14 12.27
	HYDROGRAPH AT								
+		180U	21.	12.07	3.	1.	1.	0.02	
	2 COMBINED AT								
+		*CLN10	1297.	12.27	346.	114.	114.	3.52	
	HYDROGRAPH AT								
+		180Q	49.	12.03	7.	2.	2.	0.03	
	HYDROGRAPH AT								
+		180R	39.	12.03	4.	1.	1.	0.03	
	HYDROGRAPH AT								
+		170I2	21.	12.00	3.	1.	1.	0.01	
	HYDROGRAPH AT								
+		D170I1	16.	12.03	2.	1.	1.	0.02	
	ROUTED TO								
+		R170I1	16.	12.13	2.	1.	1.	0.02	
									1570.09 12.13
	2 COMBINED AT								
+		MLT6A	34.	12.03	5.	2.	2.	0.01	
	DIVERSION TO								
+		D170I2	17.	12.03	3.	1.	1.	0.01	
	HYDROGRAPH AT								
+		DMLT6A	17.	12.03	3.	1.	1.	0.01	
	ROUTED TO								
+		RMLT6A	17.	12.10	3.	1.	1.	0.01	
+									1540.18 12.10
	3 COMBINED AT								
+		CL10A	104.	12.03	13.	4.	4.	0.07	
	ROUTED TO								
+		RCL10A	102.	12.07	13.	4.	4.	0.07	
+									1528.35 12.07
	2 COMBINED AT								
+		*CLN10	1366.	12.20	358.	118.	118.	3.59	
	HYDROGRAPH AT								
+		180T	39.	12.03	6.	2.	2.	0.02	
	2 COMBINED AT								
+		CLN10	1388.	12.20	363.	120.	120.	3.62	

NORMAL END OF HEC-1 ***

K.8

PANORAMA CHANNEL

```
*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*              MAY   1991               *
*            VERSION 4.0.1E             *
*     Lahey F77L-EM/32 version 5.01     *
*       Dodson & Associates, Inc.       *
* RUN DATE  04/11/95  TIME  13:18:45    *
*****************************************
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*****************************************
*                                       *
*    U.S. ARMY CORPS OF ENGINEERS       *
*    HYDROLOGIC ENGINEERING CENTER      *
*          609 SECOND STREET            *
*       DAVIS, CALIFORNIA 95616         *
*           (916) 551-1748              *
*                                       *
*****************************************
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X     X  XXXXXXX   XXXXX          X
X     X  X        X     X        XX
X     X  X        X              X
XXXXXXX  XXXX     X       XXXXX  X
X     X  X        X              X
X     X  X        X     X        X
X     X  XXXXXXX   XXXXX         XXX
```

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

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

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

  1           ID   PANORAMA CHANNEL - EXISTING CONDITIONS, AGK ENGINEERS, 04-11-95
  2           ID   First routing 06-29-93
  3           ID   100-Year 24-Hour storm
  4           ID   24-Hour SCS Type II distribution
  5           ID   2 minutes time step
  6           ID   File: 190-24CE.DAT
  7           ID
  8           IT       2                    720
  9           IO       5
              *DIAGRAM
 10           IN      30
 11           JD     4.0
 12           PC    .000    .005    .011    .016    .022    .028    .035    .041    .048    .056
 13           PC    .063    .071    .080    .089    .098    .109    .120    .133    .147    .163
 14           PC    .181    .204    .235    .283    .663    .735    .772    .799    .820    .838
 15           PC    .854    .868    .880    .891    .902    .912    .921    .929    .937    .945
 16           PC    .952    .959    .965    .972    .978    .984    .989    .995   1.000

 17           KK    182H
 18           KM   SUB-BASIN 182H
 19           KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 20           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 21           BA    .027
 22           LG    .150    .250   5.700    .207   6.500
 23           UC    .196    .181
 24           UA       0       5      16      30      65      77      84      90      94      97
 25           UA     100

 26           KK   S182H
 27           KM   STORAGE PONDED AREA ON SUB-BASIN 182H
 28           RS       1    ELEV    1601
 29           SQ       0       0       0      82     405
 30           SE    1601    1604    1606    1607    1608
 31           SA       0    0.01    0.06    0.25
 32           SE    1601    1602    1604    1606

 33           KK   R182H
 34           KM   ROUTE S82H THROUGH SUB-BASIN 190A TO CON. POINT PNR1A
 35           RS       1    FLOW       0
 36           RC    0.02    0.02    0.02     290   0.014
 37           RX    9958    9963    9968  9968.5 10031.5   10032   10037   10042
 38           RY  1598.5  1598.5  1598.5    1598    1598  1598.5  1598.5  1598.5

 39           KK    190A
 40           KM   SUB-BASIN 190A
 41           KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 42           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 43           BA    .019
 44           LG    .150    .250   5.700    .207   6.500
 45           UC    .179    .179
 46           UA       0       5      16      30      65      77      84      90      94      97
 47           UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  48          KK   PNR1A
  49          KM   PANORAMA CONSENTRATION POINT 1A - COMBINE R182H, 190A
  50          HC       2

  51          KK  SPNR1A
  52          KM   STORAGE PONDED AREA ON SUB-BASIN 190A
  53          RS       1    ELEV    1594
  54          SQ       0       0      90    1051
  55          SE    1594    1601    1602    1603
  56          SA       0   0.005    0.08    0.44
  57          SE    1594    1596    1598    1601

  58          KK  RPNR1A
  59          KM   ROUTE SPNR1A THROUGH SUB-BASIN 190B TO CON. POINT PNR1
  60          RS       2    FLOW       0
  61          RC    0.02    0.02    0.02     567    0.02
  62          RX    9958    9963    9968  9968.5 10031.5   10032   10037   10042
  63          RY  1590.5  1590.5  1590.5    1590    1590  1590.5  1590.5  1590.5

  64          KK    190B
  65          KM   SUB-BASIN 190B
  66          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
  67          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
  68          BA    .007
  69          LG    .150    .250   5.700    .189  29.250
  70          UC    .158    .214
  71          UA       0       5      16      30      65      77      84      90      94      97
  72          UA     100

  73          KK    PNR1
  74          KM   PANORAMA CONSENTRATION POINT 1 - COMBINE RPNR1A, 190B
  75          HC       2

  76          KK   RPNR1
  77          KM   ROUTE PNR1 THROUGH SUB-BASIN 190C TO CON. POINT PNR2
  78          RS       2    FLOW       0
  79          RC    0.02    0.02    0.02     449    0.01
  80          RX    9958    9963    9968  9968.5 10031.5   10032   10037   10042
  81          RY  1588.5  1588.5  1588.5    1588    1588  1588.5  1588.5  1588.5

  82          KK    190C
  83          KM   SUB-BASIN 190C
  84          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
  85          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
  86          BA    .022
  87          LG    .150    .250   5.700    .189  26.000
  88          UC    .175    .160
  89          UA       0       5      16      30      65      77      84      90      94      97
  90          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 91           KK    PNR2
 92           KM   PANORAMA CONSENTRATION POINT 2 - COMBINE RPNR1, 190C
 93           HC       2

 94           KK   RPNR2
 95           KM   ROUTE PNR2 THROUGH SUB-BASIN 190I TO CON. POINT PNR3
 96           RS       2    FLOW       0
 97           RC    0.02    0.02    0.02     779   0.012
 98           RX    9958    9963    9968  9968.5 10031.5   10032   10037   10042
 99           RY  1578.5  1578.5  1578.5    1578    1578  1578.5  1578.5  1578.5

100           KK    190D
101           KM   SUB-BASIN 190D
102           KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
103           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
104           BA    .005
105           LG    .100    .250   5.700    .189    .000
106           UC    .092    .064
107           UA       0       3       5       8      12      20      43      75      90      96
108           UA     100

109           KK   R190D
110           KM   ROUTE 190D THROUGH SUB-BASIN 190F TO CON. POINT PNR3A
111           RS       3    FLOW       0
112           RC    0.04    0.04    0.04     722   0.059
113           RX    9890    9910    9955    9995   10005   10045   10185   10210
114           RY    1612    1608    1602    1588    1588    1602    1602    1606

115           KK    190E
116           KM   SUB-BASIN 190E
117           KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
118           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
119           BA    .003
120           LG    .050    .250   5.700    .170  32.500
121           UC    .112    .228
122           UA       0       5      16      30      65      77      84      90      94      97
123           UA     100

124           KK    190F
125           KM   SUB-BASIN 190F
126           KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
127           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
128           BA    .006
129           LG    .100    .250   5.700    .170   6.500
130           UC    .154    .208
131           UA       0       5      16      30      65      77      84      90      94      97
132           UA     100

133           KK    190G
134           KM   SUB-BASIN 190G
135           KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
136           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
137           BA    .006
138           LG    .100    .250   5.700    .170  16.250
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 139          UC    .167    .279
 140          UA       0       5      16      30      65      77      84      90      94      97
 141          UA     100

 142          KK   PNR3A
 143          KM   PANORAMA CONSENTRATION POINT 3A - COMBINE R190D, 190E, 190F, 190G
 144          HC       4

 145          KK  RPNR3A
 146          KM   ROUTE PNR3A THROUGH SUB-BASIN 190J TO CON. POINT PNR3
 147          RS       1    FLOW       0
 148          RC    0.02    0.02    0.02     287   0.003
 149          RX    9980    9980    9985    9986   10014   10015   10020   10030
 150          RY  1576.7  1576.6  1576.5    1576    1576  1576.5  1576.6  1576.7

 151          KK    190H
 152          KM   SUB-BASIN 190H
 153          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 154          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .999
 155          BA    .075
 156          LG    .150    .250   5.700    .207   3.250
 157          UC    .221    .157
 158          UA       0       5      16      30      65      77      84      90      94      97
 159          UA     100

 160          KK   R190H
 161          KM   ROUTE 190H THROUGH SUB-BASIN 190J TO CON. POINT PNR3
 162          RS       2    FLOW       0
 163          RC    0.02    0.02    0.02     660    0.01
 164          RX    9980    9980    9985    9986   10014   10015   10020   10030
 165          RY  1576.9  1576.6  1576.5    1576    1576  1576.5  1576.6  1576.9

 166          KK    190I
 167          KM   SUB-BASIN 190I
 168          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 169          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 170          BA    .012
 171          LG    .105    .250   5.700    .174  42.500
 172          UC    .121    .136
 173          UA       0       5      16      30      65      77      84      90      94      97
 174          UA     100

 175          KK    190J
 176          KM   SUB-BASIN 190J
 177          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 178          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 179          BA    .009
 180          LG    .140    .250   5.700    .196  16.250
 181          UC    .167    .221
 182          UA       0       5      16      30      65      77      84      90      94      97
 183          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 184          KK    PNR3
 185          KM   PANORAMA CONSENTRATION POINT 3 - COMBINE RPNR2, RPNR3A, R190H, 190J, 190I
 186          HC       5

 187          KK   RPNR3
 188          KM   ROUTE PNR3 THROUGH SUB-BASIN 190L TO CON. POINT *PNR4
 189          RS       3    FLOW       0
 190          RC    0.02    0.02    0.02    1048   0.022
 191          RX    9948    9963    9968  9968.5 10031.5   10032   10037   10052
 192          RY  1570.8  1570.6  1570.5    1570    1570  1570.5  1570.6  1570.8

 193          KK    190K
 194          KM   SUB-BASIN 190K
 195          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 196          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 197          BA    .008
 198          LG    .150    .250   5.700    .207    .000
 199          UC    .162    .221
 200          UA       0       3       5       8      12      20      43      75      90      96
 201          UA     100

 202          KK   R190K
 203          KM   ROUTE R910K THROUGH SUB-BASIN 190L TO CON. POINT *PNR4
 204          RS       2    FLOW       0
 205          RC    0.02    0.02    0.02     620   0.027
 206          RX    9958    9963    9968  9968.5 10031.5   10032   10037   10042
 207          RY  1570.5  1570.5  1570.5    1570    1570  1570.5  1570.5  1570.5

 208          KK    190L
 209          KM   SUB-BASIN 190L
 210          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 211          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 212          BA    .011
 213          LG    .102    .250   5.400    .218  30.130
 214          UC    .146    .176
 215          UA       0       5      16      30      65      77      84      90      94      97
 216          UA     100

 217          KK   *PNR4
 218          KM   PANORAMA CHANNEL CONC. POINT *4 - RPNR3, R190K, 190L
 219          HC       3

 220          KK    190M
 221          KM   SUB-BASIN 190M
 222          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 223          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 224          BA    .009
 225          LG    .116    .250   4.600    .311  24.800
 226          UC    .171    .244
 227          UA       0       5      16      30      65      77      84      90      94      97
 228          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 229          KK    190N
 230          KM   SUB-BASIN 190N
 231          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 232          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 233          BA    .018
 234          LG    .150    .250   5.700    .207    .000
 235          UC    .171    .164
 236          UA       0       3       5       8      12      20      43      75      90      96
 237          UA     100

 238          KK    PNR4
 239          KM   PANORAMA CONSENTRATION POINT 3 - COMBINE (RPNR3, R190K, 190L), 190M, 190N
 240          HC       3

 241          KK   RPNR4
 242          KM   ROUTE PNR4 THROUGH SUB-BASIN 190Q TO CON. POINT PNR5
 243          RS       3    FLOW       0
 244          RC    0.04    0.04    0.04    1232   0.015
 245          RX    9790    9855    9910    9990   10015   10045   10160   10220
 246          RY    1546    1544    1538    1536    1536    1540    1540    1558

 247          KK    1900
 248          KM   SUB-BASIN 1900
 249          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 250          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 251          BA    .006
 252          LG    .050    .250   4.400    .320  59.800
 253          UC    .121    .173
 254          UA       0       5      16      30      65      77      84      90      94      97
 255          UA     100

 256          KK   R1900
 257          KM   ROUTE 1900 THROUGH SUB-BASIN 190P TO CON. POINT PNR5A
 258          RS       2    FLOW       0
 259          RC    0.02    0.02    0.02     701   0.027
 260          RX    9958    9963    9968  9968.5 10031.5   10032   10037   10042
 261          RY  1570.5  1570.5  1570.5    1570  1570.5  1570.5  1570.5  1570.5

 262          KK    190P
 263          KM   SUB-BASIN 190P
 264          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 265          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 266          BA    .021
 267          LG    .080    .250   4.100    .380  57.200
 268          UC    .100    .075
 269          UA       0       5      16      30      65      77      84      90      94      97
 270          UA     100

 271          KK   PNR5A
 272          KM   PANORAMA CONSENTRATION POINT 5A - COMBINE R1900, 190P
 273          HC       2
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 274          KK  RPNR5A
 275          KM   ROUTE PNR5A THROUGH SUB-BASIN 190Q TO CON. POINT PNR5
 276          RS       2    FLOW       0
 277          RC    0.04    0.04    0.04     625   0.019
 278          RX    9790    9855    9910    9990   10015   10045   10160   10220
 279          RY    1576    1544    1538    1536    1536    1540    1540    1558

 280          KK    190Q
 281          KM   SUB-BASIN 190Q
 282          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 283          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 284          BA    .012
 285          LG    .150    .250   4.000    .605    .000
 286          UC    .179    .239
 287          UA       0       3       5       8      12      20      43      75      90      96
 288          UA     100

 289          KK   *PNR5
 290          KM   PANORAMA CHANNEL CONCENTRATION POINT *5 - RPNR4, RPNR5A, 190Q
 291          HC       3

 292          KK    190R
 293          KM   SUB-BASIN 190R
 294          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 295          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 296          BA    .015
 297          LG    .150    .250   5.400    .232    .000
 298          UC    .179    .198
 299          UA       0       3       5       8      12      20      43      75      90      96
 300          UA     100

 301          KK    PNR5
 302          KM   PANORAMA CONSENTRATION POINT 5 - COMBINE (RPNR4, RPNR5A, 190Q), 190R
 303          HC       2

 304          KK   RPNR5
 305          KM   ROUTE PNR5 THROUGH SUB-BASIN 190S TO CON. POINT PNR6
 306          RS       2    FLOW       0
 307          RC    0.04    0.04    0.04     438   0.009
 308          RX    9785    9810    9845    9880   10060   10080   10100   10105
 309          RY    1550    1540    1528    1526    1526    1530    1536    1536

 310          KK    190S
 311          KM   SUB-BASIN 190S
 312          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 313          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 314          BA    .008
 315          LG    .150    .250   4.350    .512    .000
 316          UC    .167    .201
 317          UA       0       3       5       8      12      20      43      75      90      96
 318          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 319          KK   *PNR6
 320          KM   PANORAMA CHANNEL CONCENTRATION POINT *6 - RPNR5, 190S
 321          HC       2

 322          KK    190T
 323          KM   SUB-BASIN 190T
 324          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 325          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .998
 326          BA    .129
 327          LG    .150    .330   5.700    .207    .000
 328          UC    .308    .253
 329          UA       0       3       5       8      12      20      43      75      90      96
 330          UA     100

 331          KK    PNR6
 332          KM   PANORAMA CONSENTRATION POINT 5 - COMBINE (RPNR5, 190S), 190T
 333          HC       2

 334          KK   RPNR6
 335          KM   ROUTE PNR6 THROUGH SUB-BASIN 190V TO CON. POINT PNR7
 336          RS       2    FLOW       0
 337          RC    0.04    0.04    0.04     854   0.008
 338          RX    9775    9805    9840    9970   10040   10070   10115   10150
 339          RY    1540    1530    1520    1518    1518    1520    1526    1530

 340          KK    190V
 341          KM   SUB-BASIN 190V
 342          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 343          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 344          BA    .018
 345          LG    .150    .317   4.350    .385    .640
 346          UC    .196    .222
 347          UA       0       5      16      30      65      77      84      90      94      97
 348          UA     100

 349          KK   *PNR7
 350          KM   PANORAMA CHANNEL CONCENTRATION POINT *7 - RPNR6, 190V
 351          HC       2

 352          KK    190U
 353          KM   SUB-BASIN 190U
 354          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 355          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.000
 356          BA    .021
 357          LG    .100    .250   4.150    .370  45.500
 358          UC    .158    .191
 359          UA       0       5      16      30      65      77      84      90      94      97
 360          UA     100
```

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

 361          KK   R190U
 362          KM   ROUTE 190U THROUGH SUB-BASIN 190V TO CON. POINT PNR7
 363          RS       1    FLOW       0
 364          RC    0.04    0.04    0.04     286   0.035
 365          RX    9775    9805    9840    9970   10040   10070   10115   10150
 366          RY    1540    1530    1520    1518    1518    1520    1526    1530

 367          KK    PNR7
 368          KM   PANORAMA CONSENTRATION POINT 7 - COMBINE (RPNR6, 190U), R190U
 369          HC       2
 370          ZZ
```

```
            SCHEMATIC DIAGRAM OF STREAM NETWORK
LINE     (V) ROUTING          (--->) DIVERSION OR PUMP FLOW
NO.      (.) CONNECTOR        (<---) RETURN OF DIVERTED OR PUMPED FLOW

 17        182H
              V
              V
 26       S182H
              V
              V
 33       R182H
              .
              .
 39           .        190A
              .           .
              .           .
 48       PNR1A............
              V
              V
 51      SPNR1A
              V
              V
 58      RPNR1A
              .
              .
 64           .        190B
              .           .
              .           .
 73        PNR1............
              V
              V
 76       RPNR1
              .
              .
 82           .        190C
              .           .
              .           .
 91        PNR2............
              V
              V
 94       RPNR2
              .
              .
100           .        190D
              .           V
              .           V
109           .       R190D
              .           .
              .           .
115           .           .        190E
              .           .           .
              .           .           .
124           .           .           .        190F
              .           .           .           .
              .           .           .           .
133           .           .           .           .        190G
              .           .           .           .           .
              .           .           .           .           .
142           .       PNR3A.................................
              .           V
              .           V
145           .      RPNR3A
              .           .
              .           .
151           .           .        190H
              .           .           V
              .           .           V
              .           .       R190H
              .           .           .
```

```
        .          .          .        190I
        .          .          .          .
        .          .          .          .
175     .          .          .          .        190J
        .          .          .          .          .
        .          .          .          .          .
184   PNR3.......................................
        V
        V
187   RPNR3
        .
        .
193     .        190K
        .          V
        .          V
202     .       R190K
        .          .
        .          .
208     .          .        190L
        .          .          .
        .          .          .
217   *PNR4.......................
        .
        .
220     .        190M
        .          .
        .          .
229     .          .        190N
        .          .          .
        .          .          .
238    PNR4.......................
        V
        V
241   RPNR4
        .
        .
247     .        1900
        .          V
        .          V
256     .       R1900
        .          .
        .          .
262     .          .        190P
        .          .          .
        .          .          .
271     .       PNR5A............
        .          V
        .          V
274     .      RPNR5A
        .          .
        .          .
280     .          .        190Q
        .          .          .
        .          .          .
289   *PNR5.......................
        .
        .
292     .        190R
        .          .
        .          .
301    PNR5............
        V
        V
304   RPNR5
        .
        .
310     .        190S
        .          .
        .          .
      *PNR6............
        .
```

```
            .
            .        190T
            .          .
            .          .
331       PNR6............
            V
            V
334      RPNR6
            .
            .
340         .        190V
            .          .
            .          .
349      *PNR7............
            .
            .
352         .        190U
            .          V
            .          V
361         .       R190U
            .          .
            .          .
367       PNR7............
```

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

```
*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*              MAY   1991               *
*           VERSION 4.0.1E              *
*     Lahey F77L-EM/32 version 5.01     *
*        Dodson & Associates, Inc.      *
*  RUN DATE  04/11/95  TIME  13:18:45   *
*****************************************
```

```
*****************************************
*                                       *
*    U.S. ARMY CORPS OF ENGINEERS       *
*    HYDROLOGIC ENGINEERING CENTER      *
*          609 SECOND STREET            *
*       DAVIS, CALIFORNIA 95616         *
*           (916) 551-1748              *
*                                       *
*****************************************
```

PANORAMA CHANNEL - EXISTING CONDITIONS, AGK ENGINEERS, 04-11-95
First routing 06-29-93
100-Year 24-Hour storm
24-Hour SCS Type II distribution
2 minutes time step
File: 190-24CE.DAT

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

   IT        HYDROGRAPH TIME DATA
                   NMIN          2  MINUTES IN COMPUTATION INTERVAL
                  IDATE      1   0  STARTING DATE
                  ITIME       0000  STARTING TIME
                     NQ        720  NUMBER OF HYDROGRAPH ORDINATES
                 NDDATE      1   0  ENDING DATE
                 NDTIME       2358  ENDING TIME
                  ICENT         19  CENTURY MARK

            COMPUTATION INTERVAL    0.03 HOURS
                 TOTAL TIME BASE   23.97 HOURS

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

11 JD        INDEX STORM NO. 1
                  STRM        4.00  PRECIPITATION DEPTH
                  TRDA        0.00  TRANSPOSITION DRAINAGE AREA

12 PI          PRECIPITATION PATTERN
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
```

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

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

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	182H	41.	12.03	4.	1.	1.	0.03		
+	ROUTED TO	S182H	40.	12.07	4.	1.	1.	0.03		
+									1606.49	12.07
+	ROUTED TO	R182H	40.	12.07	4.	1.	1.	0.03		
+									1598.21	12.07
+	HYDROGRAPH AT	190A	29.	12.03	3.	1.	1.	0.02		
+	2 COMBINED AT	PNR1A	69.	12.03	7.	2.	2.	0.05		
+	ROUTED TO	SPNR1A	62.	12.10	5.	1.	1.	0.05		
+									1601.69	12.10
+	ROUTED TO	RPNR1A	62.	12.13	5.	1.	1.	0.05		
+									1590.24	12.13
+	HYDROGRAPH AT	190B	11.	12.03	1.	0.	0.	0.01		
+	2 COMBINED AT	PNR1	71.	12.13	6.	2.	2.	0.05		
+	ROUTED TO	RPNR1	70.	12.17	6.	2.	2.	0.05		
+									1588.32	12.17
+	HYDROGRAPH AT	190C	36.	12.03	4.	1.	1.	0.02		
+	2 COMBINED AT	PNR2	98.	12.10	11.	3.	3.	0.08		
+	ROUTED TO	RPNR2	97.	12.13	11.	3.	3.	0.08		
+									1578.37	12.13
+	HYDROGRAPH AT	190D	8.	12.00	1.	0.	0.	0.00		
+	ROUTED TO	R190D	8.	12.00	1.	0.	0.	0.00		
+									1588.07	11.97
+	HYDROGRAPH AT	190E	5.	12.03	1.	0.	0.	0.00		
+	HYDROGRAPH AT	190F	9.	12.03	1.	0.	0.	0.01		
+	HYDROGRAPH AT	190G	9.	12.03	1.	0.	0.	0.01		
+	4 COMBINED AT	PNR3A	31.	12.03	3.	1.	1.	0.02		

+	ROUTED TO	RPNR3A	31.	12.03	3.	1.	1.	0.02	
+									1576.45 12.03
+	HYDROGRAPH AT	190H	116.	12.03	11.	3.	3.	0.08	
+	ROUTED TO	R190H	116.	12.03	11.	3.	3.	0.08	
+									1576.68 12.03
+	HYDROGRAPH AT	190I	21.	12.00	3.	1.	1.	0.01	
+	HYDROGRAPH AT	190J	14.	12.03	2.	0.	0.	0.01	
+	5 COMBINED AT	PNR3	257.	12.10	29.	8.	8.	0.19	
+	ROUTED TO	RPNR3	254.	12.13	29.	8.	8.	0.19	
+									1570.55 12.13
+	HYDROGRAPH AT	190K	11.	12.07	1.	0.	0.	0.01	
+	ROUTED TO	R190K	11.	12.10	1.	0.	0.	0.01	
+									1570.08 12.10
+	HYDROGRAPH AT	190L	18.	12.00	2.	1.	1.	0.01	
+	3 COMBINED AT	*PNR4	279.	12.10	33.	9.	9.	0.21	
+	HYDROGRAPH AT	190M	13.	12.03	2.	0.	0.	0.01	
+	HYDROGRAPH AT	190N	28.	12.07	3.	1.	1.	0.02	
+	3 COMBINED AT	PNR4	317.	12.10	37.	10.	10.	0.24	
+	ROUTED TO	RPNR4	311.	12.13	37.	10.	10.	0.24	
+									1537.27 12.13
+	HYDROGRAPH AT	190O	10.	12.00	1.	0.	0.	0.01	
+	ROUTED TO	R190O	10.	12.03	1.	0.	0.	0.01	
+									1570.23 12.03
+	HYDROGRAPH AT	190P	37.	12.00	5.	2.	2.	0.02	
+	2 COMBINED AT	PNR5A	47.	12.00	6.	2.	2.	0.03	
+	ROUTED TO	RPNR5A	47.	12.00	6.	2.	2.	0.03	
+									1536.10 12.00
+	HYDROGRAPH AT	190Q	13.	12.07	1.	0.	0.	0.01	
+	3 COMBINED AT	*PNR5	353.	12.10	44.	12.	12.	0.28	

	HYDROGRAPH AT								
+		190R	22.	12.07	2.	1.	1.	0.01	
	2 COMBINED AT								
+		PNR5	374.	12.10	46.	13.	13.	0.29	
	ROUTED TO								
+		RPNR5	373.	12.13	46.	13.	13.	0.29	
+									1526.49 12.13
	HYDROGRAPH AT								
+		190S	10.	12.07	1.	0.	0.	0.01	
	2 COMBINED AT								
+		*PNR6	382.	12.13	47.	13.	13.	0.30	
	HYDROGRAPH AT								
+		190T	166.	12.13	18.	4.	4.	0.13	
	2 COMBINED AT								
+		PNR6	547.	12.13	65.	18.	18.	0.43	
	ROUTED TO								
+		RPNR6	544.	12.17	65.	18.	18.	0.43	
+									1519.29 12.17
	HYDROGRAPH AT								
+		190V	22.	12.03	2.	1.	1.	0.02	
	2 COMBINED AT								
+		*PNR7	559.	12.17	67.	18.	18.	0.45	
	HYDROGRAPH AT								
+		190U	33.	12.03	4.	1.	1.	0.02	
	ROUTED TO								
+		R190U	33.	12.03	4.	1.	1.	0.02	
+									1518.05 12.03
	2 COMBINED AT								
+		PNR7	582.	12.13	71.	19.	19.	0.47	

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