Flood Control District of Maricopa County
Contract FCD 89-79

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WICKENBURG AREA DRAINAGE MASTER STUDY

WATERSHED HYDROLOGY REPORT

VOLUME IIB

HEC-1 Output

West Tributaries Area
East Tributaries Area

Submitted to the
Federal Emergency Management Agency
on Behalf of the
Flood Control District of Maricopa County

BLACK & VEATCH
Progress By Design
Project No. 17676

COE & VAN LOO
PLANNING • ENGINEERING
LANDSCAPE ARCHITECTURE
CVL No. 1197-02

December 1992

Flood Control District of Maricopa County
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WEST TRIBUTARIES AREA
2-YEAR

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*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*            FEBRUARY 1981             *
*          REVISED 02 AUG 88           *
*                                      *
*  RUN DATE  10/20/1992  TIME  08:48:32 *
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*                                      *
*    U.S. ARMY CORPS OF ENGINEERS      *
*  THE 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        WICKENBURG ADMS - CONTRACT FCD 89-79
  2           ID        WASHES W (TURTLEBACK), R (CEMETARY), AE,AD, AC (TRIB. TO SOLS WASH)
  3           ID        SCS TYPE II STORM - 24 HR: PHOENIX MOUNTAIN S-GRAPH
  4           ID        AREAL REDUCTION FACTORS PER NWS HYDRO-40
  5           ID        SUNSET & SUNNYCOVE DAMS
  6           ID         STORAGE AREAS PER 1991 MAPPING & FIELD OBSERVED BOTTOM ELEV.
  7           ID         PIPELINE SYSTEM GATES ASSUMED TO BE CLOSED - THEREFORE ALL
  8           ID          SPILLS ARE PASSING THRU THE EMERGENCY SPILLWAYS ONLY.
  9           ID         SEDIMENT POOLS SET @ 2120 & 2148 FOR SUNSET & SUNNYCOVE DAMS
 10           ID         RATING CURVES MODIFIED TO REFLECT EXST. EMERGENCY SPILLWAYS
 11           ID        W1-2A:2-YEAR EVENT
              *DIAGRAM
 12           IT      6                    300
 13           IO      5
 14           IN     30
 15           JD   1.61     .01
 16           PC   .000    .005    .011    .016    .022    .028    .035    .041    .048    .056
 17           PC   .068    .071    .080    .089    .098    .109    .120    .133    .147    .163
 18           PC   .181    .204    .235    .283    .663    .735    .772    .799    .820    .838
 19           PC   .854    .868    .880    .891    .902    .912    .921    .929    .937    .945
 20           PC   .952    .959    .965    .972    .978    .984    .989    .995   1.000
 21           JD   1.58     3.0
 22           JD   1.55     10.
 23           JD   1.48    20.0
 24           JD   1.45    30.0

 25           KK    SW2
 26           KM   SUB-BASIN SW2
 27           BA   1.25
 28           LG    .15     .28    4.64     .23   14.90
 29           UI   569.   2025.   2254.   1276.    768.    474.    284.    170.    105.     53.
 30           UI    53.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 31           UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 32           KK    RW4
 33           KM       TURTLEBACK WASH WITHIN SW7
 34           RS      2    FLOW      -1
 35           RC   .045    .030    .045   12780     .02
 36           RX   462     465     485     490     510     515     535     538
 37           RY    18      15      15      10      10      15      15      18

 38           KK    SW6
 39           KM   SUB-BASIN SW6
 40           BA    .98
 41           LG    .15     .28    4.54     .23   16.00
 42           UI   151.    584.    997.   1356.    826.    642.    484.    340.    266.    182.
 43           UI   139.    103.     67.     64.     26.     26.     26.     26.      0.      0.
 44           UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 45           KK    SW7
 46           KM   SUB-BASIN SW7
 47           BA   1.30
 48           LG    .15     .28    4.71     .22   15.00
 49           UI   163.    617.   1111.   1661.   1175.    875.    697.    518.    392.    305.
 50           UI   215.    172.    125.     90.     80.     48.     31.     31.     31.     31.
```

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

  51          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
  52          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  53          KK     CW8
  54          HC       3

  55          KK    RW10
  56          KM        TURTLEBACK WASH WITHIN SW14
  57          RS       1    FLOW      -1
  58          RC    .045     .03    .045    5550   .0198
  59          RX     423     427     477     480     520     523     573     577
  60          RY      17      13      13      10      10      13      13      17

  61          KK    SW12
  62          KM   SUB-BASIN SW12
  63          BA     .51
  64          LG     .15     .28    3.70     .26   15.30
  65          UI    337.   1157.    780.    455.    256.    139.     78.     40.     25.      0.
  66          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
  67          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  68          KK    SW14
  69          KM   SUB-BASIN SW14
  70          BA     .76
  71          LG     .15     .29    3.71     .31   13.80
  72          UI    304.   1094.   1391.    792.    502.    324.    192.    120.     78.     36.
  73          UI     31.     31.      0.      0.      0.      0.      0.      0.      0.      0.
  74          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  75          KK    CW16
  76          HC       3

  77          KK    RW18
  78          KM        TURTLEBACK WASH WITHIN SW20
  79          RS       1    FLOW      -1
  80          RC    .045     .03    .045    4100    .018
  81          RX     423     427     477     480     520     523     573     577
  82          RY      17      13      13      10      10      13      13      17

  83          KK    SW20
  84          KM   SUB-BASIN SW20
  85          BA     .23
  86          LG     .15     .29    4.12     .39   12.60
  87          UI    137.    488.    364.    216.    124.     69.     38.     23.     11.     11.
  88          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
  89          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  90          KK    CW22
  91          KM    WASH "W" CONFLUENCE WITH HASSAYAMPA RIVER
  92          HC       2
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  93          KK    SQ2
  94          KM   SUB-BASIN SQ2
  95          BA    .37
  96          LG    .15     .30    3.61     .25    9.10
  97          UI   239.    830.    568.    334.    189.    102.     58.     30.     18.     18.
  98          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
  99          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 100          KK    SR2
 101          KM   SUB-BASIN SR2
 102          BA    .91
 103          LG    .15     .29    3.55     .27    8.00
 104          UI   138.    534.    914.   1258.    768.    597.    452.    318.    250.    171.
 105          UI   131.     95.     65.     61.     25.     24.     24.     24.      0.      0.
 106          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 107          KK    SR4
 108          KM   SUB-BASIN SR4
 109          BA    .47
 110          LG    .15     .30    3.67     .29   10.00
 111          UI   131.    491.    813.    511.    366.    239.    168.    105.     73.     47.
 112          UI    34.     16.     16.     16.      0.      0.      0.      0.      0.      0.
 113          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 114          KK    CR6
 115          HC      2

 116          KK    RR8
 117          KM       CEMETARY WASH WITHIN SR10
 118          RS      3    FLOW      -1
 119          RC   .045     .03    .045   10800   .0176
 120          RX   443     447     487     490     510     513     553     557
 121          RY    17      13      13      10      10      13      13      17

 122          KK   SR10
 123          KM   SUB-BASIN SR10
 124          BA   1.57
 125          LG    .15     .30    3.94     .35    8.40
 126          UI   173.    527.   1055.   1439.   1757.   1084.    886.    722.    552.    425.
 127          UI   354.    253.    203.    161.    133.     86.     85.     54.     33.     33.
 128          UI    33.     33.     33.      0.      0.      0.      0.      0.      0.      0.
 129          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 130          KK   CR12
 131          HC      2

 132          KK   RR14
 133          KM       CEMETARY WASH WITHIN SR32
 134          RS      1    FLOW      -1
 135          RC   .045     .03    .045    2200   .0182
 136          RX   443     447     487     490     510     513     553     557
 137          RY    17      13      13      10      10      13      13      17
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 138          KK   SR16
 139          KM   SUB-BASIN SR16
 140          BA    .75
 141          LG    .15     .30    3.61     .28   11.20
 142          UI   146.    553.    948.   1000.    618.    467.    319.    241.    160.    117.
 143          UI    84.     56.     43.     22.     22.     22.     22.      0.      0.      0.
 144          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 145          KK   SR18
 146          KM   SUB-BASIN SR18
 147          BA    .71
 148          LG    .15     .30    3.58     .28   11.20
 149          UI   103.    404.    694.    977.    602.    469.    358.    253.    200.    136.
 150          UI   108.     74.     54.     47.     25.     18.     18.     18.     18.      0.
 151          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 152          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 153          KK   CR20
 154          HC      2

 155          KK   RR22
 156          KM       CEMETARY WASH WITHIN SR26
 157          RS      1    FLOW      -1
 158          RC   .045     .03    .045    4800   .0188
 159          RX   439     444     494     495     505     506     556     561
 160          RY    16      11       1      10      10      11      11      16

 161          KK   SR24
 162          KM   SUB-BASIN SR24
 163          BA    .44
 164          LG    .15     .30    3.59     .28   12.70
 165          UI   110.    419.    730.    489.    350.    239.    168.    107.     75.     51.
 166          UI    37.     19.     14.     14.     14.      0.      0.      0.      0.      0.
 167          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 168          KK   RR25
 169          KM       CEMETARY WASH WITHIN SR26
 170          RS      1    FLOW      -1
 171          RC   .045     .03    .045    4800   .0167
 172          RX   450     454     494     495     505     506     546     550
 173          RY    15      11      11      10      10      11      11      15

 174          KK   SR26
 175          KM   SUB-BASIN SR26
 176          BA    .95
 177          LG    .15     .30    3.59     .28   12.10
 178          UI   229.    870.   1533.   1078.    761.    530.    368.    242.    171.    116.
 179          UI    78.     51.     31.     31.     31.      0.      0.      0.      0.      0.
 180          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 181          KK    CR28
 182          HC       3

 183          KK    RR30
 184          KM        CEMETARY WASH WITHIN SR32
 185          RS       2    FLOW      -1
 186          RC    .045     .03    .045    9200   .0163
 187          RX     439     444     494     495     505     506     556     561
 188          RY      16      11      11      10      10      11      11      16

 189          KK    SR32
 190          KM   SUB-BASIN SR32
 191          BA     .94
 192          LG     .15     .30    3.86     .33   11.30
 193          UI    167.    637.   1085.   1290.    779.    600.    424.    315.    218.    160.
 194          UI    113.     80.     67.     32.     26.     26.     26.      0.      0.      0.
 195          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 196          KK    CR34
 197          HC       3

 198          KK    RR36
 199          KM        CEMETARY WASH WITHIN SR38
 200          RS       1    FLOW      -1
 201          RC    .045     .03    .045    3000   .0167
 202          RX     435     438     483     485     515     517     562     566
 203          RY      16      12      12      10      10      12      12      16

 204          KK    SR38
 205          KM   SUB-BASIN SR38
 206          BA     .79
 207          LG     .15     .28    3.85     .25   14.60
 208          UI    104.    415.    723.   1062.    682.    528.    412.    295.    233.    166.
 209          UI    122.     93.     71.     50.     43.     20.     20.     20.     20.      0.
 210          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 211          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 212          KK    CR40
 213          HC       2

 214          KK    RR42
 215          KM        CEMETARY WASH WITHIN SR44
 216          RS       1    FLOW      -1
 217          RC    .045     .03    .045    5200   .0154
 218          RX     443     447     477     480     520     523     553     557
 219          RY      17      13      13      10      10      13      13      17

 220          KK    SR44
 221          KM   SUB-BASIN SR44
 222          BA    1.05
 223          LG     .15     .29    3.59     .28   14.20
 224          UI    313.   1159.   1854.   1131.    803.    515.    354.    227.    152.     95.
 225          UI     61.     37.     37.     37.      0.      0.      0.      0.      0.      0.
 226          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 227          KK    CR46
 228          HC       2

 229          KK    RR48
 230          KM        CEMETARY WASH WITHIN SR50
 231          RS       2    FLOW      -1
 232          RC    .045     .03    .045    7800   .0167
 233          RX     434     438     478     482     518     522     562     566
 234          RY      18      14      14      10      10      14      14      18

 235          KK    SR50
 236          KM   SUB-BASIN SR50
 237          BA     .56
 238          LG     .15     .31    3.76     .30    5.10
 239          UI    159.    596.    976.    606.    434.    281.    198.    122.     85.     54.
 240          UI     38.     19.     19.     19.      0.      0.      0.      0.      0.      0.
 241          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 242          KK    CR52
 243          KM    WASH "R" CONFLUENCE WITH HASSAYAMPA RIVER
 244          HC       2

 245          KK   NUL
 246          KM   COMBINING WASHES W, Q, & R TO REDUCE THE NO. OF FREE HYDROGRAPHS
 247          HC   3.

 248          KK    SAG2
 249          KM   SUB-BASIN SAG2
 250          BA     .18
 251          LG     .15     .32    3.72     .29    1.50
 252          UI    119.    408.    275.    161.     91.     49.     28.     14.      9.      0.
 253          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 254          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 255          KK    SAD2
 256          KM   SUB-BASIN SAD2
 257          BA     .59
 258          LG     .14     .32    3.91     .33    7.60
 259          UI    135.    511.    904.    696.    478.    341.    232.    161.    112.     77.
 260          UI     50.     39.     19.     19.     19.      0.      0.      0.      0.      0.
 261          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 262          KK    DAD4
 263          KM        SUNSET DAM - EXISTING CONDITIONS
 264          KM         DISCHARGES FOR EMERGENCY SPILLWAY PER WIER EQUATION(CREST @ 2130)
 265          KM         STORAGE AREAS PER 1991 MAPPING & FIELD OBSERVED BOTTOM ELEV.
 266          KM        TOP OF SEDIMENT STORAGE 2120.0 PER CONSTRUCTION PLANS
 267          RS       1    ELEV    2120
 268          SA       0     .78    3.09    4.21    5.10    6.83    8.60    9.12    9.64    9.70
 269          SQ       0       0       0       0       0       0       0       0     116     603
 270          SE  2112.5    2114    2118    2120    2122    2126    2130    2131    2132    2134
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 271          KK    RAD6
 272          KM    WASH AD - SURFACE & PIPELINE FLOW
 273          RS       1    FLOW      -1
 274          RC    .045     .03    .045    2400   .0167
 275          RX     434     438     478     482     518     522     562     566
 276          RY      18      14      14      10      10      14      14      18

 277          KK    SAD8
 278          KM   SUB-BASIN SAD8
 279          BA     .53
 280          LG     .14     .33    4.20     .39    6.10
 281          UI    103.    389.    666.    708.    437.    330.    226.    171.    113.     83.
 282          UI     60.     39.     31.     15.     15.     15.     15.      0.      0.      0.
 283          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 284          KK   SAE10
 285          KM   SUB-BASIN SAE10
 286          BA    1.34
 287          LG     .15     .31    3.61     .28    6.20
 288          UI    123.    270.    606.    855.   1119.   1237.    784.    662.    562.    467.
 289          UI    364.    298.    264.    195.    156.    134.    104.     94.     63.     60.
 290          UI     59.     24.     24.     24.     24.     24.     24.     24.      0.      0.
 291          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 292          KK   DAE12
 293          KM        SUNNYCOVE DAM - EXISTING CONDITIONS
 294          KM         DISCHARGES FOR EMERGENCY SPILLWAY PER WIER EQUATION(CREST @ 2170)
 295          KM         STORAGE AREAS PER 1991 MAPPING & FIELD OBSERVED BOTTOM ELEV.
 296          KM          TOP OF SEDIMENT STORAGE 2148 PER CONSTRUCTION PLAN
 297          RS       1    ELEV    2148
 298          SA     .03    1.19    2.19    2.63    3.69    8.09   14.17    15.0    18.5
 299          SQ       0       0       0       0       0       0       0     270    3020
 300          SE  2134.0    2140    2146    2148    2150    2160    2170    2171    2175

 301          KK   RAD14
 302          KM     WASH AD - SURFACE & PIPELINE FLOW
 303          RS       3    FLOW      -1
 304          RC    .045     .03    .045    5800   .0155
 305          RX     441     445     475     487     513     525     555     559
 306          RY      18      14      14      10      10      14      14      18

 307          KK   CAD16
 308          KM    WASH "AD" CONFLUENCE WITH HASSAYAMPA RIVER
 309          HC       3
 310          ZZ
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SCHEMATIC DIAGRAM OF STREAM NETWORK

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

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

 25        SW2
            V
            V
 32        RW4
            .
            .
 38         .        SW6
            .          .
            .          .
 45         .          .        SW7
            .          .          .
            .          .          .
 53        CW8.......................
            V
            V
 55       RW10
            .
            .
 61         .       SW12
            .          .
            .          .
 68         .          .       SW14
            .          .          .
            .          .          .
 75       CW16.......................
            V
            V
 77       RW18
            .
            .
 83         .       SW20
            .          .
            .          .
 90       CW22............
            .
            .
 93         .        SQ2
            .          .
            .          .
100         .          .        SR2
            .          .          .
            .          .          .
107         .          .          .        SR4
            .          .          .          .
            .          .          .          .
114         .          .        CR6............
            .          .          V
            .          .          V
116         .          .        RR8
            .          .          .
            .          .          .
122         .          .          .       SR10
            .          .          .          .
            .          .          .          .
 )          .          .       CR12............
            .          .          V
            .          .          V
132         .          .       RR14
            .          .          .
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138                 SR16
                      .
                      .
 5                    .        SR18
                      .          .
                      .          .
153                 CR20............
                      V
                      V
155                 RR22
                      .
                      .
161                   .        SR24
                      .          V
                      .          V
168                   .        RR25
                      .          .
                      .          .
174                   .          .        SR26
                      .          .          .
                      .          .          .
181                 CR28......................
                      V
                      V
183                 RR30
                      .
                      .
189                   .        SR32
                      .          .
                      .          .
196               CR34......................
                    V
                    V
198               RR36
                    .
                    .
204                 .        SR38
                    .          .
                    .          .
212               CR40............
                    V
                    V
214               RR42
                    .
                    .
220                 .        SR44
                    .          .
                    .          .
227               CR46............
                    V
                    V
229               RR48
                    .
                    .
235                 .        SR50
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242               CR52............
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                    .
 5      NUL  ......................
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248          .     SAG2
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                .          .
255             .          .        SAD2
                .          .          V
                .          .          V
[illegible]2    .          .        DAD4
                .          .          V
                .          .          V
271             .          .        RAD6
                .          .          .
                .          .          .
277             .          .          .        SAD8
                .          .          .          .
                .          .          .          .
284             .          .          .          .        SAE10
                .          .          .          .          V
                .          .          .          .          V
292             .          .          .          .        DAE12
                .          .          .          .          V
                .          .          .          .          V
301             .          .          .          .        RAD14
                .          .          .          .          .
                .          .          .          .          .
307             .          .        CAD16.......................
```

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

```
****************************************                    ****************************************
*                                      *                    *                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *                    *   U.S. ARMY CORPS OF ENGINEERS       *
*            FEBRUARY 1981             *                    *  THE HYDROLOGIC ENGINEERING CENTER   *
*          REVISED 02 AUG 88           *                    *         609 SECOND STREET            *
*                                      *                    *       DAVIS, CALIFORNIA 95616        *
*  RUN DATE  10/20/1992  TIME  08:48:32 *                    *          (916) 551-1748              *
*                                      *                    *                                      *
****************************************                    ****************************************
```

```
                         WICKENBURG ADMS - CONTRACT FCD 89-79
                         WASHES W (TURTLEBACK), R (CEMETARY), AE,AD, AC (TRIB. TO SOLS WASH)
                         SCS TYPE II STORM - 24 HR: PHOENIX MOUNTAIN S-GRAPH
                         AREAL REDUCTION FACTORS PER NWS HYDRO-40
                         SUNSET & SUNNYCOVE DAMS
                          STORAGE AREAS PER 1991 MAPPING & FIELD OBSERVED BOTTOM ELEV.
                          PIPELINE SYSTEM GATES ASSUMED TO BE CLOSED - THEREFORE ALL
                           SPILLS ARE PASSING THRU THE EMERGENCY SPILLWAYS ONLY.
                          SEDIMENT POOLS SET @ 2120 & 2148 FOR SUNSET & SUNNYCOVE DAMS
                          RATING CURVES MODIFIED TO REFLECT EXST. EMERGENCY SPILLWAYS
                         W1-2A:2-YEAR EVENT

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

    IT          HYDROGRAPH TIME DATA
                       NMIN          6  MINUTES IN COMPUTATION INTERVAL
                      IDATE      1   0  STARTING DATE
                      ITIME       0000  STARTING TIME
                         NQ        300  NUMBER OF HYDROGRAPH ORDINATES
                     NDDATE      2   0  ENDING DATE
                     NDTIME       0554  ENDING TIME
                      ICENT         19  CENTURY MARK

                 COMPUTATION INTERVAL     .10 HOURS
                      TOTAL TIME BASE   29.90 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

 15 JD          INDEX STORM NO. 1
                       STRM       1.61  PRECIPITATION DEPTH
                       TRDA        .01  TRANSPOSITION DRAINAGE AREA

 16 PI            PRECIPITATION PATTERN
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21 JD INDEX STORM NO. 2

STRM 1.58 PRECIPITATION DEPTH

TRDA 3.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

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22 JD INDEX STORM NO. 3

STRM 1.55 PRECIPITATION DEPTH

TRDA 10.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

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23 JD INDEX STORM NO. 4

STRM 1.48 PRECIPITATION DEPTH

TRDA 20.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

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24 JD INDEX STORM NO. 5

STRM 1.45 PRECIPITATION DEPTH

TRDA 30.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

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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	SW2	381.	12.10	44.	13.	11.	1.25		
ROUTED TO	RW4	271.	12.30	44.	13.	11.	1.25	11.20	12.40
HYDROGRAPH AT	SW6	243.	12.20	36.	11.	9.	.98		
HYDROGRAPH AT	SW7	307.	12.20	47.	14.	11.	1.30		
3 COMBINED AT	CW8	773.	12.20	124.	38.	30.	3.53		
ROUTED TO	RW10	715.	12.30	124.	38.	30.	3.53	11.47	12.40
HYDROGRAPH AT	SW12	166.	12.00	19.	6.	5.	.51		
HYDROGRAPH AT	SW14	187.	12.10	22.	7.	5.	.76		
3 COMBINED AT	CW16	863.	12.30	162.	49.	40.	4.80		
ROUTED TO	RW18	846.	12.30	161.	49.	40.	4.80	11.67	12.40
HYDROGRAPH AT	SW20	37.	12.10	4.	1.	1.	.23		
2 COMBINED AT	CW22	859.	12.30	165.	51.	41.	5.03		
HYDROGRAPH AT	SQ2	112.	12.10	11.	3.	3.	.37		
HYDROGRAPH AT	SR2	193.	12.20	26.	7.	6.	.91		
HYDROGRAPH AT	SR4	106.	12.10	13.	4.	3.	.47		
2 COMBINED AT	CR6	290.	12.10	38.	11.	9.	1.38		
ROUTED TO	RR8	243.	12.40	38.	11.	9.	1.38	11.14	12.50
HYDROGRAPH AT	SR10	166.	12.30	27.	8.	7.	1.57		

2 COMBINED AT	CR12	388.	12.40	65.	19.	16.	2.95		
ROUTED TO	RR14	384.	12.40	65.	19.	16.	2.95	11.44	12.50
HYDROGRAPH AT	SR16	163.	12.10	22.	7.	5.	.75		
HYDROGRAPH AT	SR18	148.	12.20	21.	6.	5.	.71		
2 COMBINED AT	CR20	309.	12.20	43.	13.	10.	1.46		
ROUTED TO	RR22	267.	12.30	43.	13.	10.	1.46	4.41	12.30
HYDROGRAPH AT	SR24	108.	12.10	14.	4.	3.	.44		
ROUTED TO	RR25	76.	12.30	14.	4.	3.	.44	10.92	12.30
HYDROGRAPH AT	SR26	227.	12.10	29.	9.	7.	.95		
3 COMBINED AT	CR28	531.	12.20	84.	25.	20.	2.85		
ROUTED TO	RR30	338.	12.70	84.	25.	20.	2.85	11.44	12.80
HYDROGRAPH AT	SR32	151.	12.20	21.	7.	5.	.94		
3 COMBINED AT	CR34	694.	12.50	163.	49.	40.	6.74		
ROUTED TO	RR36	666.	12.60	163.	49.	40.	6.74	11.74	12.60
HYDROGRAPH AT	SR38	192.	12.20	29.	9.	7.	.79		
2 COMBINED AT	CR40	743.	12.50	189.	57.	46.	7.53		
ROUTED TO	RR42	726.	12.60	189.	57.	46.	7.53	11.59	12.70
HYDROGRAPH AT	SR44	281.	12.10	35.	11.	8.	1.05		
2 COMBINED AT	CR46	783.	12.60	220.	67.	54.	8.58		
ROUTED TO	RR48	769.	12.70	219.	67.	54.	8.58		

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+                                                                                    11.72       12.80

      HYDROGRAPH AT
+                    SR50      102.  12.10       11.       3.       2.      .56

      2 COMBINED AT
+                    CR52      780.  12.70      228.      69.      56.     9.14

      3 COMBINED AT
+                    NUL      1362.  12.40      370.     114.      92.    14.54

      HYDROGRAPH AT
+                    SAG2       37.  12.10        3.       1.       1.      .18

      HYDROGRAPH AT
+                    SAD2       83.  12.20       10.       3.       3.      .59

      ROUTED TO
+                    DAD4        0.    .10        0.       0.       0.      .59
+                                                                          2120.98       24.80

      ROUTED TO
+                    RAD6        0.    .10        0.       0.       0.      .59
+                                                                            10.00        .00

      HYDROGRAPH AT
+                    SAD8       34.  12.20        5.       2.       1.      .53

      HYDROGRAPH AT
+                    SAE10     185.  12.30       31.       9.       7.     1.34

      ROUTED TO
                    DAE12       0.    .10        0.       0.       0.     1.34
                                                                          2151.14       25.80

      ROUTED TO
+                    RAD14       0.    .10        0.       0.       0.     1.34
+                                                                            10.00        .00

      3 COMBINED AT
+                    CAD16      34.  12.20        5.       2.       1.     2.46


*** NORMAL END OF HEC-1 ***
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WEST TRIBUTARIES AREA
10-YEAR

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*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
          FEBRUARY 1981                *
        REVISED 02 AUG 88              *
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* RUN DATE  10/20/1992  TIME  08:45:15 *
*                                      *
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*                                      *
*   U.S. ARMY CORPS OF ENGINEERS       *
* THE 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        WICKENBURG ADMS - CONTRACT FCD 89-79
  2           ID        WASHES W (TURTLEBACK), R (CEMETARY), AE,AD, AC (TRIB. TO SOLS WASH)
  3           ID        SCS TYPE II STORM - 24 HR: PHOENIX MOUNTAIN S-GRAPH
  4           ID        AREAL REDUCTION FACTORS PER NWS HYDRO-40
  5           ID        SUNSET & SUNNYCOVE DAMS
  6           ID         STORAGE AREAS PER 1991 MAPPING & FIELD OBSERVED BOTTOM ELEV.
  7           ID         PIPELINE SYSTEM GATES ASSUMED TO BE CLOSED - THEREFORE ALL
  8           ID          SPILLS ARE PASSING THRU THE EMERGENCY SPILLWAYS ONLY.
  9           ID         SEDIMENT POOLS SET @ 2120 & 2148 FOR SUNSET & SUNNYCOVE DAMS
 10           ID         RATING CURVES MODIFIED TO REFLECT EXST. EMERGENCY SPILLWAYS
 11           ID        W1-10A;10-YEAR EVENT
             *DIAGRAM
 12           IT      6                    300
 13           IO      5
 14           IN     30
 15           JD   2.68     .01
 16           PC    .000    .005    .011    .016    .022    .028    .035    .041    .048    .056
 17           PC    .068    .071    .080    .089    .098    .109    .120    .133    .147    .163
 18           PC    .181    .204    .235    .283    .663    .735    .772    .799    .820    .838
 19           PC    .854    .868    .880    .891    .902    .912    .921    .929    .937    .945
 20           PC    .952    .959    .965    .972    .978    .984    .989    .995   1.000
 21           JD   2.63     3.0
 22           JD   2.57     10.
 23           JD   2.47    20.0
 24           JD   2.41    30.0

 25           KK     SW2
 26           KM   SUB-BASIN SW2
 27           BA    1.25
 28           LG     .15     .28    4.64     .23   14.90
 29           UI    569.   2025.   2254.   1276.    768.    474.    284.    170.    105.     53.
 30           UI     53.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 31           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 32           KK     RW4
 33           KM        TURTLEBACK WASH WITHIN SW7
 34           RS       2    FLOW      -1
 35           RC    .045    .030    .045   12780     .02
 36           RX    462     465     485     490     510     515     535     538
 37           RY     18      15      15      10      10      15      15      18

 38           KK     SW6
 39           KM   SUB-BASIN SW6
 40           BA     .98
 41           LG     .15     .28    4.54     .23   16.00
 42           UI    151.    584.    997.   1356.    826.    642.    484.    340.    266.    182.
 43           UI    139.    103.     67.     64.     26.     26.     26.     26.      0.      0.
 44           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 45           KK     SW7
 46           KM   SUB-BASIN SW7
 47           BA    1.30
 48           LG     .15     .28    4.71     .22   15.00
 49           UI    163.    617.   1111.   1661.   1175.    875.    697.    518.    392.    305.
 50           UI    215.    172.    125.     90.     80.     48.     31.     31.     31.     31.
```

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

  51          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
  52          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  53          KK     CW8
  54          HC       3

  55          KK    RW10
  56          KM        TURTLEBACK WASH WITHIN SW14
  57          RS       1    FLOW      -1
  58          RC    .045     .03    .045    5550   .0198
  59          RX     423     427     477     480     520     523     573     577
  60          RY      17      13      13      10      10      13      13      17

  61          KK    SW12
  62          KM   SUB-BASIN SW12
  63          BA     .51
  64          LG     .15     .28    3.70     .26   15.30
  65          UI    337.   1157.    780.    455.    256.    139.     78.     40.     25.      0.
  66          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
  67          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  68          KK    SW14
  69          KM   SUB-BASIN SW14
  70          BA     .76
  71          LG     .15     .29    3.71     .31   13.80
  72          UI    304.   1094.   1391.    792.    502.    324.    192.    120.     78.     36.
  73          UI     31.     31.      0.      0.      0.      0.      0.      0.      0.      0.
  74          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  75          KK    CW16
  76          HC       3

  77          KK    RW18
  78          KM        TURTLEBACK WASH WITHIN SW20
  79          RS       1    FLOW      -1
  80          RC    .045     .03    .045    4100    .018
  81          RX     423     427     477     480     520     523     573     577
  82          RY      17      13      13      10      10      13      13      17

  83          KK    SW20
  84          KM   SUB-BASIN SW20
  85          BA     .23
  86          LG     .15     .29    4.12     .39   12.60
  87          UI    137.    488.    364.    216.    124.     69.     38.     23.     11.     11.
  88          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
  89          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  90          KK    CW22
  91          KM    WASH "W" CONFLUENCE WITH HASSAYAMPA RIVER
  92          HC       2
```

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

  93          KK     SQ2
  94          KM   SUB-BASIN SQ2
  95          BA     .37
  96          LG     .15     .30    3.61     .25    9.10
  97          UI    239.    830.    568.    334.    189.    102.     58.     30.     18.     18.
  98          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
  99          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 100          KK     SR2
 101          KM   SUB-BASIN SR2
 102          BA     .91
 103          LG     .15     .29    3.55     .27    8.00
 104          UI    138.    534.    914.   1258.    768.    597.    452.    318.    250.    171.
 105          UI    131.     95.     65.     61.     25.     24.     24.     24.      0.      0.
 106          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 107          KK     SR4
 108          KM   SUB-BASIN SR4
 109          BA     .47
 110          LG     .15     .30    3.67     .29   10.00
 111          UI    131.    491.    813.    511.    366.    239.    168.    105.     73.     47.
 112          UI     34.     16.     16.     16.      0.      0.      0.      0.      0.      0.
 113          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 114          KK     CR6
 115          HC       2

 116          KK     RR8
 117          KM        CEMETARY WASH WITHIN SR10
 118          RS       3    FLOW      -1
 119          RC    .045     .03    .045   10800   .0176
 120          RX     443     447     487     490     510     513     553     557
 121          RY      17      13      13      10      10      13      13      17

 122          KK    SR10
 123          KM   SUB-BASIN SR10
 124          BA    1.57
 125          LG     .15     .30    3.94     .35    8.40
 126          UI    173.    527.   1055.   1439.   1757.   1084.    886.    722.    552.    425.
 127          UI    354.    253.    203.    161.    133.     86.     85.     54.     33.     33.
 128          UI     33.     33.     33.      0.      0.      0.      0.      0.      0.      0.
 129          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 130          KK    CR12
 131          HC       2

 132          KK    RR14
 133          KM        CEMETARY WASH WITHIN SR32
 134          RS       1    FLOW      -1
 135          RC    .045     .03    .045    2200   .0182
 136          RX     443     447     487     490     510     513     553     557
 137          RY      17      13      13      10      10      13      13      17
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 138          KK   SR16
 139          KM   SUB-BASIN SR16
 140          BA    .75
 141          LG    .15     .30    3.61     .28   11.20
 142          UI   146.    553.    948.   1000.    618.    467.    319.    241.    160.    117.
 143          UI    84.     56.     43.     22.     22.     22.     22.      0.      0.      0.
 144          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 145          KK   SR18
 146          KM   SUB-BASIN SR18
 147          BA    .71
 148          LG    .15     .30    3.58     .28   11.20
 149          UI   103.    404.    694.    977.    602.    469.    358.    253.    200.    136.
 150          UI   108.     74.     54.     47.     25.     18.     18.     18.     18.      0.
 151          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 152          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 153          KK   CR20
 154          HC      2

 155          KK   RR22
 156          KM       CEMETARY WASH WITHIN SR26
 157          RS      1    FLOW      -1
 158          RC   .045     .03    .045    4800   .0188
 159          RX   439     444     494     495     505     506     556     561
 160          RY    16      11       1      10      10      11      11      16

 161          KK   SR24
 162          KM   SUB-BASIN SR24
 163          BA    .44
 164          LG    .15     .30    3.59     .28   12.70
 165          UI   110.    419.    730.    489.    350.    239.    168.    107.     75.     51.
 166          UI    37.     19.     14.     14.     14.      0.      0.      0.      0.      0.
 167          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 168          KK   RR25
 169          KM       CEMETARY WASH WITHIN SR26
 170          RS      1    FLOW      -1
 171          RC   .045     .03    .045    4800   .0167
 172          RX   450     454     494     495     505     506     546     550
 173          RY    15      11      11      10      10      11      11      15

 174          KK   SR26
 175          KM   SUB-BASIN SR26
 176          BA    .95
 177          LG    .15     .30    3.59     .28   12.10
 178          UI   229.    870.   1533.   1078.    761.    530.    368.    242.    171.    116.
 179          UI    78.     51.     31.     31.     31.      0.      0.      0.      0.      0.
 180          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 181          KK    CR28
 182          HC       3

 183          KK    RR30
 184          KM        CEMETARY WASH WITHIN SR32
 185          RS       2    FLOW      -1
 186          RC    .045     .03    .045    9200   .0163
 187          RX     439     444     494     495     505     506     556     561
 188          RY      16      11      11      10      10      11      11      16

 189          KK    SR32
 190          KM   SUB-BASIN SR32
 191          BA     .94
 192          LG     .15     .30    3.86     .33   11.30
 193          UI    167.    637.   1085.   1290.    779.    600.    424.    315.    218.    160.
 194          UI    113.     80.     67.     32.     26.     26.     26.      0.      0.      0.
 195          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 196          KK    CR34
 197          HC       3

 198          KK    RR36
 199          KM        CEMETARY WASH WITHIN SR38
 200          RS       1    FLOW      -1
 201          RC    .045     .03    .045    3000   .0167
 202          RX     435     438     483     485     515     517     562     566
 203          RY      16      12      12      10      10      12      12      16

 204          KK    SR38
 205          KM   SUB-BASIN SR38
 206          BA     .79
 207          LG     .15     .28    3.85     .25   14.60
 208          UI    104.    415.    723.   1062.    682.    528.    412.    295.    233.    166.
 209          UI    122.     93.     71.     50.     43.     20.     20.     20.     20.      0.
 210          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 211          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 212          KK    CR40
 213          HC       2

 214          KK    RR42
 215          KM        CEMETARY WASH WITHIN SR44
 216          RS       1    FLOW      -1
 217          RC    .045     .03    .045    5200   .0154
 218          RX     443     447     477     480     520     523     553     557
 219          RY      17      13      13      10      10      13      13      17

 220          KK    SR44
 221          KM   SUB-BASIN SR44
 222          BA    1.05
 223          LG     .15     .29    3.59     .28   14.20
 224          UI    313.   1159.   1854.   1131.    803.    515.    354.    227.    152.     95.
 225          UI     61.     37.     37.     37.      0.      0.      0.      0.      0.      0.
 226          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 227          KK    CR46
 228          HC       2

 229          KK    RR48
 230          KM        CEMETARY WASH WITHIN SR50
 231          RS       2    FLOW      -1
 232          RC    .045     .03    .045    7800   .0167
 233          RX     434     438     478     482     518     522     562     566
 234          RY      18      14      14      10      10      14      14      18

 235          KK    SR50
 236          KM   SUB-BASIN SR50
 237          BA     .56
 238          LG     .15     .31    3.76     .30    5.10
 239          UI    159.    596.    976.    606.    434.    281.    198.    122.     85.     54.
 240          UI     38.     19.     19.     19.      0.      0.      0.      0.      0.      0.
 241          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 242          KK    CR52
 243          KM    WASH "R" CONFLUENCE WITH HASSAYAMPA RIVER
 244          HC       2

 245          KK   NUL
 246          KM   COMBINING WASHES W, Q, & R TO REDUCE THE NO. OF FREE HYDROGRAPHS
 247          HC   3.

 248          KK    SAG2
 249          KM   SUB-BASIN SAG2
 250          BA     .18
 251          LG     .15     .32    3.72     .29    1.50
 252          UI    119.    408.    275.    161.     91.     49.     28.     14.      9.      0.
 253          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 254          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 255          KK    SAD2
 256          KM   SUB-BASIN SAD2
 257          BA     .59
 258          LG     .14     .32    3.91     .33    7.60
 259          UI    135.    511.    904.    696.    478.    341.    232.    161.    112.     77.
 260          UI     50.     39.     19.     19.     19.      0.      0.      0.      0.      0.
 261          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 262          KK    DAD4
 263          KM        SUNSET DAM - EXISTING CONDITIONS
 264          KM         DISCHARGES FOR EMERGENCY SPILLWAY PER WIER EQUATION(CREST @ 2130)
 265          KM         STORAGE AREAS PER 1991 MAPPING & FIELD OBSERVED BOTTOM ELEV.
 266          KM        TOP OF SEDIMENT STORAGE 2120.0 PER CONSTRUCTION PLANS
 267          RS       1    ELEV    2120
 268          SA       0     .78    3.09    4.21    5.10    6.83    8.60    9.12    9.64    9.70
 269          SQ       0       0       0       0       0       0       0       0     116     603
 270          SE  2112.5    2114    2118    2120    2122    2126    2130    2131    2132    2134
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 271          KK    RAD6
 272          KM    WASH AD - SURFACE & PIPELINE FLOW
 273          RS       1    FLOW      -1
 274          RC    .045     .03    .045    2400   .0167
 275          RX     434     438     478     482     518     522     562     566
 276          RY      18      14      14      10      10      14      14      18

 277          KK    SAD8
 278          KM   SUB-BASIN SAD8
 279          BA     .53
 280          LG     .14     .33    4.20     .39    6.10
 281          UI    103.    389.    666.    708.    437.    330.    226.    171.    113.     83.
 282          UI     60.     39.     31.     15.     15.     15.     15.      0.      0.      0.
 283          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 284          KK   SAE10
 285          KM   SUB-BASIN SAE10
 286          BA    1.34
 287          LG     .15     .31    3.61     .28    6.20
 288          UI    123.    270.    606.    855.   1119.   1237.    784.    662.    562.    467.
 289          UI    364.    298.    264.    195.    156.    134.    104.     94.     63.     60.
 290          UI     59.     24.     24.     24.     24.     24.     24.     24.      0.      0.
 291          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 292          KK   DAE12
 293          KM        SUNNYCOVE DAM - EXISTING CONDITIONS
 294          KM         DISCHARGES FOR EMERGENCY SPILLWAY PER WIER EQUATION(CREST @ 2170)
 295          KM         STORAGE AREAS PER 1991 MAPPING & FIELD OBSERVED BOTTOM ELEV.
 296          KM          TOP OF SEDIMENT STORAGE 2148 PER CONSTRUCTION PLAN
 297          RS       1    ELEV    2148
 298          SA     .03    1.19    2.19    2.63    3.69    8.09   14.17    15.0    18.5
 299          SQ       0       0       0       0       0       0       0     270    3020
 300          SE  2134.0    2140    2146    2148    2150    2160    2170    2171    2175

 301          KK   RAD14
 302          KM    WASH AD - SURFACE & PIPELINE FLOW
 303          RS       3    FLOW      -1
 304          RC    .045     .03    .045    5800   .0155
 305          RX     441     445     475     487     513     525     555     559
 306          RY      18      14      14      10      10      14      14      18

 307          KK   CAD16
 308          KM    WASH "AD" CONFLUENCE WITH HASSAYAMPA RIVER
 309          HC       3
 310          ZZ
```

SCHEMATIC DIAGRAM OF STREAM NETWORK

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

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

 25          SW2
               V
               V
 32          RW4
               .
               .
 38            .         SW6
               .           .
               .           .
 45            .           .         SW7
               .           .           .
               .           .           .
 53          CW8.......................
               V
               V
 55         RW10
               .
               .
 61            .        SW12
               .           .
               .           .
 68            .           .       SW14
               .           .           .
               .           .           .
 75         CW16.......................
               V
               V
 77         RW18
               .
               .
 83            .        SW20
               .           .
               .           .
 90         CW22............
               .
               .
 93            .         SQ2
               .           .
               .           .
100            .           .         SR2
               .           .           .
               .           .           .
107            .           .           .         SR4
               .           .           .           .
               .           .           .           .
114            .           .         CR6............
               .           .           V
               .           .           V
116            .           .         RR8
               .           .           .
               .           .           .
122            .           .           .        SR10
               .           .           .           .
               .           .           .           .
               .           .       CR12............
               .           .           V
               .           .           V
132            .           .       RR14
               .           .           .
```

```
138                 SR16
                      .
                      .
145                   .        SR18
                      .          .
                      .          .
153                 CR20............
                      V
                      V
155                 RR22
                      .
                      .
161                   .        SR24
                      .          V
                      .          V
168                   .        RR25
                      .          .
                      .          .
174                   .          .        SR26
                      .          .          .
                      .          .          .
181                 CR28......................
                      V
                      V
183                 RR30
                      .
                      .
189                   .        SR32
                      .          .
                      .          .
196               CR34......................
                    V
                    V
198               RR36
                      .
                      .
204                   .        SR38
                      .          .
                      .          .
212               CR40............
                    V
                    V
214               RR42
                      .
                      .
220                   .        SR44
                      .          .
                      .          .
227               CR46............
                    V
                    V
229               RR48
                      .
                      .
235                   .        SR50
                      .          .
                      .          .
242               CR52............
                      .
                      .
    NUL  ......................
                      .
                      .
248           SAG2
                      .
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                .          .
255             .          .        SAD2
                .          .          V
                .          .          V
262             .          .        DAD4
                .          .          V
                .          .          V
271             .          .        RAD6
                .          .          .
                .          .          .
277             .          .          .        SAD8
                .          .          .          .
                .          .          .          .
284             .          .          .          .        SAE10
                .          .          .          .          V
                .          .          .          .          V
292             .          .          .          .        DAE12
                .          .          .          .          V
                .          .          .          .          V
301             .          .          .          .        RAD14
                .          .          .          .          .
                .          .          .          .          .
307             .          .        CAD16.......................
```

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

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****************************************                    ****************************************
*                                      *                    *                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *                    *   U.S. ARMY CORPS OF ENGINEERS       *
*            FEBRUARY 1981             *                    *  THE HYDROLOGIC ENGINEERING CENTER   *
*          REVISED 02 AUG 88           *                    *          609 SECOND STREET           *
*                                      *                    *       DAVIS, CALIFORNIA 95616        *
*  RUN DATE  10/20/1992  TIME  08:45:15 *                    *          (916) 551-1748              *
*                                      *                    *                                      *
****************************************                    ****************************************
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                    WICKENBURG ADMS - CONTRACT FCD 89-79
                    WASHES W (TURTLEBACK), R (CEMETARY), AE,AD, AC (TRIB. TO SOLS WASH)
                    SCS TYPE II STORM - 24 HR: PHOENIX MOUNTAIN S-GRAPH
                    AREAL REDUCTION FACTORS PER NWS HYDRO-40
                    SUNSET & SUNNYCOVE DAMS
                     STORAGE AREAS PER 1991 MAPPING & FIELD OBSERVED BOTTOM ELEV.
                     PIPELINE SYSTEM GATES ASSUMED TO BE CLOSED - THEREFORE ALL
                      SPILLS ARE PASSING THRU THE EMERGENCY SPILLWAYS ONLY.
                     SEDIMENT POOLS SET @ 2120 & 2148 FOR SUNSET & SUNNYCOVE DAMS
                     RATING CURVES MODIFIED TO REFLECT EXST. EMERGENCY SPILLWAYS
                    W1-10A;10-YEAR EVENT

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

   IT        HYDROGRAPH TIME DATA
                  NMIN          6  MINUTES IN COMPUTATION INTERVAL
                 IDATE      1   0  STARTING DATE
                 ITIME       0000  STARTING TIME
                    NQ        300  NUMBER OF HYDROGRAPH ORDINATES
                NDDATE      2   0  ENDING DATE
                NDTIME       0554  ENDING TIME
                 ICENT         19  CENTURY MARK

           COMPUTATION INTERVAL     .10 HOURS
                TOTAL TIME BASE   29.90 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

15 JD        INDEX STORM NO. 1
                 STRM       2.68  PRECIPITATION DEPTH
                 TRDA        .01  TRANSPOSITION DRAINAGE AREA

16 PI         PRECIPITATION PATTERN
                .00      .00      .00      .00      .00      .00      .00      .00      .00      .00
                .00      .00      .00      .00      .00      .00      .00      .00      .00      .00
                .00      .00      .00      .00      .00      .00      .00      .00      .00      .00
                .00      .00      .00      .00      .00      .00      .00      .00      .00      .00
                .00      .00      .00      .00      .00      .00      .00      .00      .00      .00
                .00      .00      .00      .00      .00      .00      .00      .00      .00      .00
                .00      .00      .00      .00      .00      .00      .00      .00      .00      .00
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21 JD INDEX STORM NO. 2

STRM 2.63 PRECIPITATION DEPTH

TRDA 3.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
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22 JD INDEX STORM NO. 3

STRM 2.57 PRECIPITATION DEPTH

TRDA 10.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

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23 JD INDEX STORM NO. 4

STRM 2.47 PRECIPITATION DEPTH

TRDA 20.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

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24 JD INDEX STORM NO. 5

STRM 2.41 PRECIPITATION DEPTH

TRDA 30.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

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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	SW2	1020.	12.00	116.	33.	26.	1.25		
ROUTED TO	RW4	892.	12.20	115.	33.	26.	1.25	12.75	12.20
HYDROGRAPH AT	SW6	662.	12.10	92.	26.	21.	.98		
HYDROGRAPH AT	SW7	837.	12.20	122.	34.	28.	1.30		
3 COMBINED AT	CW8	2359.	12.20	326.	93.	74.	3.53		
ROUTED TO	RW10	2131.	12.30	326.	93.	74.	3.53	13.11	12.30
HYDROGRAPH AT	SW12	447.	12.00	48.	14.	11.	.51		
HYDROGRAPH AT	SW14	574.	12.10	66.	19.	15.	.76		
3 COMBINED AT	CW16	2757.	12.10	434.	123.	99.	4.80		
ROUTED TO	RW18	2602.	12.30	434.	123.	99.	4.80	13.49	12.30
HYDROGRAPH AT	SW20	160.	12.00	17.	5.	4.	.23		
2 COMBINED AT	CW22	2659.	12.30	450.	128.	103.	5.03		
HYDROGRAPH AT	SQ2	317.	12.00	32.	9.	7.	.37		
HYDROGRAPH AT	SR2	582.	12.10	76.	20.	16.	.91		
HYDROGRAPH AT	SR4	338.	12.10	39.	11.	9.	.47		
2 COMBINED AT	CR6	917.	12.10	115.	31.	25.	1.38		
ROUTED TO	RR8	810.	12.30	114.	31.	25.	1.38	12.79	12.30
HYDROGRAPH AT	SR10	767.	12.20	114.	31.	25.	1.57		

2 COMBINED AT								
	CR12	1542.	12.30	228.	62.	50.	2.95	
ROUTED TO								
	RR14	1520.	12.30	228.	62.	50.	2.95	
								13.56 12.30
HYDROGRAPH AT								
	SR16	510.	12.10	64.	18.	14.	.75	
HYDROGRAPH AT								
	SR18	448.	12.10	61.	17.	14.	.71	
2 COMBINED AT								
	CR20	954.	12.10	125.	35.	28.	1.46	
ROUTED TO								
	RR22	878.	12.20	125.	35.	28.	1.46	
								6.71 12.20
HYDROGRAPH AT								
	SR24	321.	12.10	39.	11.	9.	.44	
ROUTED TO								
	RR25	230.	12.30	39.	11.	9.	.44	
								11.40 12.30
HYDROGRAPH AT								
	SR26	683.	12.10	83.	23.	19.	.95	
3 COMBINED AT								
	CR28	1710.	12.20	245.	68.	55.	2.85	
ROUTED TO								
	RR30	1365.	12.40	245.	68.	55.	2.85	
								12.50 12.50
HYDROGRAPH AT								
	SR32	572.	12.10	75.	21.	17.	.94	
3 COMBINED AT								
	CR34	3084.	12.40	533.	147.	118.	6.74	
ROUTED TO								
	RR36	3049.	12.40	533.	147.	118.	6.74	
								13.65 12.40
HYDROGRAPH AT								
	SR38	516.	12.20	74.	21.	17.	.79	
2 COMBINED AT								
	CR40	3362.	12.40	602.	167.	134.	7.53	
ROUTED TO								
	RR42	3199.	12.50	602.	167.	134.	7.53	
								13.97 12.50
HYDROGRAPH AT								
	SR44	796.	12.10	95.	27.	22.	1.05	
2 COMBINED AT								
	CR46	3399.	12.50	690.	192.	154.	8.58	
ROUTED TO								
	RR48	3199.	12.70	690.	192.	154.	8.58	

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+                                                                                    14.36        12.70

      HYDROGRAPH AT
+                        SR50      382.   12.10        42.        11.        9.       .56

      2 COMBINED AT
+                        CR52     3250.   12.60       728.       202.      163.      9.14

      3 COMBINED AT
+                        NUL      5172.   12.40      1156.       324.      261.     14.54

      HYDROGRAPH AT
+                        SAG2      138.   12.00        13.         3.        3.       .18

      HYDROGRAPH AT
+                        SAD2      368.   12.10        43.        12.        9.       .59

      ROUTED TO
+                        DAD4        0.     .10         0.         0.        0.       .59
+                                                                                  2123.73        24.90

      ROUTED TO
+                        RAD6        0.     .10         0.         0.        0.       .59
+                                                                                    10.00         .00

      HYDROGRAPH AT
+                        SAD8      271.   12.10        33.         9.        7.       .53

      HYDROGRAPH AT
+                        SAE10     641.   12.30       105.        28.       23.      1.34

      ROUTED TO
+                        DAE12       0.     .10         0.         0.        0.      1.34
                                                                                  2157.22        26.10

      ROUTED TO
+                        RAD14       0.     .10         0.         0.        0.      1.34
+                                                                                    10.00         .00

      3 COMBINED AT
+                        CAD16     271.   12.10        33.         9.        7.      2.46


*** NORMAL END OF HEC-1 ***
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WEST TRIBUTARIES AREA
25-YEAR

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*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*            FEBRUARY 1981              *
*          REVISED 02 AUG 88            *
*                                       *
* RUN DATE  10/20/1992  TIME  09:04:36  *
*                                       *
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*                                      *
*    U.S. ARMY CORPS OF ENGINEERS      *
*  THE 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        WICKENBURG ADMS - CONTRACT FCD 89-79
  2           ID        WASHES W (TURTLEBACK), R (CEMETARY), AE,AD, AC (TRIB. TO SOLS WASH)
  3           ID        SCS TYPE II STORM - 24 HR: PHOENIX MOUNTAIN S-GRAPH
  4           ID        AREAL REDUCTION FACTORS PER NWS HYDRO-40
  5           ID        SUNSET & SUNNYCOVE DAMS
  6           ID         STORAGE AREAS PER 1991 MAPPING & FIELD OBSERVED BOTTOM ELEV.
  7           ID         PIPELINE SYSTEM GATES ASSUMED TO BE CLOSED - THEREFORE ALL
  8           ID          SPILLS ARE PASSING THRU THE EMERGENCY SPILLWAYS ONLY.
  9           ID         SEDIMENT POOLS SET @ 2120 & 2148 FOR SUNSET & SUNNYCOVE DAMS
 10           ID         RATING CURVES MODIFIED TO REFLECT EXST. EMERGENCY SPILLWAYS
 11           ID        W1-25A;25-YEAR EVENT
              *DIAGRAM
 12           IT      6                   300
 13           IO      5
 14           IN     30
 15           JD   3.30     .01
 16           PC   .000    .005    .011    .016    .022    .028    .035    .041    .048    .056
 17           PC   .068    .071    .080    .089    .098    .109    .120    .133    .147    .163
 18           PC   .181    .204    .235    .283    .663    .735    .772    .799    .820    .838
 19           PC   .854    .868    .880    .891    .902    .912    .921    .929    .937    .945
 20           PC   .952    .959    .965    .972    .978    .984    .989    .995   1.000
 21           JD   3.23     3.0
 22           JD   3.17     10.
 23           JD   3.04    20.0
 24           JD   2.97    30.0

 25           KK     SW2
 26           KM   SUB-BASIN SW2
 27           BA    1.25
 28           LG     .15     .28    4.64     .23   14.90
 29           UI    569.   2025.   2254.   1276.    768.    474.    284.    170.    105.     53.
 30           UI     53.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 31           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 32           KK     RW4
 33           KM        TURTLEBACK WASH WITHIN SW7
 34           RS      2    FLOW      -1
 35           RC   .045    .030    .045   12780     .02
 36           RX    462     465     485     490     510     515     535     538
 37           RY     18      15      15      10      10      15      15      18

 38           KK     SW6
 39           KM   SUB-BASIN SW6
 40           BA     .98
 41           LG     .15     .28    4.54     .23   16.00
 42           UI    151.    584.    997.   1356.    826.    642.    484.    340.    266.    182.
 43           UI    139.    103.     67.     64.     26.     26.     26.     26.      0.      0.
 44           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 45           KK     SW7
 46           KM   SUB-BASIN SW7
 47           BA    1.30
 48           LG     .15     .28    4.71     .22   15.00
 49           UI    163.    617.   1111.   1661.   1175.    875.    697.    518.    392.    305.
 50           UI    215.    172.    125.     90.     80.     48.     31.     31.     31.     31.
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  51          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
  52          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  53          KK    CW8
  54          HC      3

  55          KK    RW10
  56          KM        TURTLEBACK WASH WITHIN SW14
  57          RS      1    FLOW     -1
  58          RC   .045     .03    .045    5550   .0198
  59          RX    423     427     477     480     520     523     573     577
  60          RY     17      13      13      10      10      13      13      17

  61          KK    SW12
  62          KM   SUB-BASIN SW12
  63          BA    .51
  64          LG    .15     .28    3.70     .26   15.30
  65          UI   337.   1157.    780.    455.    256.    139.     78.     40.     25.      0.
  66          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
  67          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  68          KK    SW14
  69          KM   SUB-BASIN SW14
  70          BA    .76
  71          LG    .15     .29    3.71     .31   13.80
  72          UI   304.   1094.   1391.    792.    502.    324.    192.    120.     78.     36.
  73          UI    31.     31.      0.      0.      0.      0.      0.      0.      0.      0.
  74          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  75          KK    CW16
  76          HC      3

  77          KK    RW18
  78          KM        TURTLEBACK WASH WITHIN SW20
  79          RS      1    FLOW     -1
  80          RC   .045     .03    .045    4100    .018
  81          RX    423     427     477     480     520     523     573     577
  82          RY     17      13      13      10      10      13      13      17

  83          KK    SW20
  84          KM   SUB-BASIN SW20
  85          BA    .23
  86          LG    .15     .29    4.12     .39   12.60
  87          UI   137.    488.    364.    216.    124.     69.     38.     23.     11.     11.
  88          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
  89          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  90          KK    CW22
  91          KM    WASH "W" CONFLUENCE WITH HASSAYAMPA RIVER
  92          HC      2
```

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

  93          KK    SQ2
  94          KM   SUB-BASIN SQ2
  95          BA    .37
  96          LG    .15     .30    3.61     .25    9.10
  97          UI   239.    830.    568.    334.    189.    102.     58.     30.     18.     18.
  98          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
  99          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 100          KK    SR2
 101          KM   SUB-BASIN SR2
 102          BA    .91
 103          LG    .15     .29    3.55     .27    8.00
 104          UI   138.    534.    914.   1258.    768.    597.    452.    318.    250.    171.
 105          UI   131.     95.     65.     61.     25.     24.     24.     24.      0.      0.
 106          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 107          KK    SR4
 108          KM   SUB-BASIN SR4
 109          BA    .47
 110          LG    .15     .30    3.67     .29   10.00
 111          UI   131.    491.    813.    511.    366.    239.    168.    105.     73.     47.
 112          UI    34.     16.     16.     16.      0.      0.      0.      0.      0.      0.
 113          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 114          KK    CR6
 115          HC      2

 116          KK    RR8
 117          KM       CEMETARY WASH WITHIN SR10
 118          RS      3    FLOW     -1
 119          RC   .045     .03    .045   10800   .0176
 120          RX    443     447     487     490     510     513     553     557
 121          RY     17      13      13      10      10      13      13      17

 122          KK   SR10
 123          KM   SUB-BASIN SR10
 124          BA   1.57
 125          LG    .15     .30    3.94     .35    8.40
 126          UI   173.    527.   1055.   1439.   1757.   1084.    886.    722.    552.    425.
 127          UI   354.    253.    203.    161.    133.     86.     85.     54.     33.     33.
 128          UI    33.     33.     33.      0.      0.      0.      0.      0.      0.      0.
 129          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 130          KK   CR12
 131          HC      2

 132          KK   RR14
 133          KM       CEMETARY WASH WITHIN SR32
 134          RS      1    FLOW     -1
 135          RC   .045     .03    .045    2200   .0182
 136          RX    443     447     487     490     510     513     553     557
 137          RY     17      13      13      10      10      13      13      17
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 138          KK   SR16
 139          KM   SUB-BASIN SR16
 140          BA    .75
 141          LG    .15     .30    3.61     .28   11.20
 142          UI   146.    553.    948.   1000.    618.    467.    319.    241.    160.    117.
 143          UI    84.     56.     43.     22.     22.     22.     22.      0.      0.      0.
 144          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 145          KK   SR18
 146          KM   SUB-BASIN SR18
 147          BA    .71
 148          LG    .15     .30    3.58     .28   11.20
 149          UI   103.    404.    694.    977.    602.    469.    358.    253.    200.    136.
 150          UI   108.     74.     54.     47.     25.     18.     18.     18.     18.      0.
 151          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 152          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 153          KK   CR20
 154          HC      2

 155          KK   RR22
 156          KM       CEMETARY WASH WITHIN SR26
 157          RS      1    FLOW      -1
 158          RC   .045     .03    .045    4800   .0188
 159          RX   439     444     494     495     505     506     556     561
 160          RY    16      11       1      10      10      11      11      16

 161          KK   SR24
 162          KM   SUB-BASIN SR24
 163          BA    .44
 164          LG    .15     .30    3.59     .28   12.70
 165          UI   110.    419.    730.    489.    350.    239.    168.    107.     75.     51.
 166          UI    37.     19.     14.     14.     14.      0.      0.      0.      0.      0.
 167          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 168          KK   RR25
 169          KM       CEMETARY WASH WITHIN SR26
 170          RS      1    FLOW      -1
 171          RC   .045     .03    .045    4800   .0167
 172          RX   450     454     494     495     505     506     546     550
 173          RY    15      11      11      10      10      11      11      15

 174          KK   SR26
 175          KM   SUB-BASIN SR26
 176          BA    .95
 177          LG    .15     .30    3.59     .28   12.10
 178          UI   229.    870.   1533.   1078.    761.    530.    368.    242.    171.    116.
 179          UI    78.     51.     31.     31.     31.      0.      0.      0.      0.      0.
 180          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
```

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

 181          KK    CR28
 182          HC       3

 183          KK    RR30
 184          KM        CEMETARY WASH WITHIN SR32
 185          RS       2    FLOW      -1
 186          RC    .045     .03    .045    9200   .0163
 187          RX     439     444     494     495     505     506     556     561
 188          RY      16      11      11      10      10      11      11      16

 189          KK    SR32
 190          KM   SUB-BASIN SR32
 191          BA     .94
 192          LG     .15     .30    3.86     .33   11.30
 193          UI    167.    637.   1085.   1290.    779.    600.    424.    315.    218.    160.
 194          UI    113.     80.     67.     32.     26.     26.     26.      0.      0.      0.
 195          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 196          KK    CR34
 197          HC       3

 198          KK    RR36
 199          KM        CEMETARY WASH WITHIN SR38
 200          RS       1    FLOW      -1
 201          RC    .045     .03    .045    3000   .0167
 202          RX     435     438     483     485     515     517     562     566
 203          RY      16      12      12      10      10      12      12      16

 204          KK    SR38
 205          KM   SUB-BASIN SR38
 206          BA     .79
 207          LG     .15     .28    3.85     .25   14.60
 208          UI    104.    415.    723.   1062.    682.    528.    412.    295.    233.    166.
 209          UI    122.     93.     71.     50.     43.     20.     20.     20.     20.      0.
 210          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 211          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 212          KK    CR40
 213          HC       2

 214          KK    RR42
 215          KM        CEMETARY WASH WITHIN SR44
 216          RS       1    FLOW      -1
 217          RC    .045     .03    .045    5200   .0154
 218          RX     443     447     477     480     520     523     553     557
 219          RY      17      13      13      10      10      13      13      17

 220          KK    SR44
 221          KM   SUB-BASIN SR44
 222          BA    1.05
 223          LG     .15     .29    3.59     .28   14.20
 224          UI    313.   1159.   1854.   1131.    803.    515.    354.    227.    152.     95.
 225          UI     61.     37.     37.     37.      0.      0.      0.      0.      0.      0.
 226          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 227          KK    CR46
 228          HC       2

 229          KK    RR48
 230          KM        CEMETARY WASH WITHIN SR50
 231          RS       2    FLOW      -1
 232          RC    .045     .03    .045    7800   .0167
 233          RX     434     438     478     482     518     522     562     566
 234          RY      18      14      14      10      10      14      14      18

 235          KK    SR50
 236          KM   SUB-BASIN SR50
 237          BA     .56
 238          LG     .15     .31    3.76     .30    5.10
 239          UI    159.    596.    976.    606.    434.    281.    198.    122.     85.     54.
 240          UI     38.     19.     19.     19.      0.      0.      0.      0.      0.      0.
 241          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 242          KK    CR52
 243          KM    WASH "R" CONFLUENCE WITH HASSAYAMPA RIVER
 244          HC       2

 245          KK   NUL
 246          KM   COMBINING WASHES W, Q, & R TO REDUCE THE NO. OF FREE HYDROGRAPHS
 247          HC   3.

 248          KK    SAG2
 249          KM   SUB-BASIN SAG2
 250          BA     .18
 251          LG     .15     .32    3.72     .29    1.50
 252          UI    119.    408.    275.    161.     91.     49.     28.     14.      9.      0.
 253          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 254          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 255          KK    SAD2
 256          KM   SUB-BASIN SAD2
 257          BA     .59
 258          LG     .14     .32    3.91     .33    7.60
 259          UI    135.    511.    904.    696.    478.    341.    232.    161.    112.     77.
 260          UI     50.     39.     19.     19.     19.      0.      0.      0.      0.      0.
 261          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 262          KK    DAD4
 263          KM        SUNSET DAM - EXISTING CONDITIONS
 264          KM         DISCHARGES FOR EMERGENCY SPILLWAY PER WIER EQUATION(CREST @ 2130)
 265          KM         STORAGE AREAS PER 1991 MAPPING & FIELD OBSERVED BOTTOM ELEV.
 266          KM        TOP OF SEDIMENT STORAGE 2120.0 PER CONSTRUCTION PLANS
 267          RS       1    ELEV    2120
 268          SA       0     .78    3.09    4.21    5.10    6.83    8.60    9.12    9.64    9.70
 269          SQ       0       0       0       0       0       0       0       0     116     603
 270          SE  2112.5    2114    2118    2120    2122    2126    2130    2131    2132    2134
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 271          KK    RAD6
 272          KM    WASH AD - SURFACE & PIPELINE FLOW
 273          RS       1    FLOW      -1
 274          RC    .045     .03    .045    2400   .0167
 275          RX     434     438     478     482     518     522     562     566
 276          RY      18      14      14      10      10      14      14      18

 277          KK    SAD8
 278          KM   SUB-BASIN SAD8
 279          BA     .53
 280          LG     .14     .33    4.20     .39    6.10
 281          UI    103.    389.    666.    708.    437.    330.    226.    171.    113.     83.
 282          UI     60.     39.     31.     15.     15.     15.     15.      0.      0.      0.
 283          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 284          KK   SAE10
 285          KM   SUB-BASIN SAE10
 286          BA    1.34
 287          LG     .15     .31    3.61     .28    6.20
 288          UI    123.    270.    606.    855.   1119.   1237.    784.    662.    562.    467.
 289          UI    364.    298.    264.    195.    156.    134.    104.     94.     63.     60.
 290          UI     59.     24.     24.     24.     24.     24.     24.     24.      0.      0.
 291          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 292          KK   DAE12
 293          KM        SUNNYCOVE DAM - EXISTING CONDITIONS
 294          KM         DISCHARGES FOR EMERGENCY SPILLWAY PER WIER EQUATION(CREST @ 2170)
 295          KM         STORAGE AREAS PER 1991 MAPPING & FIELD OBSERVED BOTTOM ELEV.
 296          KM          TOP OF SEDIMENT STORAGE 2148 PER CONSTRUCTION PLAN
 297          RS       1    ELEV    2148
 298          SA     .03    1.19    2.19    2.63    3.69    8.09   14.17    15.0    18.5
 299          SQ       0       0       0       0       0       0       0     270    3020
 300          SE  2134.0    2140    2146    2148    2150    2160    2170    2171    2175

 301          KK   RAD14
 302          KM     WASH AD - SURFACE & PIPELINE FLOW
 303          RS       3    FLOW      -1
 304          RC    .045     .03    .045    5800   .0155
 305          RX     441     445     475     487     513     525     555     559
 306          RY      18      14      14      10      10      14      14      18

 307          KK   CAD16
 308          KM    WASH "AD" CONFLUENCE WITH HASSAYAMPA RIVER
 309          HC       3
 310          ZZ
```

SCHEMATIC DIAGRAM OF STREAM NETWORK

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

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

  25        SW2
             V
             V
  32        RW4
             .
             .
  38         .        SW6
             .          .
             .          .
  45         .          .        SW7
             .          .          .
             .          .          .
  53        CW8.......................
             V
             V
  55       RW10
             .
             .
  61         .       SW12
             .          .
             .          .
  68         .          .       SW14
             .          .          .
             .          .          .
  75       CW16......................
             V
             V
  77       RW18
             .
             .
  83         .       SW20
             .          .
             .          .
  90       CW22............
             .
             .
  93         .        SQ2
             .          .
             .          .
 100         .          .        SR2
             .          .          .
             .          .          .
 107         .          .          .        SR4
             .          .          .          .
             .          .          .          .
 114         .          .       CR6............
             .          .         V
             .          .         V
 116         .          .       RR8
             .          .          .
             .          .          .
 122         .          .          .       SR10
             .          .          .          .
             .          .          .          .
 1           .          .      CR12............
             .          .         V
             .          .         V
 132         .          .      RR14
             .          .          .
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138                 SR16
                      .
                      .
'5                    .        SR18
                      .          .
                      .          .
153                 CR20............
                      V
                      V
155                 RR22
                      .
                      .
161                   .        SR24
                      .          V
                      .          V
168                   .        RR25
                      .          .
                      .          .
174                   .          .        SR26
                      .          .          .
                      .          .          .
181                 CR28......................
                      V
                      V
183                 RR30
                      .
                      .
189                   .        SR32
                      .          .
                      .          .
196               CR34......................
                    V
                    V
198               RR36
                    .
                    .
204                 .        SR38
                    .          .
                    .          .
212               CR40............
                    V
                    V
214               RR42
                    .
                    .
220                 .        SR44
                    .          .
                    .          .
227               CR46............
                    V
                    V
229               RR48
                    .
                    .
235                 .        SR50
                    .          .
                    .          .
242               CR52............
                    .
                    .
 5      NUL ......................
          .
          .
248          SAG2
               .
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                .         .
255             .         .       SAD2
                .         .         V
                .         .         V
272             .         .       DAD4
                .         .         V
                .         .         V
271             .         .       RAD6
                .         .         .
                .         .         .
277             .         .         .       SAD8
                .         .         .         .
                .         .         .         .
284             .         .         .         .       SAE10
                .         .         .         .         V
                .         .         .         .         V
292             .         .         .         .       DAE12
                .         .         .         .         V
                .         .         .         .         V
301             .         .         .         .       RAD14
                .         .         .         .         .
                .         .         .         .         .
307             .         .       CAD16.......................
```

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

```
****************************************                    ****************************************
*                                      *                    *                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *                    *   U.S. ARMY CORPS OF ENGINEERS       *
*          FEBRUARY 1981               *                    *  THE HYDROLOGIC ENGINEERING CENTER   *
*         REVISED 02 AUG 88            *                    *         609 SECOND STREET            *
*                                      *                    *      DAVIS, CALIFORNIA 95616         *
* RUN DATE  10/20/1992  TIME  09:04:36 *                    *          (916) 551-1748              *
*                                      *                    *                                      *
****************************************                    ****************************************
```

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                         WICKENBURG ADMS - CONTRACT FCD 89-79
                         WASHES W (TURTLEBACK), R (CEMETARY), AE,AD, AC (TRIB. TO SOLS WASH)
                         SCS TYPE II STORM - 24 HR: PHOENIX MOUNTAIN S-GRAPH
                         AREAL REDUCTION FACTORS PER NWS HYDRO-40
                         SUNSET & SUNNYCOVE DAMS
                          STORAGE AREAS PER 1991 MAPPING & FIELD OBSERVED BOTTOM ELEV.
                          PIPELINE SYSTEM GATES ASSUMED TO BE CLOSED - THEREFORE ALL
                           SPILLS ARE PASSING THRU THE EMERGENCY SPILLWAYS ONLY.
                          SEDIMENT POOLS SET @ 2120 & 2148 FOR SUNSET & SUNNYCOVE DAMS
                          RATING CURVES MODIFIED TO REFLECT EXST. EMERGENCY SPILLWAYS
                         W1-25A;25-YEAR EVENT

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

   IT          HYDROGRAPH TIME DATA
                      NMIN          6  MINUTES IN COMPUTATION INTERVAL
                     IDATE      1   0  STARTING DATE
                     ITIME       0000  STARTING TIME
                        NQ        300  NUMBER OF HYDROGRAPH ORDINATES
                    NDDATE      2   0  ENDING DATE
                    NDTIME       0554  ENDING TIME
                     ICENT         19  CENTURY MARK

              COMPUTATION INTERVAL     .10 HOURS
                   TOTAL TIME BASE   29.90 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

15 JD          INDEX STORM NO. 1
                      STRM       3.30  PRECIPITATION DEPTH
                      TRDA        .01  TRANSPOSITION DRAINAGE AREA

16 PI            PRECIPITATION PATTERN
                    .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                    .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                    .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                    .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                    .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                    .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                    .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                    .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                    .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
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.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
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.01	.01	.01	.01	.01	.08	.08	.08	.08	.08
.01	.01	.01	.01	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
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.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

21 JD INDEX STORM NO. 2

STRM 3.23 PRECIPITATION DEPTH

TRDA 3.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.08	.08	.08	.08	.08
.01	.01	.01	.01	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
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.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

22 JD INDEX STORM NO. 3

STRM 3.17 PRECIPITATION DEPTH

TRDA 10.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.08	.08	.08	.08	.08
.01	.01	.01	.01	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
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.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
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.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

23 JD INDEX STORM NO. 4

STRM 3.04 PRECIPITATION DEPTH

TRDA 20.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.08	.08	.08	.08	.08
.01	.01	.01	.01	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
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.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

24 JD INDEX STORM NO. 5

STRM 2.97 PRECIPITATION DEPTH

TRDA 30.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
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.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.08	.08	.08	.08	.08
.01	.01	.01	.01	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
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.00	.00	.00	.00	.00	.00	.00	.00	.00	.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	SW2	1375.	12.00	154.	43.	35.	1.25		
ROUTED TO	RW4	1236.	12.20	154.	43.	35.	1.25	13.40	12.20
HYDROGRAPH AT	SW6	891.	12.10	123.	35.	28.	.98		
HYDROGRAPH AT	SW7	1122.	12.20	162.	45.	36.	1.30		
3 COMBINED AT	CW8	3206.	12.20	435.	122.	98.	3.53		
ROUTED TO	RW10	2921.	12.30	435.	122.	98.	3.53	13.59	12.30
HYDROGRAPH AT	SW12	600.	12.00	63.	18.	14.	.51		
HYDROGRAPH AT	SW14	786.	12.10	89.	25.	20.	.76		
3 COMBINED AT	CW16	3695.	12.20	581.	163.	131.	4.80		
ROUTED TO	RW18	3567.	12.30	581.	163.	131.	4.80	13.99	12.30
HYDROGRAPH AT	SW20	231.	12.00	25.	7.	6.	.23		
2 COMBINED AT	CW22	3649.	12.30	604.	170.	137.	5.03		
HYDROGRAPH AT	SQ2	428.	12.00	43.	12.	9.	.37		
HYDROGRAPH AT	SR2	793.	12.10	103.	27.	22.	.91		
HYDROGRAPH AT	SR4	464.	12.10	53.	15.	12.	.47		
2 COMBINED AT	CR6	1252.	12.10	155.	42.	34.	1.38		
ROUTED TO	RR8	1011.	12.40	155.	42.	34.	1.38	13.13	12.40
HYDROGRAPH AT	SR10	1098.	12.20	162.	44.	35.	1.57		

2 COMBINED AT								
	CR12	2001.	12.30	316.	85.	69.	2.95	
ROUTED TO								
	RR14	1986.	12.30	316.	85.	69.	2.95	
								14.00 12.30
HYDROGRAPH AT								
	SR16	696.	12.10	87.	24.	19.	.75	
HYDROGRAPH AT								
	SR18	612.	12.10	83.	23.	18.	.71	
2 COMBINED AT								
	CR20	1303.	12.10	169.	46.	37.	1.46	
ROUTED TO								
	RR22	1216.	12.20	169.	46.	37.	1.46	
								7.53 12.20
HYDROGRAPH AT								
	SR24	436.	12.10	52.	14.	12.	.44	
ROUTED TO								
	RR25	326.	12.30	52.	14.	12.	.44	
								11.57 12.30
HYDROGRAPH AT								
	SR26	929.	12.10	111.	31.	25.	.95	
3 COMBINED AT								
	CR28	2364.	12.20	331.	91.	73.	2.85	
ROUTED TO								
	RR30	1992.	12.40	331.	91.	73.	2.85	
								12.96 12.40
HYDROGRAPH AT								
	SR32	804.	12.10	103.	29.	23.	.94	
3 COMBINED AT								
	CR34	4373.	12.30	736.	201.	162.	6.74	
ROUTED TO								
	RR36	4339.	12.40	736.	201.	162.	6.74	
								14.32 12.40
HYDROGRAPH AT								
	SR38	691.	12.20	98.	27.	22.	.79	
2 COMBINED AT								
	CR40	4766.	12.40	829.	227.	183.	7.53	
ROUTED TO								
	RR42	4593.	12.50	829.	227.	183.	7.53	
								14.78 12.50
HYDROGRAPH AT								
	SR44	1076.	12.10	127.	36.	29.	1.05	
2 COMBINED AT								
	CR46	4947.	12.40	950.	261.	210.	8.58	
ROUTED TO								
	RR48	4760.	12.60	950.	261.	210.	8.58	

								15.22	12.60
HYDROGRAPH AT	SR50	534.	12.10	58.	15.	12.	.56		
2 COMBINED AT	CR52	4848.	12.60	1004.	275.	222.	9.14		
3 COMBINED AT	NUL	7441.	12.50	1588.	440.	354.	14.54		
HYDROGRAPH AT	SAG2	194.	12.00	18.	5.	4.	.18		
HYDROGRAPH AT	SAD2	523.	12.10	61.	16.	13.	.59		
ROUTED TO	DAD4	0.	.10	0.	0.	0.	.59		
								2125.20	25.20
ROUTED TO	RAD6	0.	.10	0.	0.	0.	.59		
								10.00	.00
HYDROGRAPH AT	SAD8	409.	12.10	49.	13.	11.	.53		
HYDROGRAPH AT	SAE10	885.	12.30	145.	38.	31.	1.34		
ROUTED TO	DAE12	0.	.10	0.	0.	0.	1.34		
								2160.30	26.40
ROUTED TO	RAD14	0.	.10	0.	0.	0.	1.34		
								10.00	.00
3 COMBINED AT	CAD16	409.	12.10	49.	13.	11.	2.46		

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

WEST TRIBUTARIES AREA
50-YEAR

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****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
          FEBRUARY 1981                *
         REVISED 02 AUG 88             *
                                       *
*  RUN DATE  10/20/1992  TIME  09:47:01 *
*                                      *
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*                                      *
*   U.S. ARMY CORPS OF ENGINEERS       *
*  THE 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        WICKENBURG ADMS - CONTRACT FCD 89-79
  2           ID        WASHES W (TURTLEBACK), R (CEMETARY), AE,AD, AC (TRIB. TO SOLS WASH)
  3           ID        SCS TYPE II STORM - 24 HR: PHOENIX MOUNTAIN S-GRAPH
  4           ID        AREAL REDUCTION FACTORS PER NWS HYDRO-40
  5           ID        SUNSET & SUNNYCOVE DAMS
  6           ID         STORAGE AREAS PER 1991 MAPPING & FIELD OBSERVED BOTTOM ELEV.
  7           ID         PIPELINE SYSTEM GATES ASSUMED TO BE CLOSED - THEREFORE ALL
  8           ID          SPILLS ARE PASSING THRU THE EMERGENCY SPILLWAYS ONLY.
  9           ID         SEDIMENT POOLS SET @ 2120 & 2148 FOR SUNSET & SUNNYCOVE DAMS
 10           ID         RATING CURVES MODIFIED TO REFLECT EXST. EMERGENCY SPILLWAYS
 11           ID        W1-50A;50-YEAR EVENT
              *DIAGRAM
 12           IT      6                    300
 13           IO      5
 14           IN     30
 15           JD   3.74     .01
 16           PC   .000    .005    .011    .016    .022    .028    .035    .041    .048    .056
 17           PC   .068    .071    .080    .089    .098    .109    .120    .133    .147    .163
 18           PC   .181    .204    .235    .283    .663    .735    .772    .799    .820    .838
 19           PC   .854    .868    .880    .891    .902    .912    .921    .929    .937    .945
 20           PC   .952    .959    .965    .972    .978    .984    .989    .995   1.000
 21           JD   3.67     3.0
 22           JD   3.59     10.
 23           JD   3.44    20.0
 24           JD   3.37    30.0

 25           KK    SW2
 26           KM   SUB-BASIN SW2
 27           BA   1.25
 28           LG    .15     .28    4.64     .23   14.90
 29           UI   569.   2025.   2254.   1276.    768.    474.    284.    170.    105.     53.
 30           UI    53.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 31           UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 32           KK    RW4
 33           KM        TURTLEBACK WASH WITHIN SW7
 34           RS      2    FLOW      -1
 35           RC   .045    .030    .045   12780     .02
 36           RX   462     465     485     490     510     515     535     538
 37           RY    18      15      15      10      10      15      15      18

 38           KK    SW6
 39           KM   SUB-BASIN SW6
 40           BA    .98
 41           LG    .15     .28    4.54     .23   16.00
 42           UI   151.    584.    997.   1356.    826.    642.    484.    340.    266.    182.
 43           UI   139.    103.     67.     64.     26.     26.     26.     26.      0.      0.
 44           UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 45           KK    SW7
 46           KM   SUB-BASIN SW7
 47           BA   1.30
 48           LG    .15     .28    4.71     .22   15.00
 49           UI   163.    617.   1111.   1661.   1175.    875.    697.    518.    392.    305.
 50           UI   215.    172.    125.     90.     80.     48.     31.     31.     31.     31.
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  51          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
  52          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  53          KK     CW8
  54          HC       3

  55          KK    RW10
  56          KM        TURTLEBACK WASH WITHIN SW14
  57          RS       1    FLOW      -1
  58          RC    .045     .03    .045    5550   .0198
  59          RX     423     427     477     480     520     523     573     577
  60          RY      17      13      13      10      10      13      13      17

  61          KK    SW12
  62          KM   SUB-BASIN SW12
  63          BA     .51
  64          LG     .15     .28    3.70     .26   15.30
  65          UI    337.   1157.    780.    455.    256.    139.     78.     40.     25.      0.
  66          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
  67          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  68          KK    SW14
  69          KM   SUB-BASIN SW14
  70          BA     .76
  71          LG     .15     .29    3.71     .31   13.80
  72          UI    304.   1094.   1391.    792.    502.    324.    192.    120.     78.     36.
  73          UI     31.     31.      0.      0.      0.      0.      0.      0.      0.      0.
  74          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  75          KK    CW16
  76          HC       3

  77          KK    RW18
  78          KM        TURTLEBACK WASH WITHIN SW20
  79          RS       1    FLOW      -1
  80          RC    .045     .03    .045    4100    .018
  81          RX     423     427     477     480     520     523     573     577
  82          RY      17      13      13      10      10      13      13      17

  83          KK    SW20
  84          KM   SUB-BASIN SW20
  85          BA     .23
  86          LG     .15     .29    4.12     .39   12.60
  87          UI    137.    488.    364.    216.    124.     69.     38.     23.     11.     11.
  88          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
  89          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  90          KK    CW22
  91          KM    WASH "W" CONFLUENCE WITH HASSAYAMPA RIVER
  92          HC       2
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  93          KK    SQ2
  94          KM   SUB-BASIN SQ2
  95          BA    .37
  96          LG    .15     .30    3.61     .25    9.10
  97          UI   239.    830.    568.    334.    189.    102.     58.     30.     18.     18.
  98          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
  99          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 100          KK    SR2
 101          KM   SUB-BASIN SR2
 102          BA    .91
 103          LG    .15     .29    3.55     .27    8.00
 104          UI   138.    534.    914.   1258.    768.    597.    452.    318.    250.    171.
 105          UI   131.     95.     65.     61.     25.     24.     24.     24.      0.      0.
 106          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 107          KK    SR4
 108          KM   SUB-BASIN SR4
 109          BA    .47
 110          LG    .15     .30    3.67     .29   10.00
 111          UI   131.    491.    813.    511.    366.    239.    168.    105.     73.     47.
 112          UI    34.     16.     16.     16.      0.      0.      0.      0.      0.      0.
 113          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 114          KK    CR6
 115          HC      2

 116          KK    RR8
 117          KM       CEMETARY WASH WITHIN SR10
 118          RS      3    FLOW      -1
 119          RC   .045     .03    .045   10800   .0176
 120          RX   443     447     487     490     510     513     553     557
 121          RY    17      13      13      10      10      13      13      17

 122          KK   SR10
 123          KM   SUB-BASIN SR10
 124          BA   1.57
 125          LG    .15     .30    3.94     .35    8.40
 126          UI   173.    527.   1055.   1439.   1757.   1084.    886.    722.    552.    425.
 127          UI   354.    253.    203.    161.    133.     86.     85.     54.     33.     33.
 128          UI    33.     33.     33.      0.      0.      0.      0.      0.      0.      0.
 129          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 130          KK   CR12
 131          HC      2

 132          KK   RR14
 133          KM       CEMETARY WASH WITHIN SR32
 134          RS      1    FLOW      -1
 135          RC   .045     .03    .045    2200   .0182
 136          RX   443     447     487     490     510     513     553     557
 137          RY    17      13      13      10      10      13      13      17
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 138          KK   SR16
 139          KM  SUB-BASIN SR16
 140          BA    .75
 141          LG    .15     .30    3.61     .28   11.20
 142          UI   146.    553.    948.   1000.    618.    467.    319.    241.    160.    117.
 143          UI    84.     56.     43.     22.     22.     22.     22.      0.      0.      0.
 144          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 145          KK   SR18
 146          KM  SUB-BASIN SR18
 147          BA    .71
 148          LG    .15     .30    3.58     .28   11.20
 149          UI   103.    404.    694.    977.    602.    469.    358.    253.    200.    136.
 150          UI   108.     74.     54.     47.     25.     18.     18.     18.     18.      0.
 151          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 152          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 153          KK   CR20
 154          HC      2

 155          KK   RR22
 156          KM       CEMETARY WASH WITHIN SR26
 157          RS      1    FLOW      -1
 158          RC   .045     .03    .045    4800   .0188
 159          RX   439     444     494     495     505     506     556     561
 160          RY    16      11       1      10      10      11      11      16

 161          KK   SR24
 162          KM  SUB-BASIN SR24
 163          BA    .44
 164          LG    .15     .30    3.59     .28   12.70
 165          UI   110.    419.    730.    489.    350.    239.    168.    107.     75.     51.
 166          UI    37.     19.     14.     14.     14.      0.      0.      0.      0.      0.
 167          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 168          KK   RR25
 169          KM       CEMETARY WASH WITHIN SR26
 170          RS      1    FLOW      -1
 171          RC   .045     .03    .045    4800   .0167
 172          RX   450     454     494     495     505     506     546     550
 173          RY    15      11      11      10      10      11      11      15

 174          KK   SR26
 175          KM  SUB-BASIN SR26
 176          BA    .95
 177          LG    .15     .30    3.59     .28   12.10
 178          UI   229.    870.   1533.   1078.    761.    530.    368.    242.    171.    116.
 179          UI    78.     51.     31.     31.     31.      0.      0.      0.      0.      0.
 180          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 181          KK    CR28
 182          HC       3

 183          KK    RR30
 184          KM        CEMETARY WASH WITHIN SR32
 185          RS       2    FLOW      -1
 186          RC    .045     .03    .045    9200   .0163
 187          RX     439     444     494     495     505     506     556     561
 188          RY      16      11      11      10      10      11      11      16

 189          KK    SR32
 190          KM   SUB-BASIN SR32
 191          BA     .94
 192          LG     .15     .30    3.86     .33   11.30
 193          UI    167.    637.   1085.   1290.    779.    600.    424.    315.    218.    160.
 194          UI    113.     80.     67.     32.     26.     26.     26.      0.      0.      0.
 195          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 196          KK    CR34
 197          HC       3

 198          KK    RR36
 199          KM        CEMETARY WASH WITHIN SR38
 200          RS       1    FLOW      -1
 201          RC    .045     .03    .045    3000   .0167
 202          RX     435     438     483     485     515     517     562     566
 203          RY      16      12      12      10      10      12      12      16

 204          KK    SR38
 205          KM   SUB-BASIN SR38
 206          BA     .79
 207          LG     .15     .28    3.85     .25   14.60
 208          UI    104.    415.    723.   1062.    682.    528.    412.    295.    233.    166.
 209          UI    122.     93.     71.     50.     43.     20.     20.     20.     20.      0.
 210          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 211          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 212          KK    CR40
 213          HC       2

 214          KK    RR42
 215          KM        CEMETARY WASH WITHIN SR44
 216          RS       1    FLOW      -1
 217          RC    .045     .03    .045    5200   .0154
 218          RX     443     447     477     480     520     523     553     557
 219          RY      17      13      13      10      10      13      13      17

 220          KK    SR44
 221          KM   SUB-BASIN SR44
 222          BA    1.05
 223          LG     .15     .29    3.59     .28   14.20
 224          UI    313.   1159.   1854.   1131.    803.    515.    354.    227.    152.     95.
 225          UI     61.     37.     37.     37.      0.      0.      0.      0.      0.      0.
 226          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 227          KK    CR46
 228          HC       2

 229          KK    RR48
 230          KM        CEMETARY WASH WITHIN SR50
 231          RS       2    FLOW      -1
 232          RC    .045     .03    .045    7800   .0167
 233          RX     434     438     478     482     518     522     562     566
 234          RY      18      14      14      10      10      14      14      18

 235          KK    SR50
 236          KM   SUB-BASIN SR50
 237          BA     .56
 238          LG     .15     .31    3.76     .30    5.10
 239          UI    159.    596.    976.    606.    434.    281.    198.    122.     85.     54.
 240          UI     38.     19.     19.     19.      0.      0.      0.      0.      0.      0.
 241          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 242          KK    CR52
 243          KM    WASH "R" CONFLUENCE WITH HASSAYAMPA RIVER
 244          HC       2

 245          KK   NUL
 246          KM   COMBINING WASHES W, Q, & R TO REDUCE THE NO. OF FREE HYDROGRAPHS
 247          HC   3.

 248          KK    SAG2
 249          KM   SUB-BASIN SAG2
 250          BA     .18
 251          LG     .15     .32    3.72     .29    1.50
 252          UI    119.    408.    275.    161.     91.     49.     28.     14.      9.      0.
 253          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 254          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 255          KK    SAD2
 256          KM   SUB-BASIN SAD2
 257          BA     .59
 258          LG     .14     .32    3.91     .33    7.60
 259          UI    135.    511.    904.    696.    478.    341.    232.    161.    112.     77.
 260          UI     50.     39.     19.     19.     19.      0.      0.      0.      0.      0.
 261          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 262          KK    DAD4
 263          KM        SUNSET DAM - EXISTING CONDITIONS
 264          KM         DISCHARGES FOR EMERGENCY SPILLWAY PER WIER EQUATION(CREST @ 2130)
 265          KM         STORAGE AREAS PER 1991 MAPPING & FIELD OBSERVED BOTTOM ELEV.
 266          KM        TOP OF SEDIMENT STORAGE 2120.0 PER CONSTRUCTION PLANS
 267          RS       1    ELEV    2120
 268          SA       0     .78    3.09    4.21    5.10    6.83    8.60    9.12    9.64    9.70
 269          SQ       0       0       0       0       0       0       0       0     116     603
 270          SE  2112.5    2114    2118    2120    2122    2126    2130    2131    2132    2134
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 271          KK    RAD6
 272          KM    WASH AD - SURFACE & PIPELINE FLOW
 273          RS       1    FLOW      -1
 274          RC    .045     .03    .045    2400   .0167
 275          RX     434     438     478     482     518     522     562     566
 276          RY      18      14      14      10      10      14      14      18

 277          KK    SAD8
 278          KM   SUB-BASIN SAD8
 279          BA     .53
 280          LG     .14     .33    4.20     .39    6.10
 281          UI    103.    389.    666.    708.    437.    330.    226.    171.    113.     83.
 282          UI     60.     39.     31.     15.     15.     15.     15.      0.      0.      0.
 283          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 284          KK   SAE10
 285          KM   SUB-BASIN SAE10
 286          BA    1.34
 287          LG     .15     .31    3.61     .28    6.20
 288          UI    123.    270.    606.    855.   1119.   1237.    784.    662.    562.    467.
 289          UI    364.    298.    264.    195.    156.    134.    104.     94.     63.     60.
 290          UI     59.     24.     24.     24.     24.     24.     24.     24.      0.      0.
 291          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 292          KK   DAE12
 293          KM        SUNNYCOVE DAM - EXISTING CONDITIONS
 294          KM         DISCHARGES FOR EMERGENCY SPILLWAY PER WIER EQUATION(CREST @ 2170)
 295          KM         STORAGE AREAS PER 1991 MAPPING & FIELD OBSERVED BOTTOM ELEV.
 296          KM          TOP OF SEDIMENT STORAGE 2148 PER CONSTRUCTION PLAN
 297          RS       1    ELEV    2148
 298          SA     .03    1.19    2.19    2.63    3.69    8.09   14.17    15.0    18.5
 299          SQ       0       0       0       0       0       0       0     270    3020
 300          SE  2134.0    2140    2146    2148    2150    2160    2170    2171    2175

 301          KK   RAD14
 302          KM     WASH AD - SURFACE & PIPELINE FLOW
 303          RS       3    FLOW      -1
 304          RC    .045     .03    .045    5800   .0155
 305          RX     441     445     475     487     513     525     555     559
 306          RY      18      14      14      10      10      14      14      18

 307          KK   CAD16
 308          KM    WASH "AD" CONFLUENCE WITH HASSAYAMPA RIVER
 309          HC       3
 310          ZZ
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SCHEMATIC DIAGRAM OF STREAM NETWORK

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

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

 25        SW2
            V
            V
 32        RW4
            .
            .
 38         .        SW6
            .          .
            .          .
 45         .          .        SW7
            .          .          .
            .          .          .
 53       CW8.......................
            V
            V
 55      RW10
            .
            .
 61         .       SW12
            .          .
            .          .
 68         .          .       SW14
            .          .          .
            .          .          .
 75      CW16.......................
            V
            V
 77      RW18
            .
            .
 83         .       SW20
            .          .
            .          .
 90      CW22............
            .
            .
 93         .        SQ2
            .          .
            .          .
100         .          .        SR2
            .          .          .
            .          .          .
107         .          .          .        SR4
            .          .          .          .
            .          .          .          .
114         .          .        CR6............
            .          .          V
            .          .          V
116         .          .        RR8
            .          .          .
            .          .          .
122         .          .          .       SR10
            .          .          .          .
            .          .          .          .
 )          .          .       CR12............
            .          .          V
            .          .          V
132         .          .       RR14
            .          .          .
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138                 SR16
                      .
                      .
                      .          SR18
                      .            .
                      .            .
153                 CR20............
                      V
                      V
155                 RR22
                      .
                      .
161                   .          SR24
                      .            V
                      .            V
168                   .          RR25
                      .            .
                      .            .
174                   .            .          SR26
                      .            .            .
                      .            .            .
181                 CR28........................
                      V
                      V
183                 RR30
                      .
                      .
189                   .          SR32
                      .            .
                      .            .
196               CR34........................
                    V
                    V
198               RR36
                      .
                      .
204                 SR38
                      .
                      .
212               CR40............
                    V
                    V
214               RR42
                      .
                      .
220                 SR44
                      .
                      .
227               CR46............
                    V
                    V
229               RR48
                      .
                      .
235                 SR50
                      .
                      .
242               CR52............
                      .
                      .
      NUL  ........................
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248           SAG2
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                .          .
255             .          .        SAD2
                .          .          V
                .          .          V
262             .          .        DAD4
                .          .          V
                .          .          V
271             .          .        RAD6
                .          .          .
                .          .          .
277             .          .          .        SAD8
                .          .          .          .
                .          .          .          .
284             .          .          .          .        SAE10
                .          .          .          .            V
                .          .          .          .            V
292             .          .          .          .        DAE12
                .          .          .          .            V
                .          .          .          .            V
301             .          .          .          .        RAD14
                .          .          .          .            .
                .          .          .          .            .
307             .          .        CAD16.......................
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(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

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****************************************                    ****************************************
*                                      *                    *                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *                    *   U.S. ARMY CORPS OF ENGINEERS       *
*            FEBRUARY 1981             *                    *  THE HYDROLOGIC ENGINEERING CENTER   *
*          REVISED 02 AUG 88           *                    *          609 SECOND STREET           *
*                                      *                    *       DAVIS, CALIFORNIA 95616        *
*  RUN DATE  10/20/1992  TIME  09:47:01 *                    *          (916) 551-1748              *
*                                      *                    *                                      *
****************************************                    ****************************************
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                         WICKENBURG ADMS - CONTRACT FCD 89-79
                         WASHES W (TURTLEBACK), R (CEMETARY), AE,AD, AC (TRIB. TO SOLS WASH)
                         SCS TYPE II STORM - 24 HR: PHOENIX MOUNTAIN S-GRAPH
                         AREAL REDUCTION FACTORS PER NWS HYDRO-40
                         SUNSET & SUNNYCOVE DAMS
                          STORAGE AREAS PER 1991 MAPPING & FIELD OBSERVED BOTTOM ELEV.
                          PIPELINE SYSTEM GATES ASSUMED TO BE CLOSED - THEREFORE ALL
                           SPILLS ARE PASSING THRU THE EMERGENCY SPILLWAYS ONLY.
                          SEDIMENT POOLS SET @ 2120 & 2148 FOR SUNSET & SUNNYCOVE DAMS
                          RATING CURVES MODIFIED TO REFLECT EXST. EMERGENCY SPILLWAYS
                         W1-50A;50-YEAR EVENT

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

   IT          HYDROGRAPH TIME DATA
                      NMIN          6  MINUTES IN COMPUTATION INTERVAL
                     IDATE      1   0  STARTING DATE
                     ITIME       0000  STARTING TIME
                        NQ        300  NUMBER OF HYDROGRAPH ORDINATES
                    NDDATE      2   0  ENDING DATE
                    NDTIME       0554  ENDING TIME
                    ICENT         19  CENTURY MARK

               COMPUTATION INTERVAL     .10 HOURS
                    TOTAL TIME BASE   29.90 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

15 JD          INDEX STORM NO. 1
                      STRM       3.74  PRECIPITATION DEPTH
                      TRDA        .01  TRANSPOSITION DRAINAGE AREA

16 PI            PRECIPITATION PATTERN
                    .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                    .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
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21 JD INDEX STORM NO. 2

STRM 3.67 PRECIPITATION DEPTH

TRDA 3.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

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22 JD INDEX STORM NO. 3

STRM 3.59 PRECIPITATION DEPTH

TRDA 10.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

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23 JD INDEX STORM NO. 4

STRM 3.44 PRECIPITATION DEPTH

TRDA 20.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
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24 JD INDEX STORM NO. 5

STRM 3.37 PRECIPITATION DEPTH

TRDA 30.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
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.00	.00	.00	.00	.00	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.08	.08	.08	.08	.08
.01	.01	.01	.01	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.00	.00	.00	.00	.00
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.00	.00	.00	.00	.00	.00	.00	.00	.00	.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	SW2	1628.	12.00	185.	52.	41.	1.25		
ROUTED TO	RW4	1481.	12.20	185.	52.	41.	1.25	13.80	12.20
HYDROGRAPH AT	SW6	1053.	12.10	148.	41.	33.	.98		
HYDROGRAPH AT	SW7	1329.	12.20	195.	54.	44.	1.30		
3 COMBINED AT	CW8	3816.	12.20	522.	146.	117.	3.53		
ROUTED TO	RW10	3512.	12.30	522.	146.	117.	3.53	13.88	12.30
HYDROGRAPH AT	SW12	708.	12.00	76.	21.	17.	.51		
HYDROGRAPH AT	SW14	936.	12.10	106.	29.	24.	.76		
3 COMBINED AT	CW16	4469.	12.20	696.	194.	156.	4.80		
ROUTED TO	RW18	4309.	12.30	696.	194.	156.	4.80	14.32	12.30
HYDROGRAPH AT	SW20	281.	12.00	30.	8.	7.	.23		
2 COMBINED AT	CW22	4408.	12.30	724.	202.	163.	5.03		
HYDROGRAPH AT	SQ2	507.	12.00	52.	14.	11.	.37		
HYDROGRAPH AT	SR2	943.	12.10	124.	33.	26.	.91		
HYDROGRAPH AT	SR4	553.	12.10	63.	17.	14.	.47		
2 COMBINED AT	CR6	1491.	12.10	186.	50.	40.	1.38		
ROUTED TO	RR8	1211.	12.40	186.	50.	40.	1.38	13.34	12.40
HYDROGRAPH AT	SR10	1333.	12.20	196.	53.	42.	1.57		

2 COMBINED AT	CR12	2392.	12.30	381.	102.	82.	2.95	
ROUTED TO	RR14	2353.	12.30	381.	102.	82.	2.95	14.24 12.30
HYDROGRAPH AT	SR16	828.	12.10	104.	28.	23.	.75	
HYDROGRAPH AT	SR18	728.	12.10	99.	27.	22.	.71	
2 COMBINED AT	CR20	1551.	12.10	202.	55.	44.	1.46	
ROUTED TO	RR22	1460.	12.20	202.	55.	44.	1.46	8.02 12.20
HYDROGRAPH AT	SR24	518.	12.10	62.	17.	14.	.44	
ROUTED TO	RR25	397.	12.20	62.	17.	14.	.44	11.68 12.30
HYDROGRAPH AT	SR26	1104.	12.10	133.	37.	29.	.95	
3 COMBINED AT	CR28	2839.	12.20	395.	108.	87.	2.85	
ROUTED TO	RR30	2442.	12.40	395.	108.	87.	2.85	13.26 12.40
HYDROGRAPH AT	SR32	968.	12.10	124.	34.	27.	.94	
3 COMBINED AT	CR34	5317.	12.30	879.	239.	192.	6.74	
ROUTED TO	RR36	5264.	12.40	879.	239.	192.	6.74	14.72 12.40
HYDROGRAPH AT	SR38	818.	12.20	117.	33.	26.	.79	
2 COMBINED AT	CR40	5776.	12.30	990.	270.	217.	7.53	
ROUTED TO	RR42	5611.	12.40	990.	270.	217.	7.53	15.24 12.50
HYDROGRAPH AT	SR44	1276.	12.10	151.	42.	34.	1.05	
2 COMBINED AT	CR46	6088.	12.40	1133.	310.	249.	8.58	
ROUTED TO	RR48	5815.	12.50	1132.	310.	249.	8.58	

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+                                                                                    15.71        12.60

      HYDROGRAPH AT
+                    SR50      641.   12.10       70.      18.      15.      .56

      2 COMBINED AT
+                    CR52     5968.   12.50     1198.     327.     263.     9.14

      3 COMBINED AT
+                    NUL      9177.   12.40     1892.     521.     420.    14.54

      HYDROGRAPH AT
+                    SAG2      233.   12.00       22.       5.       4.      .18

      HYDROGRAPH AT
+                    SAD2      633.   12.10       74.      20.      16.      .59

      ROUTED TO
+                    DAD4        0.     .10        0.       0.       0.      .59
+                                                                          2126.16        24.90

      ROUTED TO
+                    RAD6        0.     .10        0.       0.       0.      .59
+                                                                            10.00         .00

      HYDROGRAPH AT
+                    SAD8      506.   12.10       61.      16.      13.      .53

      HYDROGRAPH AT
+                    SAE10    1058.   12.30      174.      46.      37.     1.34

      ROUTED TO
                   DAE12        0.     .10        0.       0.       0.     1.34
                                                                          2161.51        26.50

      ROUTED TO
+                    RAD14       0.     .10        0.       0.       0.     1.34
+                                                                            10.00         .00

      3 COMBINED AT
+                    CAD16     506.   12.10       61.      16.      13.     2.46
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*** NORMAL END OF HEC-1 ***

WEST TRIBUTARIES AREA
100-YEAR

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****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*            FEBRUARY 1981             *
*          REVISED 02 AUG 88           *
*                                      *
*  RUN DATE  10/20/1992  TIME  08:47:03 *
*                                      *
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****************************************
*                                      *
*    U.S. ARMY CORPS OF ENGINEERS      *
*  THE 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        WICKENBURG ADMS - CONTRACT FCD 89-79
  2           ID        WASHES W (TURTLEBACK), R (CEMETARY), AE,AD, AC (TRIB. TO SOLS WASH)
  3           ID        SCS TYPE II STORM - 24 HR: PHOENIX MOUNTAIN S-GRAPH
  4           ID        AREAL REDUCTION FACTORS PER NWS HYDRO-40
  5           ID        SUNSET & SUNNYCOVE DAMS
  6           ID         STORAGE AREAS PER 1991 MAPPING & FIELD OBSERVED BOTTOM ELEV.
  7           ID         PIPELINE SYSTEM GATES ASSUMED TO BE CLOSED - THEREFORE ALL
  8           ID          SPILLS ARE PASSING THRU THE EMERGENCY SPILLWAYS ONLY.
  9           ID         SEDIMENT POOLS SET @ 2120 & 2148 FOR SUNSET & SUNNYCOVE DAMS
 10           ID         RATING CURVES MODIFIED TO REFLECT EXST. EMERGENCY SPILLWAYS
 11           ID        W1-100A:100-YEAR EVENT
              *DIAGRAM
 12           IT      6                   300
 13           IO      5
 14           IN     30
 15           JD   4.19     .01
 16           PC   .000    .005    .011    .016    .022    .028    .035    .041    .048    .056
 17           PC   .068    .071    .080    .089    .098    .109    .120    .133    .147    .163
 18           PC   .181    .204    .235    .283    .663    .735    .772    .799    .820    .838
 19           PC   .854    .868    .880    .891    .902    .912    .921    .929    .937    .945
 20           PC   .952    .959    .965    .972    .978    .984    .989    .995   1.000
 21           JD   4.10     3.0
 22           JD   4.02     10.
 23           JD   3.85    20.0
 24           JD   3.77    30.0

 25           KK     SW2
 26           KM   SUB-BASIN SW2
 27           BA    1.25
 28           LG     .15     .28    4.64     .23   14.90
 29           UI    569.   2025.   2254.   1276.    768.    474.    284.    170.    105.     53.
 30           UI     53.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 31           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 32           KK     RW4
 33           KM        TURTLEBACK WASH WITHIN SW7
 34           RS       2    FLOW      -1
 35           RC    .045    .030    .045   12780     .02
 36           RX     462     465     485     490     510     515     535     538
 37           RY      18      15      15      10      10      15      15      18

 38           KK     SW6
 39           KM   SUB-BASIN SW6
 40           BA     .98
 41           LG     .15     .28    4.54     .23   16.00
 42           UI    151.    584.    997.   1356.    826.    642.    484.    340.    266.    182.
 43           UI    139.    103.     67.     64.     26.     26.     26.     26.      0.      0.
 44           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 45           KK     SW7
 46           KM   SUB-BASIN SW7
 47           BA    1.30
 48           LG     .15     .28    4.71     .22   15.00
 49           UI    163.    617.   1111.   1661.   1175.    875.    697.    518.    392.    305.
 50           UI    215.    172.    125.     90.     80.     48.     31.     31.     31.     31.
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  51          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
  52          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  53          KK     CW8
  54          HC       3

  55          KK    RW10
  56          KM        TURTLEBACK WASH WITHIN SW14
  57          RS       1    FLOW      -1
  58          RC    .045     .03    .045    5550   .0198
  59          RX     423     427     477     480     520     523     573     577
  60          RY      17      13      13      10      10      13      13      17

  61          KK    SW12
  62          KM   SUB-BASIN SW12
  63          BA     .51
  64          LG     .15     .28    3.70     .26   15.30
  65          UI    337.   1157.    780.    455.    256.    139.     78.     40.     25.      0.
  66          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
  67          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  68          KK    SW14
  69          KM   SUB-BASIN SW14
  70          BA     .76
  71          LG     .15     .29    3.71     .31   13.80
  72          UI    304.   1094.   1391.    792.    502.    324.    192.    120.     78.     36.
  73          UI     31.     31.      0.      0.      0.      0.      0.      0.      0.      0.
  74          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  75          KK    CW16
  76          HC       3

  77          KK    RW18
  78          KM        TURTLEBACK WASH WITHIN SW20
  79          RS       1    FLOW      -1
  80          RC    .045     .03    .045    4100    .018
  81          RX     423     427     477     480     520     523     573     577
  82          RY      17      13      13      10      10      13      13      17

  83          KK    SW20
  84          KM   SUB-BASIN SW20
  85          BA     .23
  86          LG     .15     .29    4.12     .39   12.60
  87          UI    137.    488.    364.    216.    124.     69.     38.     23.     11.     11.
  88          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
  89          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  90          KK    CW22
  91          KM    WASH "W" CONFLUENCE WITH HASSAYAMPA RIVER
  92          HC       2
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 93           KK    SQ2
 94           KM   SUB-BASIN SQ2
 95           BA    .37
 96           LG    .15     .30    3.61     .25    9.10
 97           UI   239.    830.    568.    334.    189.    102.     58.     30.     18.     18.
 98           UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 99           UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

100           KK    SR2
101           KM   SUB-BASIN SR2
102           BA    .91
103           LG    .15     .29    3.55     .27    8.00
104           UI   138.    534.    914.   1258.    768.    597.    452.    318.    250.    171.
105           UI   131.     95.     65.     61.     25.     24.     24.     24.      0.      0.
106           UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

107           KK    SR4
108           KM   SUB-BASIN SR4
109           BA    .47
110           LG    .15     .30    3.67     .29   10.00
111           UI   131.    491.    813.    511.    366.    239.    168.    105.     73.     47.
112           UI    34.     16.     16.     16.      0.      0.      0.      0.      0.      0.
113           UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

114           KK    CR6
115           HC      2

116           KK    RR8
117           KM       CEMETARY WASH WITHIN SR10
118           RS      3    FLOW     -1
119           RC   .045     .03    .045   10800   .0176
120           RX   443     447     487     490     510     513     553     557
121           RY    17      13      13      10      10      13      13      17

122           KK   SR10
123           KM   SUB-BASIN SR10
124           BA   1.57
125           LG    .15     .30    3.94     .35    8.40
126           UI   173.    527.   1055.   1439.   1757.   1084.    886.    722.    552.    425.
127           UI   354.    253.    203.    161.    133.     86.     85.     54.     33.     33.
128           UI    33.     33.     33.      0.      0.      0.      0.      0.      0.      0.
129           UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

130           KK   CR12
131           HC      2

132           KK   RR14
133           KM       CEMETARY WASH WITHIN SR32
134           RS      1    FLOW     -1
135           RC   .045     .03    .045    2200   .0182
136           RX   443     447     487     490     510     513     553     557
137           RY    17      13      13      10      10      13      13      17
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 138          KK   SR16
 139          KM   SUB-BASIN SR16
 140          BA    .75
 141          LG    .15     .30    3.61     .28   11.20
 142          UI   146.    553.    948.   1000.    618.    467.    319.    241.    160.    117.
 143          UI    84.     56.     43.     22.     22.     22.     22.      0.      0.      0.
 144          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 145          KK   SR18
 146          KM   SUB-BASIN SR18
 147          BA    .71
 148          LG    .15     .30    3.58     .28   11.20
 149          UI   103.    404.    694.    977.    602.    469.    358.    253.    200.    136.
 150          UI   108.     74.     54.     47.     25.     18.     18.     18.     18.      0.
 151          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 152          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 153          KK   CR20
 154          HC      2

 155          KK   RR22
 156          KM       CEMETARY WASH WITHIN SR26
 157          RS      1    FLOW     -1
 158          RC   .045     .03    .045    4800   .0188
 159          RX    439     444     494     495     505     506     556     561
 160          RY     16      11      1      10      10      11      11      16

 161          KK   SR24
 162          KM   SUB-BASIN SR24
 163          BA    .44
 164          LG    .15     .30    3.59     .28   12.70
 165          UI   110.    419.    730.    489.    350.    239.    168.    107.     75.     51.
 166          UI    37.     19.     14.     14.     14.      0.      0.      0.      0.      0.
 167          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 168          KK   RR25
 169          KM       CEMETARY WASH WITHIN SR26
 170          RS      1    FLOW     -1
 171          RC   .045     .03    .045    4800   .0167
 172          RX    450     454     494     495     505     506     546     550
 173          RY     15      11     11      10      10      11      11      15

 174          KK   SR26
 175          KM   SUB-BASIN SR26
 176          BA    .95
 177          LG    .15     .30    3.59     .28   12.10
 178          UI   229.    870.   1533.   1078.    761.    530.    368.    242.    171.    116.
 179          UI    78.     51.     31.     31.     31.      0.      0.      0.      0.      0.
 180          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 181          KK    CR28
 182          HC       3

 183          KK    RR30
 184          KM        CEMETARY WASH WITHIN SR32
 185          RS       2    FLOW      -1
 186          RC    .045     .03    .045    9200   .0163
 187          RX     439     444     494     495     505     506     556     561
 188          RY      16      11      11      10      10      11      11      16

 189          KK    SR32
 190          KM   SUB-BASIN SR32
 191          BA     .94
 192          LG     .15     .30    3.86     .33   11.30
 193          UI    167.    637.   1085.   1290.    779.    600.    424.    315.    218.    160.
 194          UI    113.     80.     67.     32.     26.     26.     26.      0.      0.      0.
 195          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 196          KK    CR34
 197          HC       3

 198          KK    RR36
 199          KM        CEMETARY WASH WITHIN SR38
 200          RS       1    FLOW      -1
 201          RC    .045     .03    .045    3000   .0167
 202          RX     435     438     483     485     515     517     562     566
 203          RY      16      12      12      10      10      12      12      16

 204          KK    SR38
 205          KM   SUB-BASIN SR38
 206          BA     .79
 207          LG     .15     .28    3.85     .25   14.60
 208          UI    104.    415.    723.   1062.    682.    528.    412.    295.    233.    166.
 209          UI    122.     93.     71.     50.     43.     20.     20.     20.     20.      0.
 210          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 211          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 212          KK    CR40
 213          HC       2

 214          KK    RR42
 215          KM        CEMETARY WASH WITHIN SR44
 216          RS       1    FLOW      -1
 217          RC    .045     .03    .045    5200   .0154
 218          RX     443     447     477     480     520     523     553     557
 219          RY      17      13      13      10      10      13      13      17

 220          KK    SR44
 221          KM   SUB-BASIN SR44
 222          BA    1.05
 223          LG     .15     .29    3.59     .28   14.20
 224          UI    313.   1159.   1854.   1131.    803.    515.    354.    227.    152.     95.
 225          UI     61.     37.     37.     37.      0.      0.      0.      0.      0.      0.
 226          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 227          KK    CR46
 228          HC       2

 229          KK    RR48
 230          KM        CEMETARY WASH WITHIN SR50
 231          RS       2    FLOW      -1
 232          RC    .045     .03    .045    7800   .0167
 233          RX     434     438     478     482     518     522     562     566
 234          RY      18      14      14      10      10      14      14      18

 235          KK    SR50
 236          KM   SUB-BASIN SR50
 237          BA     .56
 238          LG     .15     .31    3.76     .30    5.10
 239          UI    159.    596.    976.    606.    434.    281.    198.    122.     85.     54.
 240          UI     38.     19.     19.     19.      0.      0.      0.      0.      0.      0.
 241          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 242          KK    CR52
 243          KM    WASH "R" CONFLUENCE WITH HASSAYAMPA RIVER
 244          HC       2

 245          KK   NUL
 246          KM   COMBINING WASHES W, Q, & R TO REDUCE THE NO. OF FREE HYDROGRAPHS
 247          HC   3.

 248          KK    SAG2
 249          KM   SUB-BASIN SAG2
 250          BA     .18
 251          LG     .15     .32    3.72     .29    1.50
 252          UI    119.    408.    275.    161.     91.     49.     28.     14.      9.      0.
 253          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 254          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 255          KK    SAD2
 256          KM   SUB-BASIN SAD2
 257          BA     .59
 258          LG     .14     .32    3.91     .33    7.60
 259          UI    135.    511.    904.    696.    478.    341.    232.    161.    112.     77.
 260          UI     50.     39.     19.     19.     19.      0.      0.      0.      0.      0.
 261          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 262          KK    DAD4
 263          KM        SUNSET DAM - EXISTING CONDITIONS
 264          KM         DISCHARGES FOR EMERGENCY SPILLWAY PER WIER EQUATION(CREST @ 2130)
 265          KM         STORAGE AREAS PER 1991 MAPPING & FIELD OBSERVED BOTTOM ELEV.
 266          KM        TOP OF SEDIMENT STORAGE 2120.0 PER CONSTRUCTION PLANS
 267          RS       1    ELEV    2120
 268          SA       0     .78    3.09    4.21    5.10    6.83    8.60    9.12    9.64    9.70
 269          SQ       0       0       0       0       0       0       0       0     116     603
 270          SE  2112.5    2114    2118    2120    2122    2126    2130    2131    2132    2134
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  271         KK    RAD6
  272         KM    WASH AD - SURFACE & PIPELINE FLOW
  273         RS       1    FLOW      -1
  274         RC    .045     .03    .045    2400   .0167
  275         RX     434     438     478     482     518     522     562     566
  276         RY      18      14      14      10      10      14      14      18

  277         KK    SAD8
  278         KM   SUB-BASIN SAD8
  279         BA     .53
  280         LG     .14     .33    4.20     .39    6.10
  281         UI    103.    389.    666.    708.    437.    330.    226.    171.    113.     83.
  282         UI     60.     39.     31.     15.     15.     15.     15.      0.      0.      0.
  283         UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  284         KK   SAE10
  285         KM   SUB-BASIN SAE10
  286         BA    1.34
  287         LG     .15     .31    3.61     .28    6.20
  288         UI    123.    270.    606.    855.   1119.   1237.    784.    662.    562.    467.
  289         UI    364.    298.    264.    195.    156.    134.    104.     94.     63.     60.
  290         UI     59.     24.     24.     24.     24.     24.     24.     24.      0.      0.
  291         UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  292         KK   DAE12
  293         KM        SUNNYCOVE DAM - EXISTING CONDITIONS
  294         KM         DISCHARGES FOR EMERGENCY SPILLWAY PER WIER EQUATION(CREST @ 2170)
  295         KM         STORAGE AREAS PER 1991 MAPPING & FIELD OBSERVED BOTTOM ELEV.
  296         KM          TOP OF SEDIMENT STORAGE 2148 PER CONSTRUCTION PLAN
  297         RS       1    ELEV    2148
  298         SA     .03    1.19    2.19    2.63    3.69    8.09   14.17    15.0    18.5
  299         SQ       0       0       0       0       0       0       0     270    3020
  300         SE  2134.0    2140    2146    2148    2150    2160    2170    2171    2175

  301         KK   RAD14
  302         KM     WASH AD - SURFACE & PIPELINE FLOW
  303         RS       3    FLOW      -1
  304         RC    .045     .03    .045    5800   .0155
  305         RX     441     445     475     487     513     525     555     559
  306         RY      18      14      14      10      10      14      14      18

  307         KK   CAD16
  308         KM    WASH "AD" CONFLUENCE WITH HASSAYAMPA RIVER
  309         HC       3
  310         ZZ
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SCHEMATIC DIAGRAM OF STREAM NETWORK

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

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

  25        SW2
             V
             V
  32        RW4
             .
             .
  38         .         SW6
             .           .
             .           .
  45         .           .         SW7
             .           .           .
             .           .           .
  53        CW8.......................
             V
             V
  55       RW10
             .
             .
  61         .        SW12
             .           .
             .           .
  68         .           .        SW14
             .           .           .
             .           .           .
  75       CW16......................
             V
             V
  77       RW18
             .
             .
  83         .        SW20
             .           .
             .           .
  90       CW22............
             .
             .
  93         .         SQ2
             .           .
             .           .
 100         .           .         SR2
             .           .           .
             .           .           .
 107         .           .           .         SR4
             .           .           .           .
             .           .           .           .
 114         .           .        CR6............
             .           .          V
             .           .          V
 116         .           .        RR8
             .           .           .
             .           .           .
 122         .           .           .        SR10
             .           .           .           .
             .           .           .           .
             .           .       CR12............
             .           .          V
             .           .          V
 132         .           .       RR14
             .           .           .
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138                 SR16
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                      .          SR18
                      .            .
                      .            .
153                 CR20............
                      V
                      V
155                 RR22
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161                   .          SR24
                      .            V
                      .            V
168                   .          RR25
                      .            .
                      .            .
174                   .            .          SR26
                      .            .            .
                      .            .            .
181                 CR28........................
                      V
                      V
183                 RR30
                      .
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189                   .          SR32
                      .            .
                      .            .
196               CR34........................
                    V
                    V
198               RR36
                      .
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204                 SR38
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                      .
212               CR40............
                    V
                    V
214               RR42
                      .
                      .
220                 SR44
                      .
                      .
227               CR46............
                    V
                    V
229               RR48
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235                 SR50
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242               CR52............
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      NUL .........................
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248           SAG2
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                .         .
255             .         .        SAD2
                .         .          V
                .         .          V
?               .         .        DAD4
                .         .          V
                .         .          V
271             .         .        RAD6
                .         .          .
                .         .          .
277             .         .          .        SAD8
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                .         .          .          .
284             .         .          .          .       SAE10
                .         .          .          .          V
                .         .          .          .          V
292             .         .          .          .       DAE12
                .         .          .          .          V
                .         .          .          .          V
301             .         .          .          .       RAD14
                .         .          .          .          .
                .         .          .          .          .
307             .         .        CAD16.......................
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(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

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****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*            FEBRUARY 1981             *
*          REVISED 02 AUG 88           *
*                                      *
*  RUN DATE  10/20/1992  TIME  08:47:03 *
*                                      *
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****************************************
*                                      *
*    U.S. ARMY CORPS OF ENGINEERS      *
*  THE HYDROLOGIC ENGINEERING CENTER   *
*          609 SECOND STREET           *
*       DAVIS, CALIFORNIA 95616        *
*          (916) 551-1748              *
*                                      *
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                    WICKENBURG ADMS - CONTRACT FCD 89-79
                    WASHES W (TURTLEBACK), R (CEMETARY), AE,AD, AC (TRIB. TO SOLS WASH)
                    SCS TYPE II STORM - 24 HR: PHOENIX MOUNTAIN S-GRAPH
                    AREAL REDUCTION FACTORS PER NWS HYDRO-40
                    SUNSET & SUNNYCOVE DAMS
                     STORAGE AREAS PER 1991 MAPPING & FIELD OBSERVED BOTTOM ELEV.
                     PIPELINE SYSTEM GATES ASSUMED TO BE CLOSED - THEREFORE ALL
                      SPILLS ARE PASSING THRU THE EMERGENCY SPILLWAYS ONLY.
                     SEDIMENT POOLS SET @ 2120 & 2148 FOR SUNSET & SUNNYCOVE DAMS
                     RATING CURVES MODIFIED TO REFLECT EXST. EMERGENCY SPILLWAYS
                    W1-100A:100-YEAR EVENT

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

   IT        HYDROGRAPH TIME DATA
                  NMIN          6  MINUTES IN COMPUTATION INTERVAL
                 IDATE      1   0  STARTING DATE
                 ITIME       0000  STARTING TIME
                    NQ        300  NUMBER OF HYDROGRAPH ORDINATES
                NDDATE      2   0  ENDING DATE
                NDTIME       0554  ENDING TIME
                 ICENT         19  CENTURY MARK

            COMPUTATION INTERVAL     .10 HOURS
                 TOTAL TIME BASE   29.90 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

15 JD        INDEX STORM NO. 1
                 STRM       4.19  PRECIPITATION DEPTH
                 TRDA        .01  TRANSPOSITION DRAINAGE AREA

16 PI          PRECIPITATION PATTERN
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
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21 JD INDEX STORM NO. 2

STRM 4.10 PRECIPITATION DEPTH

TRDA 3.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

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22 JD INDEX STORM NO. 3

STRM 4.02 PRECIPITATION DEPTH

TRDA 10.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

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23 JD INDEX STORM NO. 4

STRM 3.85 PRECIPITATION DEPTH

TRDA 20.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

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24 JD INDEX STORM NO. 5

STRM 3.77 PRECIPITATION DEPTH

TRDA 30.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

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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	SW2	1873.	12.00	216.	60.	48.	1.25		
ROUTED TO	RW4	1720.	12.20	216.	60.	48.	1.25	14.17	12.20
HYDROGRAPH AT	SW6	1212.	12.10	172.	48.	39.	.98		
HYDROGRAPH AT	SW7	1531.	12.20	227.	63.	51.	1.30		
3 COMBINED AT	CW8	4412.	12.20	610.	170.	136.	3.53		
ROUTED TO	RW10	4092.	12.30	609.	170.	136.	3.53	14.15	12.30
HYDROGRAPH AT	SW12	814.	12.00	88.	25.	20.	.51		
HYDROGRAPH AT	SW14	1083.	12.10	124.	34.	28.	.76		
3 COMBINED AT	CW16	5244.	12.20	813.	226.	182.	4.80		
ROUTED TO	RW18	5058.	12.30	813.	226.	182.	4.80	14.62	12.30
HYDROGRAPH AT	SW20	330.	12.00	35.	10.	8.	.23		
2 COMBINED AT	CW22	5180.	12.20	846.	235.	189.	5.03		
HYDROGRAPH AT	SQ2	584.	12.00	61.	16.	13.	.37		
HYDROGRAPH AT	SR2	1089.	12.10	146.	39.	31.	.91		
HYDROGRAPH AT	SR4	641.	12.10	75.	20.	16.	.47		
2 COMBINED AT	CR6	1724.	12.10	220.	59.	47.	1.38		
ROUTED TO	RR8	1419.	12.40	220.	59.	47.	1.38	13.54	12.40
HYDROGRAPH AT	SR10	1559.	12.20	228.	61.	49.	1.57		

2 COMBINED AT	CR12	2797.	12.30	446.	120.	96.	2.95	
ROUTED TO	RR14	2744.	12.30	446.	120.	96.	2.95	14.49 12.30
HYDROGRAPH AT	SR16	958.	12.10	123.	33.	27.	.75	
HYDROGRAPH AT	SR18	841.	12.10	116.	32.	25.	.71	
2 COMBINED AT	CR20	1793.	12.10	238.	65.	52.	1.46	
ROUTED TO	RR22	1695.	12.20	238.	65.	52.	1.46	8.44 12.20
HYDROGRAPH AT	SR24	599.	12.10	73.	20.	16.	.44	
ROUTED TO	RR25	472.	12.20	73.	20.	16.	.44	11.78 12.20
HYDROGRAPH AT	SR26	1276.	12.10	156.	43.	34.	.95	
3 COMBINED AT	CR28	3304.	12.20	464.	127.	102.	2.85	
ROUTED TO	RR30	2890.	12.40	464.	127.	102.	2.85	13.53 12.40
HYDROGRAPH AT	SR32	1127.	12.10	144.	39.	32.	.94	
3 COMBINED AT	CR34	6308.	12.30	1034.	280.	225.	6.74	
ROUTED TO	RR36	6226.	12.40	1034.	280.	225.	6.74	15.11 12.40
HYDROGRAPH AT	SR38	943.	12.20	137.	38.	30.	.79	
2 COMBINED AT	CR40	6870.	12.30	1164.	316.	254.	7.53	
ROUTED TO	RR42	6717.	12.40	1164.	316.	254.	7.53	15.72 12.40
HYDROGRAPH AT	SR44	1471.	12.10	177.	49.	39.	1.05	
2 COMBINED AT	CR46	7299.	12.40	1332.	363.	292.	8.58	
ROUTED TO	RR48	7061.	12.50	1332.	363.	292.	8.58	

								16.18	12.50
HYDROGRAPH AT	SR50	746.	12.10	83.	22.	17.	.56		
2 COMBINED AT	CR52	7251.	12.50	1409.	383.	308.	9.14		
3 COMBINED AT	NUL	11118.	12.40	2224.	610.	491.	14.54		
HYDROGRAPH AT	SAG2	272.	12.00	26.	7.	5.	.18		
HYDROGRAPH AT	SAD2	740.	12.10	86.	23.	18.	.59		
ROUTED TO	DAD4	0.	.10	0.	0.	0.	.59		
								2126.93	25.20
ROUTED TO	RAD6	0.	.10	0.	0.	0.	.59		
								10.00	.00
HYDROGRAPH AT	SAD8	600.	12.10	72.	19.	15.	.53		
HYDROGRAPH AT	SAE10	1232.	12.30	206.	54.	43.	1.34		
ROUTED TO	DAE12	0.	.10	0.	0.	0.	1.34		
								2162.78	26.20
ROUTED TO	RAD14	0.	.10	0.	0.	0.	1.34		
								10.00	.00
3 COMBINED AT	CAD16	600.	12.10	72.	19.	15.	2.46		

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

EAST TRIBUTARIES AREA
NMIN = 10
2-YEAR

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****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*            FEBRUARY 1981             *
*          REVISED 02 AUG 88           *
*                                      *
*  RUN DATE  10/13/1992  TIME  12:05:40 *
*                                      *
****************************************
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****************************************
*                                      *
*    U.S. ARMY CORPS OF ENGINEERS      *
*  THE 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       WICKENBURG ADMS - CONTRACT FCD 89-79
  2           ID       WASHES B(CALAMITY), C, D(MONARCH), E, I, J,
  3           ID       WASHES K, L, O, P, & T(SAN DOMINGO)
  4           ID       SCS TYPE II STORM :100YR - 24 HR: PHOENIX MOUNTAIN S-GRAPH
  5           ID       AERIAL REDUCTION FACTORS PER NWS HYDRO-40
  6           ID       NMIN = 10 min
  7           ID       E2-2 ; 2-YEAR EVENT
              *DIAGRAM
  8           IT      10                    300
  9           IO       5
 10           IN      30
 11           JD    1.91     .01
 12           PC    .000    .005    .011    .016    .022    .028    .035    .041    .048    .056
 13           PC    .068    .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           JD    1.87     3.0
 18           JD    1.83     10.
 19           JD    1.76    20.0
 20           JD    1.72    30.0

 21           KK     SB5
 22           KM   SUB-BASIN B5
 23           BA    3.17
 24           LG     .15     .34    4.21     .38    5.20
 25           UI    264.   1041.   1798.   2591.   1626.   1266.    976.    690.    556.    375.
 26           UI    291.    212.    158.    123.     85.     48.     48.     48.     48.      0.
 27           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 28           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 29           KK    RB7
 30           KM       ROUTE SB5 THROUGH SB10
 31           RS       1    FLOW      -1
 32           RC   0.040   0.025   0.040 11985.6  0.0284
 33           RX       0       8     108     109     139     140     240     248
 34           RY       6       4       3       0       0       3       4       6

 35           KK    SB10
 36           KM   SUB-BASIN B10
 37           BA    1.11
 38           LG     .15     .30    3.74     .30   10.70
 39           UI    219.    800.   1202.    709.    491.    312.    202.    132.     84.     62.
 40           UI     25.     25.     25.      0.      0.      0.      0.      0.      0.      0.
 41           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 42           KK    CB12
 43           KM       COMBINE RB7 & SB10
 44           HC       2
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  45          KK    SC5
  46          KM   SUB-BASIN C5
  47          BA   4.43
  48          LG    .15     .31    3.68     .29    7.00
  49          UI   231.    453.   1069.   1544.   1933.   2542.   1608.   1323.   1136.    964.
  50          UI   794.    617.    542.    452.    346.    285.    253.    187.    177.    117.
  51          UI   113.    113.     51.     44.     44.     44.     44.     44.     44.     0.
  52          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.     0.
  53          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.     0.

  54          KK    RC7
  55          KM       ROUTE HYDROGRAPH SC5 (RC7) THROUGH SC10
  56          RS      2    FLOW      -1
  57          RC  0.040   0.025   0.040 24024.0  0.0233
  58          RX      0       3       5       6      36      37      39      42
  59          RY     10       3       2       0       0       2       3      10

  60          KK   SC10
  61          KM   SUB-BASIN C10
  62          BA   3.66
  63          LG    .15     .34    4.28     .41    9.40
  64          UI   247.    780.   1540.   2120.   2422.   1504.   1233.    994.    745.    590.
  65          UI   470.    340.    278.    207.    170.    121.    121.     51.     47.     47.
  66          UI    47.     47.     47.      0.      0.      0.      0.      0.      0.      0.
  67          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  68          KK   CC12
  69          KM       COMBINE HYDROGRAPHS RC7 & SC10
  70          HC      2

  71          KK   RC14
  72          KM       ROUTE HYDROGRAPH CC12 THROUGH SC15
  73          RS      3    FLOW      -1
  74          RC  0.040   0.025   0.040 22017.6  0.024
  75          RX      0       8     108     109     139     140     240     248
  76          RY      6       4       3       0       0       3       4       6

  77          KK   SC15
  78          KM   SUB-BASIN C15
  79          BA   2.31
  80          LG    .15     .34    4.19     .38    6.15
  81          UI   160.    524.   1022.   1425.   1486.    945.    770.    615.    451.    367.
  82          UI   285.    201.    170.    123.     94.     78.     61.     31.     31.     31.
  83          UI    31.     31.      0.      0.      0.      0.      0.      0.      0.      0.
  84          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  85          KK   CC17
  86          KM       COMBINE HYDROGRAPHS SC15 & RC14
  87          HC      2
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 88         KK    RC19
 89         KM        ROUTE HYDROGRAPH CC17 THROUGH SC20
 90         RS      1    FLOW      -1
 91         RC  0.033   0.025   0.033    5016  0.0199
 92         RX      0       8     108     109     149     150     250     258
 93         RY      6       4       3       0       0       3       4       6

 94         KK    SC20
 95         KM   SUB-BASIN C20
 96         BA    .43
 97         LG    .15     .32    4.23     .44    9.10
 98         UI   374.    736.    319.    138.     59.     22.      0.      0.      0.      0.
 99         UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

100         KK    CC22
101         KM        COMBINE HYDROGRAPHS RC19 & SC20
102         HC      2

103         KK     SD5
104         KM   SUB-BASIN D5
105         BA   5.42
106         LG    .15     .33    4.16     .38    8.10
107         UI   208.    208.    649.    996.   1330.   1568.   1912.   2406.   1549.   1282.
108         UI  1153.   1029.    911.    808.    681.    562.    502.    462.    396.    327.
109         UI   266.    243.    228.    175.    160.    151.    102.    102.    102.    100.
110         UI    40.     40.     40.     40.     40.     40.     40.     40.     40.     40.
111         UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
112         UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

113         KK    SD10
114         KM   SUB-BASIN D10
115         BA   3.80
116         LG    .15     .33    4.02     .35    8.60
117         UI   162.    216.    558.    889.   1123.   1341.   1833.   1325.   1009.    894.
118         UI   787.    688.    595.    484.    407.    372.    322.    259.    206.    186.
119         UI   176.    124.    124.     95.     79.     79.     79.     35.     31.     31.
120         UI    31.     31.     31.     31.     31.     31.      0.      0.      0.      0.
121         UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

122         KK    CD12
123         KM        COMBINE HYDROGRAPHS SD5 & SD10
124         HC      2

125         KK    RD14
126         KM        ROUTE HYDROGRAPH CD12 THROGH SD15
127         RS      1    FLOW      -1
128         RC  0.040   0.025   0.040 11510.4  0.0209
129         RX      0       8     108     109     139     140     240     248
130         RY      6       4       3       0       0       3       4       6
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 131          KK    SD15
 132          KM   SUB-BASIN D15
 133          BA     .93
 134          LG     .15     .34    4.24     .43    1.30
 135          UI    172.    634.    994.    598.    422.    270.    181.    119.     76.     51.
 136          UI     28.     20.     20.      0.      0.      0.      0.      0.      0.      0.
 137          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 138          KK    CD17
 139          KM        COMBINE HYDROGRAPHS SD15 & RD14
 140          HC       2

 141          KK    SD20
 142          KM   SUB-BASIN D20
 143          BA     .58
 144          LG     .15     .33    4.16     .38    4.20
 145          UI    107.    394.    619.    373.    264.    168.    113.     74.     47.     32.
 146          UI     18.     12.     12.      0.      0.      0.      0.      0.      0.      0.
 147          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 148          KK    RD22
 149          KM        ROUTE HYDROGRAPH SD20 THROUGH SD15
 150          RS       1    FLOW      -1
 151          RC   0.040   0.025   0.040    2500  0.0283
 152          RX       0       8     108     109     149     150     250     258
 153          RY       6       4       3       0       0       3       4       6

 154          KK    CD24
 155          KM        COMBINE HYDROGRAPHS RD22 & CD17
 156          HC       2

 157          KK     E5
 158          KM   SUB-BASIN E5
 159          BA     .37
 160          LG     .15     .31    3.95     .35   16.70
 161          UI     94.    336.    405.    229.    142.     90.     54.     32.     22.      9.
 162          UI      9.      9.      0.      0.      0.      0.      0.      0.      0.      0.
 163          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 164          KK    E10
 165          KM   SUB-BASIN E10
 166          BA     .94
 167          LG     .15     .30    3.93     .34   10.50
 168          UI     66.    223.    431.    608.    588.    383.    312.    246.    179.    148.
 169          UI    108.     81.     65.     51.     34.     32.     20.     13.     13.     13.
 170          UI     13.     13.      0.      0.      0.      0.      0.      0.      0.      0.
 171          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 172          KK    CE12
 173          KM        COMBINE HYDROGRAPHS FROM E5 & E10
 174          HC       2
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 175          KK    RE14
 176          KM        ROUTE HYDROGRAPH CE12 THROUGH E20
 177          RS       1    FLOW      -1
 178          RC   0.040   0.025   0.040    3000  0.0244
 179          RX       0       8     108     109     149     150     250     258
 180          RY       6       4       3       0       0       3       4       6

 181          KK     E15
 182          KM   SUB-BASIN E15
 183          BA    4.41
 184          LG     .15     .33    4.24     .43    8.20
 185          UI    251.    593.   1294.   1801.   2453.   2294.   1533.   1293.   1089.    886.
 186          UI    677.    582.    473.    354.    295.    248.    193.    154.    123.    123.
 187          UI     65.     48.     48.     48.     48.     48.     48.      0.      0.      0.
 188          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 189          KK    RE17
 190          KM        ROUTE HYDROGRAPH FROM E15 THROUGH E20
 191          RS       2    FLOW      -1
 192          RC   0.040   0.025   0.040 19008.0  0.0244
 193          RX       0       8     108     109     139     140     240     248
 194          RY       6       4       3       0       0       3       4       6

 195          KK    CE19
 196          KM        COMBINE HYDROGRAPHS RE17 & RE14
 197          HC       2

 198          KK    SE20
 199          KM   SUB-BASIN E20
 200          BA    1.11
 201          LG     .15     .32    4.24     .44    7.20
 202          UI     88.    351.    612.    897.    574.    445.    347.    248.    196.    139.
 203          UI    103.     78.     59.     42.     35.     17.     17.     17.     17.      0.
 204          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 205          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 206          KK    CE22
 207          KM        COMBINE HYDROGRAPHS E20 & CE19  (E)
 208          HC       2

 209          KK   NUL
 210          KM   COMBINING WASHES B, C, D, & E TO REDUCE THE NO. OF FREE HYDROGRAPHS
 211          HC   4.

 212          KK     SI5
 213          KM   SUB-BASIN I5
 214          BA     .41
 215          LG     .15     .31    3.58     .27    7.90
 216          UI     68.    257.    425.    267.    191.    124.     87.     54.     38.     24.
 217          UI     18.      8.      8.      8.      0.      0.      0.      0.      0.      0.
 218          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 219          KK   SI10
 220          KM   SUB-BASIN I10
 221          BA   1.61
 222          LG    .15     .31    3.77     .30    3.20
 223          UI   121.    456.    823.   1231.    875.    651.    518.    386.    292.    227.
 224          UI   160.    128.     92.     68.     59.     36.     23.     23.     23.     23.
 225          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 226          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 227          KK   CI12
 228          KM      COMBINE SI5 & SI10
 229          HC      2

 230          KK   RI14
 231          KM      ROUTE COMBINED HYDROGRAPHS FROM SI5 & SI10 (SI12) THROUGH SI15
 232          RS      1    FLOW     -1
 233          RC  0.040   0.025   0.040    5016  0.0279
 234          RX      0       8     108     109     139     140     240     248
 235          RY      6       4       3       0       0       3       4       6

 236          KK   SI15
 237          KM   SUB-BASIN I15
 238          BA    .25
 239          LG    .15     .34    3.91     .33    2.20
 240          UI   204.    424.    191.     85.     37.     15.     10.      0.      0.      0.
 241          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 242          KK   CI17
 243          KM      COMBINE RI14 & SI15
 244          HC      2

 245          KK     SJ
 246          KM   SUB-BASIN J
 247          BA    .42
 248          LG    .15     .32    3.74     .30    6.30
 249          UI   109.    389.    458.    259.    160.    100.     60.     36.     24.     11.
 250          UI    11.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 251          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 252          KK     SK5
 253          KM   SUB-BASIN K5
 254          BA    .84
 255          LG    .15     .31    3.78     .30     .00
 256          UI   145.    540.    881.    545.    389.    252.    177.    109.     76.     48.
 257          UI    33.     18.     18.     18.      0.      0.      0.      0.      0.      0.
 258          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 259          KK   SK10
 260          KM   SUB-BASIN K10
 261          BA   1.04
 262          LG    .15     .30    3.92     .24    3.70
 263          UI   106.    405.    689.    863.    520.    402.    291.    212.    154.    107.
 264          UI    80.     58.     44.     28.     17.     17.     17.     17.      0.      0.
 265          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 266          KK    CK12
 267          KM        COMBINE HYDROGRAPHS FROM SK5 & SK10
 268          HC       2

 269          KK    RK14
 270          KM        ROUTE COMBINED HYDROGRRAPHS SK5 & SK10 (CK12) THROUGH SK15
 271          RS       1    FLOW      -1
 272          RC   0.040   0.025   0.040 13992.0  0.0243
 273          RX       0       8     108     109     149     150     250     258
 274          RY       6       4       3       0       0       3       4       6

 275          KK    SK15
 276          KM   SUB-BASIN K15
 277          BA    1.09
 278          LG     .15     .30    3.51     .26    9.70
 279          UI    117.    445.    757.    897.    542.    417.    295.    219.    151.    111.
 280          UI     78.     55.     47.     22.     18.     18.     18.      0.      0.      0.
 281          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 282          KK    CK17
 283          KM        COMBINE HYDROGRAPHS FROM SK15 & RK14
 284          HC       2

 285          KK      SL
 286          KM   SUB-BASIN L
 287          BA     .79
 288          LG     .15     .32    3.69     .29    7.05
 289          UI    126.    478.    809.    519.    372.    247.    174.    109.     76.     50.
 290          UI     38.     16.     16.     16.      0.      0.      0.      0.      0.      0.
 291          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 292          KK   NUL
 293          KM   COMBINING WASHES I, J, K, & L TO REDUCE THE NO. OF FREE HYDROGRAPHS
 294          HC   5.

 295          KK      SO
 296          KM   SUB-BASIN O
 297          BA    2.90
 298          LG     .15     .30    3.55     .26    5.90
 299          UI    166.    393.    856.   1190.   1626.   1500.   1008.    850.    715.    580.
 300          UI    443.    382.    309.    231.    193.    161.    127.     99.     81.     81.
 301          UI     40.     32.     32.     32.     32.     32.     32.      0.      0.      0.
 302          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 303          KK      SP
 304          KM   SUB-BASIN P
 305          BA     .87
 306          LG     .15     .32    3.76     .30    8.70
 307          UI    148.    554.    909.    566.    405.    262.    185.    114.     80.     51.
 308          UI     36.     18.     18.     18.      0.      0.      0.      0.      0.      0.
 309          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
```

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

 310          KK   NUL
 311          KM   COMBINING WASHES O & P TO REDUCE THE NO. OF FREE HYDROGRAPHS
 312          HC   3.

 313          KK     ST2
 314          KM   SUB-BASIN ST2
 315          BA    4.50
 316          LG     .15     .32    3.82     .31     .50
 317          UI    928.   3373.   4908.   2863.   1947.   1247.    779.    507.    323.    224.
 318          UI    102.    102.    102.      0.      0.      0.      0.      0.      0.      0.
 319          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 320          KK     RT4
 321          KM        SAN DOMINGO WASH WITHIN SUB BASIN ST6
 322          RS       1    FLOW      -1
 323          RC    .045     .03    .045    9200   .0337
 324          RX     442     446     476     480     520     524     554     558
 325          RY      16      12      12      10      10      12      12      16

 326          KK     ST6
 327          KM   SUB-BASIN ST6
 328          BA    3.93
 329          LG     .15     .34    4.12     .37    3.30
 330          UI    920.   3322.   4323.   2465.   1578.   1017.    605.    392.    240.    125.
 331          UI     94.     94.      0.      0.      0.      0.      0.      0.      0.      0.
 332          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 333          KK     CT8
 334          HC       2

 335          KK     RT9
 336          KM        SAN DOMINGO WASH WITHIN SUB BASIN ST10
 337          RS       1    FLOW      -1
 338          RC    .045     .03    .045   17800   .0264
 339          RX     442     446     476     480     520     524     554     558
 340          RY      16      12      12      10      10      12      12      16

 341          KK    ST10
 342          KM   SUB-BASIN ST10
 343          BA    2.70
 344          LG     .15     .32    3.86     .32    9.80
 345          UI    385.   1460.   2579.   1857.   1301.    912.    631.    421.    299.    202.
 346          UI    132.     93.     52.     52.     52.      0.      0.      0.      0.      0.
 347          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 348          KK    ST12
 349          KM   SUB-BASIN ST12
 350          BA    3.50
 351          LG     .15     .33    4.00     .35    7.30
 352          UI    352.   1348.   2294.   2906.   1751.   1355.    986.    715.    528.    361.
 353          UI    272.    198.    146.     99.     57.     57.     57.     57.      0.      0.
 354          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
```

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

 355          KK    CT11
 356          HC       3

 357          KK    RT13
 358          KM        SAN DOMINGO WASH WITHIN SUB BASIN ST16
 359          RS       1    FLOW      -1
 360          RC    .045     .03    .045    4000   .0175
 361          RX     436     446     476     480     520     524     554     564
 362          RY      22      12      12      10      10      12      12      22

 363          KK    ST14
 364          KM   SUB-BASIN ST14
 365          BA    2.76
 366          LG     .15     .30    3.61     .28   10.60
 367          UI    460.   1730.   2865.   1802.   1290.    841.    591.    368.    257.    165.
 368          UI    120.     57.     57.     57.      0.      0.      0.      0.      0.      0.
 369          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 370          KK    CT14
 371          HC       2

 372          KK    RT15
 373          KM        SAN DOMINGO WASH WITHIN SUB BASIN ST16
 374          RS       1    FLOW      -1
 375          RC    .045     .03    .045   10200   .0206
 376          RX     444     454     474     480     520     526     546     556
 377          RY      23      13      13      10      10      13      13      23

 378          KK    ST16
 379          KM   SUB-BASIN ST16
 380          BA    1.35
 381          LG     .15     .29    3.78     .32   15.40
 382          UI    250.    920.   1443.    868.    613.    391.    262.    172.    110.     74.
 383          UI     41.     29.     29.      0.      0.      0.      0.      0.      0.      0.
 384          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 385          KK    CT17
 386          HC       2

 387          KK    RT18
 388          KM        SAN DOMINGO WITHIN WASH WITHIN SUB BASIN ST20
 389          RS       1    FLOW      -1
 390          RC    .045     .03    .045    4600   .0174
 391          RX     434     444     474     480     520     526     556     566
 392          RY      23      13      13      10      10      13      13      23

 393          KK    ST20
 394          KM   SUB-BASIN ST20
 395          BA     .28
 396          LG     .15     .34    3.68     .69    3.70
 397          UI    287.    484.    191.     75.     29.     13.      0.      0.      0.      0.
 398          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
```

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

 399          KK   ST22
 400          KM   SUB-BASIN ST22
 401          BA    .72
 402          LG    .15     .29    3.82     .33   21.80
 403          UI   216.    774.    753.    431.    253.    149.     90.     53.     27.     19.
 404          UI    19.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 405          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 406          KK   CT24
 407          HC      3

 408          KK   RT25
 409          KM       SAN DOMINGO WASH WITHIN SUB BASIN ST26
 410          RS      1    FLOW     -1
 411          RC   .045     .03    .045    5000    .010
 412          RX    404     414     464     470     530     536     586     596
 413          RY     23      13      13      10      10      13      13      23

 414          KK   ST26
 415          KM   SUB-BASIN ST26
 416          BA    .59
 417          LG    .15     .33    4.10     .50    6.20
 418          UI   376.    953.    497.    241.    115.     58.     22.     22.      0.      0.
 419          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 420          KK   CT30
 421          HC      2
 422          ZZ
```

SCHEMATIC DIAGRAM OF STREAM NETWORK

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

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

 21         SB5
              V
              V
 29        RB7
             .
             .
 35          .        SB10
             .          .
             .          .
 42        CB12............
             .
             .
 45          .         SC5
             .          V
             .          V
 54          .         RC7
             .          .
             .          .
 60          .          .        SC10
             .          .          .
             .          .          .
 68          .        CC12............
             .          V
             .          V
 71          .        RC14
             .          .
             .          .
             .          .        SC15
             .          .          .
             .          .          .
 85          .        CC17............
             .          V
             .          V
 88          .        RC19
             .          .
             .          .
 94          .          .        SC20
             .          .          .
             .          .          .
100          .        CC22............
             .          .
             .          .
103          .          .         SD5
             .          .          .
             .          .          .
113          .          .          .        SD10
             .          .          .          .
             .          .          .          .
122          .          .        CD12............
             .          .          V
             .          .          V
125          .          .        RD14
             .          .          .
             .          .          .
131          .          .          .        SD15
             .          .          .          .
             .          .          .          .
138          .          .        CD17............
             .          .          .
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                .         .         .
141             .         .         .      SD20
                .         .         .        V
                .         .         .        V
8               .         .         .      RD22
                .         .         .        .
                .         .         .        .
154             .         .      CD24............
                .         .         .
                .         .         .
157             .         .         .        E5
                .         .         .        .
                .         .         .        .
164             .         .         .        .        E10
                .         .         .        .         .
                .         .         .        .         .
172             .         .         .      CE12............
                .         .         .        V
                .         .         .        V
175             .         .         .      RE14
                .         .         .        .
                .         .         .        .
181             .         .         .        .        E15
                .         .         .        .         V
                .         .         .        .         V
189             .         .         .        .       RE17
                .         .         .        .         .
                .         .         .        .         .
195             .         .         .      CE19............
                .         .         .        .
                .         .         .        .
198             .         .         .        .       SE20
                .         .         .        .         .
                .         .         .        .         .
                .         .         .      CE22............
                .         .         .        .
                .         .         .        .
209          NUL ...................................
                .
                .
212             .      SI5
                .        .
                .        .
219             .        .      SI10
                .        .        .
                .        .        .
227             .     CI12............
                .       V
                .       V
230             .     RI14
                .        .
                .        .
236             .        .      SI15
                .        .        .
                .        .        .
242             .     CI17............
                .        .
                .        .
245             .        .        SJ
                .        .        .
                .        .        .
2               .        .        .      SK5
                .        .        .        .
                .        .        .        .
259             .        .        .        .       SK10
                .        .        .        .         .
```

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                .         .         .         .         .
266             .         .         .       CK12.........
                .         .         .         V
                .         .         .         V
9               .         .         .       RK14
                .         .         .         .
                .         .         .         .
275             .         .         .         .       SK15
                .         .         .         .         .
                .         .         .         .         .
282             .         .         .       CK17.........
                .         .         .         .
                .         .         .         .
285             .         .         .         .         SL
                .         .         .         .         .
                .         .         .         .         .
292         NUL ..........................................
                .
                .
295             .        SO
                .         .
                .         .
303             .         .         SP
                .         .         .
                .         .         .
310         NUL .......................
                .
                .
313             .       ST2
                .         V
                .         V
320             .       RT4
                .         .
                .         .
                .         .         ST6
                .         .         .
                .         .         .
333             .       CT8..........
                .         V
                .         V
335             .       RT9
                .         .
                .         .
341             .         .       ST10
                .         .         .
                .         .         .
348             .         .         .       ST12
                .         .         .         .
                .         .         .         .
355             .      CT11......................
                .         V
                .         V
357             .      RT13
                .         .
                .         .
363             .         .       ST14
                .         .         .
                .         .         .
370             .      CT14..........
                .         V
                .         V
72              .      RT15
                .         .
                .         .
378             .         .       ST16
                .         .         .
```

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                .          .          .
385             .       CT17...........
                .          V
                .          V
 7              .       RT18
                .          .
                .          .
393             .          .       ST20
                .          .          .
                .          .          .
399             .          .          .       ST22
                .          .          .          .
                .          .          .          .
406             .       CT24........................
                .          V
                .          V
408             .       RT25
                .          .
                .          .
414             .          .       ST26
                .          .          .
                .          .          .
420             .       CT30...........
```

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

```
****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*            FEBRUARY 1981             *
*          REVISED 02 AUG 88           *
*                                      *
* RUN DATE  10/13/1992  TIME  12:05:40 *
*                                      *
****************************************
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****************************************
*                                      *
*    U.S. ARMY CORPS OF ENGINEERS      *
*  THE HYDROLOGIC ENGINEERING CENTER   *
*          609 SECOND STREET           *
*        DAVIS, CALIFORNIA 95616       *
*           (916) 551-1748             *
*                                      *
****************************************
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                    WICKENBURG ADMS - CONTRACT FCD 89-79
                    WASHES B(CALAMITY), C, D(MONARCH), E, I, J,
                    WASHES K, L, O, P, & T(SAN DOMINGO)
                    SCS TYPE II STORM :100YR - 24 HR: PHOENIX MOUNTAIN S-GRAPH
                    AERIAL REDUCTION FACTORS PER NWS HYDRO-40
                    NMIN = 10 min
                    E2-2 ; 2-YEAR EVENT

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

   IT        HYDROGRAPH TIME DATA
                 NMIN         10  MINUTES IN COMPUTATION INTERVAL
                IDATE      1    0  STARTING DATE
                ITIME       0000  STARTING TIME
                   NQ        300  NUMBER OF HYDROGRAPH ORDINATES
               NDDATE      3    0  ENDING DATE
               NDTIME       0150  ENDING TIME
               ICENT         19  CENTURY MARK

            COMPUTATION INTERVAL     .17 HOURS
                 TOTAL TIME BASE   49.83 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        1.91  PRECIPITATION DEPTH
                 TRDA         .01  TRANSPOSITION DRAINAGE AREA

12 PI         PRECIPITATION PATTERN
               .00     .00     .00     .00     .00     .00     .00     .00     .00     .00
               .00     .00     .00     .00     .00     .00     .00     .00     .00     .00
               .00     .00     .00     .00     .00     .00     .00     .00     .00     .00
               .00     .00     .00     .00     .00     .00     .00     .00     .00     .00
               .00     .00     .00     .00     .00     .00     .00     .00     .00     .00
               .00     .00     .00     .00     .01     .01     .01     .01     .01     .01
               .01     .01     .01     .01     .01     .01     .02     .02     .02     .13
               .13     .13     .02     .02     .02     .01     .01     .01     .01     .01
               .01     .01     .01     .01     .01     .01     .01     .01     .01     .01
               .00     .00     .00     .00     .00     .00     .00     .00     .00     .00
               .00     .00     .00     .00     .00     .00     .00     .00     .00     .00
               .00     .00     .00     .00     .00     .00     .00     .00     .00     .00
               .00     .00     .00     .00     .00     .00     .00     .00     .00     .00
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                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00

17 JD        INDEX STORM NO. 2
                STRM        1.87  PRECIPITATION DEPTH
                TRDA        3.00  TRANSPOSITION DRAINAGE AREA

 0 PI          PRECIPITATION PATTERN
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .01       .01       .01       .01       .01       .01
                .01       .01       .01       .01       .01       .01       .02       .02       .02       .13
                .13       .13       .02       .02       .02       .01       .01       .01       .01       .01
                .01       .01       .01       .01       .01       .01       .01       .01       .01       .01
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00

18 JD        INDEX STORM NO. 3
                STRM        1.83  PRECIPITATION DEPTH
                TRDA       10.00  TRANSPOSITION DRAINAGE AREA

 0 PI          PRECIPITATION PATTERN
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .01       .01       .01       .01       .01       .01
                .01       .01       .01       .01       .01       .01       .02       .02       .02       .13
                .13       .13       .02       .02       .02       .01       .01       .01       .01       .01
                .01       .01       .01       .01       .01       .01       .01       .01       .01       .01
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00

19 JD        INDEX STORM NO. 4
                STRM        1.76  PRECIPITATION DEPTH
                TRDA       20.00  TRANSPOSITION DRAINAGE AREA

 0 PI          PRECIPITATION PATTERN
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .01       .01       .01       .01       .01       .01
                .01       .01       .01       .01       .01       .01       .02       .02       .02       .13
                .13       .13       .02       .02       .02       .01       .01       .01       .01       .01
                .01       .01       .01       .01       .01       .01       .01       .01       .01       .01
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00
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20 JD          INDEX STORM NO. 5
                     STRM        1.72  PRECIPITATION DEPTH
                     TRDA       30.00  TRANSPOSITION DRAINAGE AREA

  PI            PRECIPITATION PATTERN
                   .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                   .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                   .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                   .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                   .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                   .00       .00       .00       .00       .01       .01       .01       .01       .01       .01
                   .01       .01       .01       .01       .01       .01       .02       .02       .02       .13
                   .13       .13       .02       .02       .02       .01       .01       .01       .01       .01
                   .01       .01       .01       .01       .01       .01       .01       .01       .01       .01
                   .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                   .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                   .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                   .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                   .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                   .00       .00       .00       .00
```

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	SB5	328.	12.50	62.	18.	9.	3.17		
ROUTED TO	RB7	262.	12.67	62.	18.	9.	3.17	.68	12.67
HYDROGRAPH AT	SB10	302.	12.17	46.	13.	6.	1.11		
2 COMBINED AT	CB12	427.	12.33	105.	31.	15.	4.28		
HYDROGRAPH AT	SC5	653.	12.67	165.	46.	22.	4.43		
ROUTED TO	RC7	531.	13.00	164.	46.	22.	4.43	1.27	13.17
HYDROGRAPH AT	SC10	332.	12.50	80.	25.	12.	3.66		
2 COMBINED AT	CC12	695.	13.00	232.	68.	33.	8.09		
ROUTED TO	RC14	658.	13.33	231.	68.	33.	8.09	1.45	13.33
HYDROGRAPH AT	SC15	231.	12.50	49.	14.	7.	2.31		
2 COMBINED AT	CC17	714.	13.33	268.	80.	39.	10.40		
ROUTED TO	RC19	712.	13.33	267.	80.	39.	10.40	1.36	13.50
HYDROGRAPH AT	SC20	74.	12.17	9.	3.	1.	.43		
2 COMBINED AT	CC22	712.	13.33	273.	82.	40.	10.83		
HYDROGRAPH AT	SD5	379.	13.00	125.	38.	18.	5.42		
HYDROGRAPH AT	SD10	350.	12.83	108.	32.	15.	3.80		
2 COMBINED AT	CD12	692.	13.00	222.	67.	33.	9.22		
ROUTED TO	RD14	641.	13.17	221.	67.	33.	9.22		

								1.49	13.17
HYDROGRAPH AT	SD15	74.	12.33	9.	3.	1.	.93		
2 COMBINED AT	CD17	644.	13.17	227.	69.	33.	10.15		
HYDROGRAPH AT	SD20	80.	12.33	12.	3.	2.	.58		
ROUTED TO	RD22	77.	12.33	12.	3.	2.	.58		
								.23	12.33
2 COMBINED AT	CD24	651.	13.17	234.	71.	34.	10.73		
HYDROGRAPH AT	E5	99.	12.17	15.	5.	2.	.37		
HYDROGRAPH AT	E10	156.	12.50	34.	10.	5.	.94		
2 COMBINED AT	CE12	232.	12.33	49.	15.	7.	1.31		
ROUTED TO	RE14	225.	12.33	49.	15.	7.	1.31		
								.62	12.50
HYDROGRAPH AT	E15	318.	12.67	84.	26.	13.	4.41		
ROUTED TO	RE17	254.	13.00	83.	26.	13.	4.41		
								.73	13.17
2 COMBINED AT	CE19	362.	12.83	128.	40.	19.	5.72		
HYDROGRAPH AT	SE20	100.	12.50	20.	6.	3.	1.11		
2 COMBINED AT	CE22	410.	12.83	145.	45.	22.	6.83		
4 COMBINED AT	NUL	1357.	13.17	582.	183.	89.	32.67		
HYDROGRAPH AT	SI5	113.	12.17	17.	5.	2.	.41		
HYDROGRAPH AT	SI10	278.	12.33	52.	14.	7.	1.61		
2 COMBINED AT	CI12	385.	12.33	69.	18.	9.	2.02		
ROUTED TO	RI14	366.	12.50	69.	18.	9.	2.02		
								.97	12.50
HYDROGRAPH AT	SI15	61.	12.00	6.	2.	1.	.25		

2 COMBINED AT	CI17	380.	12.33	75.	20.	10.	2.27		
HYDROGRAPH AT	SJ	113.	12.17	15.	4.	2.	.42		
HYDROGRAPH AT	SK5	178.	12.17	24.	6.	3.	.84		
HYDROGRAPH AT	SK10	252.	12.33	42.	11.	5.	1.04		
2 COMBINED AT	CK12	423.	12.33	66.	17.	8.	1.88		
ROUTED TO	RK14	295.	12.50	66.	17.	8.	1.88	.71	12.67
HYDROGRAPH AT	SK15	285.	12.33	51.	14.	7.	1.09		
2 COMBINED AT	CK17	539.	12.50	115.	31.	15.	2.97		
HYDROGRAPH AT	SL	190.	12.17	30.	8.	4.	.79		
5 COMBINED AT	NUL	1744.	12.50	729.	223.	108.	39.12		
HYDROGRAPH AT	SO	519.	12.50	122.	33.	16.	2.90		
HYDROGRAPH AT	SP	209.	12.17	33.	9.	5.	.87		
3 COMBINED AT	NUL	2183.	12.50	829.	252.	122.	42.89		
HYDROGRAPH AT	ST2	907.	12.17	116.	29.	14.	4.50		
ROUTED TO	RT4	788.	12.33	116.	29.	14.	4.50	11.25	12.33
HYDROGRAPH AT	ST6	552.	12.17	72.	20.	10.	3.93		
2 COMBINED AT	CT8	1236.	12.33	179.	47.	23.	8.43		
ROUTED TO	RT9	818.	12.67	177.	47.	23.	8.43	11.37	12.67
HYDROGRAPH AT	ST10	573.	12.33	97.	28.	14.	2.70		
HYDROGRAPH AT	ST12	525.	12.33	96.	28.	13.	3.50		
3 COMBINED AT	CT11	1471.	12.50	324.	91.	44.	14.63		

ROUTED TO	RT13	1414.	12.50	324.	91.	44.	14.63	12.25	12.50
HYDROGRAPH AT	ST14	760.	12.17	123.	35.	17.	2.76		
2 COMBINED AT	CT14	1781.	12.50	418.	119.	57.	17.39		
ROUTED TO	RT15	1674.	12.67	417.	119.	57.	17.39	12.59	12.67
HYDROGRAPH AT	ST16	367.	12.17	61.	18.	9.	1.35		
2 COMBINED AT	CT17	1789.	12.67	462.	133.	64.	18.74		
ROUTED TO	RT18	1776.	12.67	462.	133.	64.	18.74	12.85	12.67
HYDROGRAPH AT	ST20	9.	12.00	1.	1.	0.	.28		
HYDROGRAPH AT	ST22	241.	12.17	37.	12.	6.	.72		
3 COMBINED AT	CT24	1827.	12.67	490.	142.	69.	19.74		
ROUTED TO	RT25	1771.	12.83	489.	142.	69.	19.74	12.71	12.83
HYDROGRAPH AT	ST26	62.	12.17	8.	2.	1.	.59		
2 COMBINED AT	CT30	1771.	12.83	493.	144.	70.	20.33		

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

EAST TRIBUTARIES AREA
NMIN = 10
10-YEAR

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****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
          FEBRUARY 1981                *
         REVISED 02 AUG 88             *
                                       *
* RUN DATE  12/02/1991  TIME  15:12:04 *
*                                      *
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*                                      *
*    U.S. ARMY CORPS OF ENGINEERS      *
*  THE 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       WICKENBURG ADMS - CONTRACT FCD 89-79
  2           ID       WASHES B(CALAMITY), C, D(MONARCH), E, I, J,
  3           ID       WASHES K, L, O, P, & T(SAN DOMINGO)
  4           ID       SCS TYPE II STORM :100YR - 24 HR: PHOENIX MOUNTAIN S-GRAPH
  5           ID       AERIAL REDUCTION FACTORS PER NWS HYDRO-40
  6           ID       NMIN = 10 min
  7           ID       E2-10 ; 10-YEAR EVENT
              *DIAGRAM
  8           IT      10                    300
  9           IO       5
 10           IN      30
 11           JD    2.85     .01
 12           PC    .000    .005    .011    .016    .022    .028    .035    .041    .048    .056
 13           PC    .068    .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           JD    2.79     3.0
 18           JD    2.74     10.
 19           JD    2.62    20.0
 20           JD    2.57    30.0

 21           KK     SB5
 22           KM   SUB-BASIN B5
 23           BA    3.17
 24           LG     .15     .34    4.21     .38    5.20
 25           UI    264.   1041.   1798.   2591.   1626.   1266.    976.    690.    556.    375.
 26           UI    291.    212.    158.    123.     85.     48.     48.     48.     48.      0.
 27           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 28           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 29           KK    RB7
 30           KM       ROUTE SB5 THROUGH SB10
 31           RS       1    FLOW      -1
 32           RC   0.040   0.025   0.040 11985.6  0.0284
 33           RX       0       8     108     109     139     140     240     248
 34           RY       6       4       3       0       0       3       4       6

 35           KK    SB10
 36           KM   SUB-BASIN B10
 37           BA    1.11
 38           LG     .15     .30    3.74     .30   10.70
 39           UI    219.    800.   1202.    709.    491.    312.    202.    132.     84.     62.
 40           UI     25.     25.     25.      0.      0.      0.      0.      0.      0.      0.
 41           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 42           KK    CB12
 43           KM       COMBINE RB7 & SB10
 44           HC       2
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  45          KK     SC5
  46          KM   SUB-BASIN C5
  47          BA    4.43
  48          LG     .15     .31    3.68     .29    7.00
  49          UI    231.    453.   1069.   1544.   1933.   2542.   1608.   1323.   1136.    964.
  50          UI    794.    617.    542.    452.    346.    285.    253.    187.    177.    117.
  51          UI    113.    113.     51.     44.     44.     44.     44.     44.     44.     0.
  52          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.     0.
  53          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.     0.

  54          KK     RC7
  55          KM       ROUTE HYDROGRAPH SC5 (RC7) THROUGH SC10
  56          RS       2    FLOW      -1
  57          RC   0.040   0.025   0.040 24024.0  0.0233
  58          RX       0       3       5       6      36      37      39      42
  59          RY      10       3       2       0       0       2       3      10

  60          KK    SC10
  61          KM   SUB-BASIN C10
  62          BA    3.66
  63          LG     .15     .34    4.28     .41    9.40
  64          UI    247.    780.   1540.   2120.   2422.   1504.   1233.    994.    745.    590.
  65          UI    470.    340.    278.    207.    170.    121.    121.     51.     47.     47.
  66          UI     47.     47.     47.      0.      0.      0.      0.      0.      0.      0.
  67          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  68          KK    CC12
  69          KM       COMBINE HYDROGRAPHS RC7 & SC10
  70          HC       2

  71          KK    RC14
  72          KM       ROUTE HYDROGRAPH CC12 THROUGH SC15
  73          RS       3    FLOW      -1
  74          RC   0.040   0.025   0.040 22017.6  0.024
  75          RX       0       8     108     109     139     140     240     248
  76          RY       6       4       3       0       0       3       4       6

  77          KK    SC15
  78          KM   SUB-BASIN C15
  79          BA    2.31
  80          LG     .15     .34    4.19     .38    6.15
  81          UI    160.    524.   1022.   1425.   1486.    945.    770.    615.    451.    367.
  82          UI    285.    201.    170.    123.     94.     78.     61.     31.     31.     31.
  83          UI     31.     31.      0.      0.      0.      0.      0.      0.      0.      0.
  84          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  85          KK    CC17
  86          KM       COMBINE HYDROGRAPHS SC15 & RC14
  87          HC       2
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  88          KK    RC19
  89          KM        ROUTE HYDROGRAPH CC17 THROUGH SC20
  90          RS       1    FLOW      -1
  91          RC   0.033   0.025   0.033    5016  0.0199
  92          RX       0       8     108     109     149     150     250     258
  93          RY       6       4       3       0       0       3       4       6

  94          KK    SC20
  95          KM   SUB-BASIN C20
  96          BA     .43
  97          LG     .15     .32    4.23     .44    9.10
  98          UI    374.    736.    319.    138.     59.     22.      0.      0.      0.      0.
  99          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 100          KK    CC22
 101          KM        COMBINE HYDROGRAPHS RC19 & SC20
 102          HC       2

 103          KK     SD5
 104          KM   SUB-BASIN D5
 105          BA    5.42
 106          LG     .15     .33    4.16     .38    8.10
 107          UI    208.    208.    649.    996.   1330.   1568.   1912.   2406.   1549.   1282.
 108          UI   1153.   1029.    911.    808.    681.    562.    502.    462.    396.    327.
 109          UI    266.    243.    228.    175.    160.    151.    102.    102.    102.    100.
 110          UI     40.     40.     40.     40.     40.     40.     40.     40.     40.     40.
 111          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 112          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 113          KK    SD10
 114          KM   SUB-BASIN D10
 115          BA    3.80
 116          LG     .15     .33    4.02     .35    8.60
 117          UI    162.    216.    558.    889.   1123.   1341.   1833.   1325.   1009.    894.
 118          UI    787.    688.    595.    484.    407.    372.    322.    259.    206.    186.
 119          UI    176.    124.    124.     95.     79.     79.     79.     35.     31.     31.
 120          UI     31.     31.     31.     31.     31.     31.      0.      0.      0.      0.
 121          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 122          KK    CD12
 123          KM        COMBINE HYDROGRAPHS SD5 & SD10
 124          HC       2

 125          KK    RD14
 126          KM        ROUTE HYDROGRAPH CD12 THROGH SD15
 127          RS       1    FLOW      -1
 128          RC   0.040   0.025   0.040 11510.4  0.0209
 129          RX       0       8     108     109     139     140     240     248
 130          RY       6       4       3       0       0       3       4       6
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 131          KK    SD15
 132          KM   SUB-BASIN D15
 133          BA     .93
 134          LG     .15     .34    4.24     .43    1.30
 135          UI    172.    634.    994.    598.    422.    270.    181.    119.     76.     51.
 136          UI     28.     20.     20.      0.      0.      0.      0.      0.      0.      0.
 137          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 138          KK    CD17
 139          KM        COMBINE HYDROGRAPHS SD15 & RD14
 140          HC       2

 141          KK    SD20
 142          KM   SUB-BASIN D20
 143          BA     .58
 144          LG     .15     .33    4.16     .38    4.20
 145          UI    107.    394.    619.    373.    264.    168.    113.     74.     47.     32.
 146          UI     18.     12.     12.      0.      0.      0.      0.      0.      0.      0.
 147          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 148          KK    RD22
 149          KM        ROUTE HYDROGRAPH SD20 THROUGH SD15
 150          RS       1    FLOW      -1
 151          RC   0.040   0.025   0.040    2500  0.0283
 152          RX       0       8     108     109     149     150     250     258
 153          RY       6       4       3       0       0       3       4       6

 154          KK    CD24
 155          KM        COMBINE HYDROGRAPHS RD22 & CD17
 156          HC       2

 157          KK     E5
 158          KM   SUB-BASIN E5
 159          BA     .37
 160          LG     .15     .31    3.95     .35   16.70
 161          UI     94.    336.    405.    229.    142.     90.     54.     32.     22.      9.
 162          UI      9.      9.      0.      0.      0.      0.      0.      0.      0.      0.
 163          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 164          KK    E10
 165          KM   SUB-BASIN E10
 166          BA     .94
 167          LG     .15     .30    3.93     .34   10.50
 168          UI     66.    223.    431.    608.    588.    383.    312.    246.    179.    148.
 169          UI    108.     81.     65.     51.     34.     32.     20.     13.     13.     13.
 170          UI     13.     13.      0.      0.      0.      0.      0.      0.      0.      0.
 171          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 172          KK    CE12
 173          KM        COMBINE HYDROGRAPHS FROM E5 & E10
 174          HC       2
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 175          KK   RE14
 176          KM       ROUTE HYDROGRAPH CE12 THROUGH E20
 177          RS      1    FLOW      -1
 178          RC  0.040   0.025   0.040    3000  0.0244
 179          RX      0       8     108     109     149     150     250     258
 180          RY      6       4       3       0       0       3       4       6

 181          KK    E15
 182          KM  SUB-BASIN E15
 183          BA   4.41
 184          LG    .15     .33    4.24     .43    8.20
 185          UI   251.    593.   1294.   1801.   2453.   2294.   1533.   1293.   1089.    886.
 186          UI   677.    582.    473.    354.    295.    248.    193.    154.    123.    123.
 187          UI    65.     48.     48.     48.     48.     48.     48.      0.      0.      0.
 188          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 189          KK   RE17
 190          KM       ROUTE HYDROGRAPH FROM E15 THROUGH E20
 191          RS      2    FLOW      -1
 192          RC  0.040   0.025   0.040 19008.0  0.0244
 193          RX      0       8     108     109     139     140     240     248
 194          RY      6       4       3       0       0       3       4       6

 195          KK   CE19
 196          KM       COMBINE HYDROGRAPHS RE17 & RE14
 197          HC      2

 198          KK   SE20
 199          KM  SUB-BASIN E20
 200          BA   1.11
 201          LG    .15     .32    4.24     .44    7.20
 202          UI    88.    351.    612.    897.    574.    445.    347.    248.    196.    139.
 203          UI   103.     78.     59.     42.     35.     17.     17.     17.     17.      0.
 204          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 205          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 206          KK   CE22
 207          KM       COMBINE HYDROGRAPHS E20 & CE19  (E)
 208          HC      2

 209          KK  NUL
 210          KM  COMBINING WASHES B, C, D, & E TO REDUCE THE NO. OF FREE HYDROGRAPHS
 211          HC  4.

 212          KK    S15
 213          KM  SUB-BASIN I5
 214          BA    .41
 215          LG    .15     .31    3.58     .27    7.90
 216          UI    68.    257.    425.    267.    191.    124.     87.     54.     38.     24.
 217          UI    18.      8.      8.      8.      0.      0.      0.      0.      0.      0.
 218          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 219          KK   SI10
 220          KM  SUB-BASIN I10
 221          BA   1.61
 222          LG    .15     .31    3.77     .30    3.20
 223          UI   121.    456.    823.   1231.    875.    651.    518.    386.    292.    227.
 224          UI   160.    128.     92.     68.     59.     36.     23.     23.     23.     23.
 225          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 226          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 227          KK   CI12
 228          KM      COMBINE SI5 & SI10
 229          HC      2

 230          KK   RI14
 231          KM      ROUTE COMBINED HYDROGRAPHS FROM SI5 & SI10 (SI12) THROUGH SI15
 232          RS      1   FLOW     -1
 233          RC  0.040   0.025   0.040    5016  0.0279
 234          RX      0       8     108     109     139     140     240     248
 235          RY      6       4       3       0       0       3       4       6

 236          KK   SI15
 237          KM  SUB-BASIN I15
 238          BA    .25
 239          LG    .15     .34    3.91     .33    2.20
 240          UI   204.    424.    191.     85.     37.     15.     10.      0.      0.      0.
 241          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 242          KK   CI17
 243          KM      COMBINE RI14 & SI15
 244          HC      2

 245          KK     SJ
 246          KM  SUB-BASIN J
 247          BA    .42
 248          LG    .15     .32    3.74     .30    6.30
 249          UI   109.    389.    458.    259.    160.    100.     60.     36.     24.     11.
 250          UI    11.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 251          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 252          KK    SK5
 253          KM  SUB-BASIN K5
 254          BA    .84
 255          LG    .15     .31    3.78     .30     .00
 256          UI   145.    540.    881.    545.    389.    252.    177.    109.     76.     48.
 257          UI    33.     18.     18.     18.      0.      0.      0.      0.      0.      0.
 258          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 259          KK   SK10
 260          KM  SUB-BASIN K10
 261          BA   1.04
 262          LG    .15     .30    3.92     .24    3.70
 263          UI   106.    405.    689.    863.    520.    402.    291.    212.    154.    107.
 264          UI    80.     58.     44.     28.     17.     17.     17.     17.      0.      0.
 265          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
```

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

 266          KK    CK12
 267          KM        COMBINE HYDROGRAPHS FROM SK5 & SK10
 268          HC       2

 269          KK    RK14
 270          KM        ROUTE COMBINED HYDROGRRAPHS SK5 & SK10 (CK12) THROUGH SK15
 271          RS       1    FLOW      -1
 272          RC   0.040   0.025   0.040 13992.0  0.0243
 273          RX       0       8     108     109     149     150     250     258
 274          RY       6       4       3       0       0       3       4       6

 275          KK    SK15
 276          KM   SUB-BASIN K15
 277          BA    1.09
 278          LG     .15     .30    3.51     .26    9.70
 279          UI    117.    445.    757.    897.    542.    417.    295.    219.    151.    111.
 280          UI     78.     55.     47.     22.     18.     18.     18.      0.      0.      0.
 281          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 282          KK    CK17
 283          KM        COMBINE HYDROGRAPHS FROM SK15 & RK14
 284          HC       2

 285          KK      SL
 286          KM   SUB-BASIN L
 287          BA     .79
 288          LG     .15     .32    3.69     .29    7.05
 289          UI    126.    478.    809.    519.    372.    247.    174.    109.     76.     50.
 290          UI     38.     16.     16.     16.      0.      0.      0.      0.      0.      0.
 291          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 292          KK   NUL
 293          KM   COMBINING WASHES I, J, K, & L TO REDUCE THE NO. OF FREE HYDROGRAPHS
 294          HC   5.

 295          KK      SO
 296          KM   SUB-BASIN O
 297          BA    2.90
 298          LG     .15     .30    3.55     .26    5.90
 299          UI    166.    393.    856.   1190.   1626.   1500.   1008.    850.    715.    580.
 300          UI    443.    382.    309.    231.    193.    161.    127.     99.     81.     81.
 301          UI     40.     32.     32.     32.     32.     32.     32.      0.      0.      0.
 302          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 303          KK      SP
 304          KM   SUB-BASIN P
 305          BA     .87
 306          LG     .15     .32    3.76     .30    8.70
 307          UI    148.    554.    909.    566.    405.    262.    185.    114.     80.     51.
 308          UI     36.     18.     18.     18.      0.      0.      0.      0.      0.      0.
 309          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 310          KK   NUL
 311          KM   COMBINING WASHES O & P TO REDUCE THE NO. OF FREE HYDROGRAPHS
 312          HC   3.

 313          KK     ST2
 314          KM   SUB-BASIN ST2
 315          BA    4.50
 316          LG     .15     .32    3.82     .31     .50
 317          UI    928.   3373.   4908.   2863.   1947.   1247.    779.    507.    323.    224.
 318          UI    102.    102.    102.      0.      0.      0.      0.      0.      0.      0.
 319          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 320          KK     RT4
 321          KM        SAN DOMINGO WASH WITHIN SUB BASIN ST6
 322          RS       1    FLOW      -1
 323          RC    .045     .03    .045    9200   .0337
 324          RX     442     446     476     480     520     524     554     558
 325          RY      16      12      12      10      10      12      12      16

 326          KK     ST6
 327          KM   SUB-BASIN ST6
 328          BA    3.93
 329          LG     .15     .34    4.12     .37    3.30
 330          UI    920.   3322.   4323.   2465.   1578.   1017.    605.    392.    240.    125.
 331          UI     94.     94.      0.      0.      0.      0.      0.      0.      0.      0.
 332          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 333          KK     CT8
 334          HC       2

 335          KK     RT9
 336          KM        SAN DOMINGO WASH WITHIN SUB BASIN ST10
 337          RS       1    FLOW      -1
 338          RC    .045     .03    .045   17800   .0264
 339          RX     442     446     476     480     520     524     554     558
 340          RY      16      12      12      10      10      12      12      16

 341          KK    ST10
 342          KM   SUB-BASIN ST10
 343          BA    2.70
 344          LG     .15     .32    3.86     .32    9.80
 345          UI    385.   1460.   2579.   1857.   1301.    912.    631.    421.    299.    202.
 346          UI    132.     93.     52.     52.     52.      0.      0.      0.      0.      0.
 347          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 348          KK    ST12
 349          KM   SUB-BASIN ST12
 350          BA    3.50
 351          LG     .15     .33    4.00     .35    7.30
 352          UI    352.   1348.   2294.   2906.   1751.   1355.    986.    715.    528.    361.
 353          UI    272.    198.    146.     99.     57.     57.     57.     57.      0.      0.
 354          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 355          KK    CT11
 356          HC       3

 357          KK    RT13
 358          KM        SAN DOMINGO WASH WITHIN SUB BASIN ST16
 359          RS       1    FLOW      -1
 360          RC    .045     .03    .045    4000   .0175
 361          RX     436     446     476     480     520     524     554     564
 362          RY      22      12      12      10      10      12      12      22

 363          KK    ST14
 364          KM   SUB-BASIN ST14
 365          BA    2.76
 366          LG     .15     .30    3.61     .28   10.60
 367          UI    460.   1730.   2865.   1802.   1290.    841.    591.    368.    257.    165.
 368          UI    120.     57.     57.     57.      0.      0.      0.      0.      0.      0.
 369          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 370          KK    CT14
 371          HC       2

 372          KK    RT15
 373          KM        SAN DOMINGO WASH WITHIN SUB BASIN ST16
 374          RS       1    FLOW      -1
 375          RC    .045     .03    .045   10200   .0206
 376          RX     444     454     474     480     520     526     546     556
 377          RY      23      13      13      10      10      13      13      23

 378          KK    ST16
 379          KM   SUB-BASIN ST16
 380          BA    1.35
 381          LG     .15     .29    3.78     .32   15.40
 382          UI    250.    920.   1443.    868.    613.    391.    262.    172.    110.     74.
 383          UI     41.     29.     29.      0.      0.      0.      0.      0.      0.      0.
 384          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 385          KK    CT17
 386          HC       2

 387          KK    RT18
 388          KM        SAN DOMINGO WITHIN WASH WITHIN SUB BASIN ST20
 389          RS       1    FLOW      -1
 390          RC    .045     .03    .045    4600   .0174
 391          RX     434     444     474     480     520     526     556     566
 392          RY      23      13      13      10      10      13      13      23

 393          KK    ST20
 394          KM   SUB-BASIN ST20
 395          BA     .28
 396          LG     .15     .34    3.68     .69    3.70
 397          UI    287.    484.    191.     75.     29.     13.      0.      0.      0.      0.
 398          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 399          KK   ST22
 400          KM   SUB-BASIN ST22
 401          BA    .72
 402          LG    .15     .29    3.82     .33   21.80
 403          UI   216.    774.    753.    431.    253.    149.     90.     53.     27.     19.
 404          UI    19.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 405          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 406          KK   CT24
 407          HC      3

 408          KK   RT25
 409          KM       SAN DOMINGO WASH WITHIN SUB BASIN ST26
 410          RS      1   FLOW     -1
 411          RC   .045     .03    .045    5000    .010
 412          RX    404     414     464     470     530     536     586     596
 413          RY     23      13      13      10      10      13      13      23

 414          KK   ST26
 415          KM   SUB-BASIN ST26
 416          BA    .59
 417          LG    .15     .33    4.10     .50    6.20
 418          UI   376.    953.    497.    241.    115.     58.     22.     22.      0.      0.
 419          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 420          KK   CT30
 421          HC      2
 422          ZZ
```

SCHEMATIC DIAGRAM OF STREAM NETWORK

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

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

 21        SB5
            V
            V
 29       RB7
            .
            .
 35         .        SB10
            .           .
            .           .
 42       CB12............
            .
            .
 45         .         SC5
            .           V
            .           V
 54         .         RC7
            .           .
            .           .
 60         .           .        SC10
            .           .           .
            .           .           .
 68         .        CC12............
            .           V
            .           V
 71         .        RC14
            .           .
            .           .
 77         .           .        SC15
            .           .           .
            .           .           .
 85         .        CC17............
            .           V
            .           V
 88         .        RC19
            .           .
            .           .
 94         .           .        SC20
            .           .           .
            .           .           .
100         .        CC22............
            .           .
            .           .
103         .           .         SD5
            .           .           .
            .           .           .
113         .           .           .        SD10
            .           .           .           .
            .           .           .           .
122         .           .        CD12............
            .           .           V
            .           .           V
125         .           .        RD14
            .           .           .
            .           .           .
            .           .           .        SD15
            .           .           .           .
            .           .           .           .
138         .           .        CD17............
            .           .           .
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141                          SD20
                               V
                               V
[illegible]                  RD22
                               .
                               .
154                     CD24............
                               .
                               .
157                            E5
                               .
                               .
164                            .          E10
                               .            .
                               .            .
172                          CE12............
                               V
                               V
175                          RE14
                               .
                               .
181                            .          E15
                               .            V
                               .            V
189                            .         RE17
                               .            .
                               .            .
195                          CE19............
                               .
                               .
198                            .          SE20
                               .            .
                               .            .
[illegible]                  CE22............
                               .
                               .
209   NUL ...................................
212                 SI5
                      .
                      .
219                   .        SI10
                      .          .
                      .          .
227                 CI12............
                      V
                      V
230                 RI14
                      .
                      .
236                   .        SI15
                      .          .
                      .          .
242                 CI17............
                      .
                      .
245                   .         SJ
                      .          .
                      .          .
[illegible]           .          .          SK5
                      .          .            .
                      .          .            .
259                   .          .            .          SK10
                      .          .            .            .
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                .         .         .         .         .
266             .         .         .      CK12.........
                .         .         .         V
                .         .         .         V
269             .         .         .      RK14
                .         .         .         .
                .         .         .         .
275             .         .         .         .      SK15
                .         .         .         .         .
                .         .         .         .         .
282             .         .         .      CK17.........
                .         .         .         .
                .         .         .         .
285             .         .         .         .        SL
                .         .         .         .         .
                .         .         .         .         .
292         NUL ...........................................
                .
                .
295             .        SO
                .         .
                .         .
303             .         .        SP
                .         .         .
                .         .         .
310         NUL ......................
                .
                .
313             .       ST2
                .         V
                .         V
320             .       RT4
                .         .
                .         .
326             .         .       ST6
                .         .         .
                .         .         .
333             .       CT8..........
                .         V
                .         V
335             .       RT9
                .         .
                .         .
341             .         .      ST10
                .         .         .
                .         .         .
348             .         .         .      ST12
                .         .         .         .
                .         .         .         .
355             .      CT11......................
                .         V
                .         V
357             .      RT13
                .         .
                .         .
363             .         .      ST14
                .         .         .
                .         .         .
370             .      CT14..........
                .         V
                .         V
                .      RT15
                .         .
                .         .
378             .         .      ST16
                .         .         .
```

```
                .          .          .
385             .       CT17...........
                .          V
                .          V
7               .       RT18
                .          .
                .          .
393             .          .       ST20
                .          .          .
                .          .          .
399             .          .          .       ST22
                .          .          .          .
                .          .          .          .
406             .       CT24......................
                .          V
                .          V
408             .       RT25
                .          .
                .          .
414             .          .       ST26
                .          .          .
                .          .          .
420             .       CT30...........
```

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

```
****************************************                                    ****************************************
*                                      *                                    *                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *                                    *   U.S. ARMY CORPS OF ENGINEERS       *
*          FEBRUARY 1981               *                                    * THE HYDROLOGIC ENGINEERING CENTER   *
*        REVISED 02 AUG 88             *                                    *        609 SECOND STREET             *
*                                      *                                    *      DAVIS, CALIFORNIA 95616         *
* RUN DATE  12/02/1991  TIME  15:12:04 *                                    *         (916) 551-1748               *
*                                      *                                    *                                      *
****************************************                                    ****************************************
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```
                    WICKENBURG ADMS - CONTRACT FCD 89-79
                    WASHES B(CALAMITY), C, D(MONARCH), E, I, J,
                    WASHES K, L, O, P, & T(SAN DOMINGO)
                    SCS TYPE II STORM :100YR - 24 HR: PHOENIX MOUNTAIN S-GRAPH
                    AERIAL REDUCTION FACTORS PER NWS HYDRO-40
                    NMIN = 10 min
                    E2-10 ; 10-YEAR EVENT

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

   IT        HYDROGRAPH TIME DATA
                   NMIN         10  MINUTES IN COMPUTATION INTERVAL
                  IDATE     1    0  STARTING DATE
                  ITIME       0000  STARTING TIME
                     NQ        300  NUMBER OF HYDROGRAPH ORDINATES
                 NDDATE     3    0  ENDING DATE
                 NDTIME       0150  ENDING TIME
                  ICENT         19  CENTURY MARK

            COMPUTATION INTERVAL     .17 HOURS
                 TOTAL TIME BASE   49.83 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       2.85  PRECIPITATION DEPTH
                  TRDA        .01  TRANSPOSITION DRAINAGE AREA

12 PI         PRECIPITATION PATTERN
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .01       .01       .01       .01       .01       .01
                 .01       .01       .01       .01       .01       .01       .02       .02       .02       .13
                 .13       .13       .02       .02       .02       .01       .01       .01       .01       .01
                 .01       .01       .01       .01       .01       .01       .01       .01       .01       .01
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
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                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00

17 JD        INDEX STORM NO. 2
                STRM        2.79  PRECIPITATION DEPTH
                TRDA        3.00  TRANSPOSITION DRAINAGE AREA

 0 PI         PRECIPITATION PATTERN
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .01       .01       .01       .01       .01       .01
                .01       .01       .01       .01       .01       .01       .02       .02       .02       .13
                .13       .13       .02       .02       .02       .01       .01       .01       .01       .01
                .01       .01       .01       .01       .01       .01       .01       .01       .01       .01
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00

18 JD        INDEX STORM NO. 3
                STRM        2.74  PRECIPITATION DEPTH
                TRDA       10.00  TRANSPOSITION DRAINAGE AREA

 0 PI         PRECIPITATION PATTERN
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .01       .01       .01       .01       .01       .01
                .01       .01       .01       .01       .01       .01       .02       .02       .02       .13
                .13       .13       .02       .02       .02       .01       .01       .01       .01       .01
                .01       .01       .01       .01       .01       .01       .01       .01       .01       .01
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00

19 JD        INDEX STORM NO. 4
                STRM        2.62  PRECIPITATION DEPTH
                TRDA       20.00  TRANSPOSITION DRAINAGE AREA

 0 PI         PRECIPITATION PATTERN
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .01       .01       .01       .01       .01       .01
                .01       .01       .01       .01       .01       .01       .02       .02       .02       .13
                .13       .13       .02       .02       .02       .01       .01       .01       .01       .01
                .01       .01       .01       .01       .01       .01       .01       .01       .01       .01
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00
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20 JD        INDEX STORM NO. 5
                  STRM        2.57  PRECIPITATION DEPTH
                  TRDA       30.00  TRANSPOSITION DRAINAGE AREA

  PI          PRECIPITATION PATTERN
                .00      .00      .00      .00      .00      .00      .00      .00      .00      .00
                .00      .00      .00      .00      .00      .00      .00      .00      .00      .00
                .00      .00      .00      .00      .00      .00      .00      .00      .00      .00
                .00      .00      .00      .00      .00      .00      .00      .00      .00      .00
                .00      .00      .00      .00      .00      .00      .00      .00      .00      .00
                .00      .00      .00      .00      .01      .01      .01      .01      .01      .01
                .01      .01      .01      .01      .01      .01      .02      .02      .02      .13
                .13      .13      .02      .02      .02      .01      .01      .01      .01      .01
                .01      .01      .01      .01      .01      .01      .01      .01      .01      .01
                .00      .00      .00      .00      .00      .00      .00      .00      .00      .00
                .00      .00      .00      .00      .00      .00      .00      .00      .00      .00
                .00      .00      .00      .00      .00      .00      .00      .00      .00      .00
                .00      .00      .00      .00      .00      .00      .00      .00      .00      .00
                .00      .00      .00      .00      .00      .00      .00      .00      .00      .00
                .00      .00      .00      .00
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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	SB5	1195.	12.33	215.	57.	28.	3.17		
ROUTED TO	RB7	1108.	12.50	215.	57.	28.	3.17	2.00	12.50
HYDROGRAPH AT	SB10	683.	12.17	100.	28.	13.	1.11		
2 COMBINED AT	CB12	1559.	12.33	311.	84.	41.	4.28		
HYDROGRAPH AT	SC5	1513.	12.67	376.	101.	49.	4.43		
ROUTED TO	RC7	1351.	12.83	373.	101.	49.	4.43	2.44	13.00
HYDROGRAPH AT	SC10	1197.	12.50	257.	72.	35.	3.66		
2 COMBINED AT	CC12	2114.	12.67	616.	169.	82.	8.09		
ROUTED TO	RC14	1943.	13.17	614.	169.	82.	8.09	3.15	13.00
HYDROGRAPH AT	SC15	788.	12.50	161.	43.	21.	2.31		
2 COMBINED AT	CC17	2258.	12.83	759.	209.	101.	10.40		
ROUTED TO	RC19	2253.	13.00	758.	209.	101.	10.40	3.07	13.00
HYDROGRAPH AT	SC20	275.	12.00	30.	8.	4.	.43		
2 COMBINED AT	CC22	2253.	13.00	782.	216.	104.	10.83		
HYDROGRAPH AT	SD5	1230.	13.00	386.	107.	52.	5.42		
HYDROGRAPH AT	SD10	1007.	12.83	294.	81.	39.	3.80		
2 COMBINED AT	CD12	2169.	12.83	667.	185.	89.	9.22		
ROUTED TO	RD14	1971.	13.17	665.	185.	89.	9.22		

								3.26	13.00
HYDROGRAPH AT	SD15	386.	12.17	53.	13.	6.	.93		
2 COMBINED AT	CD17	2021.	13.00	711.	197.	95.	10.15		
HYDROGRAPH AT	SD20	280.	12.17	40.	10.	5.	.58		
ROUTED TO	RD22	271.	12.33	40.	10.	5.	.58		
								.70	12.33
2 COMBINED AT	CD24	2068.	13.00	743.	205.	99.	10.73		
HYDROGRAPH AT	E5	236.	12.17	34.	10.	5.	.37		
HYDROGRAPH AT	E10	386.	12.33	80.	22.	11.	.94		
2 COMBINED AT	CE12	578.	12.33	114.	32.	15.	1.31		
ROUTED TO	RE14	572.	12.33	114.	32.	15.	1.31		
								1.19	12.33
HYDROGRAPH AT	E15	1225.	12.50	295.	82.	39.	4.41		
ROUTED TO	RE17	1146.	12.83	293.	82.	39.	4.41		
								2.14	12.83
2 COMBINED AT	CE19	1480.	12.67	402.	112.	54.	5.72		
HYDROGRAPH AT	SE20	393.	12.33	74.	20.	10.	1.11		
2 COMBINED AT	CE22	1729.	12.67	470.	131.	63.	6.83		
4 COMBINED AT	NUL	5985.	12.83	1999.	556.	269.	32.67		
HYDROGRAPH AT	SI5	246.	12.17	37.	10.	5.	.41		
HYDROGRAPH AT	SI10	698.	12.33	128.	33.	16.	1.61		
2 COMBINED AT	CI12	926.	12.33	164.	43.	21.	2.02		
ROUTED TO	RI14	906.	12.33	164.	43.	21.	2.02		
								1.82	12.33
HYDROGRAPH AT	SI15	180.	12.00	18.	5.	2.	.25		

2 COMBINED AT	CI17	976.	12.33	182.	47.	23.	2.27	
HYDROGRAPH AT	SJ	270.	12.17	35.	9.	5.	.42	
HYDROGRAPH AT	SK5	460.	12.17	63.	16.	8.	.84	
HYDROGRAPH AT	SK10	541.	12.33	91.	24.	11.	1.04	
2 COMBINED AT	CK12	966.	12.33	153.	39.	19.	1.88	
ROUTED TO	RK14	806.	12.50	153.	39.	19.	1.88	1.46 12.50
HYDROGRAPH AT	SK15	589.	12.33	103.	28.	13.	1.09	
2 COMBINED AT	CK17	1317.	12.33	254.	67.	32.	2.97	
HYDROGRAPH AT	SL	447.	12.17	68.	18.	9.	.79	
5 COMBINED AT	NUL	7462.	12.67	2416.	666.	322.	39.12	
HYDROGRAPH AT	SO	1126.	12.50	257.	68.	33.	2.90	
HYDROGRAPH AT	SP	498.	12.17	75.	21.	10.	.87	
3 COMBINED AT	NUL	8544.	12.50	2674.	736.	356.	42.89	
HYDROGRAPH AT	ST2	2499.	12.17	326.	82.	40.	4.50	
ROUTED TO	RT4	2177.	12.33	326.	82.	40.	4.50	12.48 12.33
HYDROGRAPH AT	ST6	2011.	12.17	261.	68.	33.	3.93	
2 COMBINED AT	CT8	3797.	12.33	575.	147.	71.	8.43	
ROUTED TO	RT9	2869.	12.50	572.	147.	71.	8.43	12.97 12.50
HYDROGRAPH AT	ST10	1395.	12.17	229.	63.	30.	2.70	
HYDROGRAPH AT	ST12	1525.	12.33	267.	72.	35.	3.50	
3 COMBINED AT	CT11	5015.	12.33	999.	265.	128.	14.63	

ROUTED TO	RT13	4977.	12.50	999.	265.	128.	14.63	14.39	12.50
HYDROGRAPH AT	ST14	1653.	12.17	255.	70.	34.	2.76		
2 COMBINED AT	CT14	6061.	12.33	1211.	324.	156.	17.39		
ROUTED TO	RT15	5698.	12.50	1210.	324.	156.	17.39	14.99	12.50
HYDROGRAPH AT	ST16	820.	12.17	128.	37.	18.	1.35		
2 COMBINED AT	CT17	6090.	12.50	1314.	354.	171.	18.74		
ROUTED TO	RT18	5913.	12.67	1313.	354.	171.	18.74	15.19	12.67
HYDROGRAPH AT	ST20	110.	12.00	11.	3.	1.	.28		
HYDROGRAPH AT	ST22	511.	12.17	75.	22.	11.	.72		
3 COMBINED AT	CT24	6042.	12.50	1379.	374.	181.	19.74		
ROUTED TO	RT25	5970.	12.67	1378.	374.	181.	19.74	14.95	12.67
HYDROGRAPH AT	ST26	301.	12.00	35.	10.	5.	.59		
2 COMBINED AT	CT30	5983.	12.67	1402.	381.	184.	20.33		

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

EAST TRIBUTARIES AREA
NMIN = 10
25-YEAR

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****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*            FEBRUARY 1981             *
*           REVISED 02 AUG 88          *
*                                      *
*  RUN DATE  12/02/1991  TIME  15:17:56 *
*                                      *
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*                                      *
*    U.S. ARMY CORPS OF ENGINEERS      *
*  THE 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       WICKENBURG ADMS - CONTRACT FCD 89-79
  2           ID       WASHES B(CALAMITY), C, D(MONARCH), E, I, J,
  3           ID       WASHES K, L, O, P, & T(SAN DOMINGO)
  4           ID       SCS TYPE II STORM :100YR - 24 HR: PHOENIX MOUNTAIN S-GRAPH
  5           ID       AERIAL REDUCTION FACTORS PER NWS HYDRO-40
  6           ID       NMIN = 10 min
  7           ID       E2-25 ; 25-YEAR EVENT
              *DIAGRAM
  8           IT      10                    300
  9           IO       5
 10           IN      30
 11           JD    3.43     .01
 12           PC    .000    .005    .011    .016    .022    .028    .035    .041    .048    .056
 13           PC    .068    .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           JD    3.36     3.0
 18           JD    3.29     10.
 19           JD    3.16    20.0
 20           JD    3.09    30.0

 21           KK     SB5
 22           KM   SUB-BASIN B5
 23           BA    3.17
 24           LG     .15     .34    4.21     .38    5.20
 25           UI    264.   1041.   1798.   2591.   1626.   1266.    976.    690.    556.    375.
 26           UI    291.    212.    158.    123.     85.     48.     48.     48.     48.      0.
 27           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 28           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 29           KK    RB7
 30           KM       ROUTE SB5 THROUGH SB10
 31           RS       1    FLOW      -1
 32           RC   0.040   0.025   0.040 11985.6  0.0284
 33           RX       0       8     108     109     139     140     240     248
 34           RY       6       4       3       0       0       3       4       6

 35           KK    SB10
 36           KM   SUB-BASIN B10
 37           BA    1.11
 38           LG     .15     .30    3.74     .30   10.70
 39           UI    219.    800.   1202.    709.    491.    312.    202.    132.     84.     62.
 40           UI     25.     25.     25.      0.      0.      0.      0.      0.      0.      0.
 41           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 42           KK    CB12
 43           KM       COMBINE RB7 & SB10
 44           HC       2
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  45          KK    SC5
  46          KM   SUB-BASIN C5
  47          BA    4.43
  48          LG     .15     .31    3.68     .29    7.00
  49          UI    231.    453.   1069.   1544.   1933.   2542.   1608.   1323.   1136.    964.
  50          UI    794.    617.    542.    452.    346.    285.    253.    187.    177.    117.
  51          UI    113.    113.     51.     44.     44.     44.     44.     44.     44.     0.
  52          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.     0.
  53          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.     0.

  54          KK    RC7
  55          KM        ROUTE HYDROGRAPH SC5 (RC7) THROUGH SC10
  56          RS      2    FLOW      -1
  57          RC  0.040   0.025   0.040 24024.0  0.0233
  58          RX      0       3       5       6      36      37      39      42
  59          RY     10       3       2       0       0       2       3      10

  60          KK    SC10
  61          KM   SUB-BASIN C10
  62          BA    3.66
  63          LG     .15     .34    4.28     .41    9.40
  64          UI    247.    780.   1540.   2120.   2422.   1504.   1233.    994.    745.    590.
  65          UI    470.    340.    278.    207.    170.    121.    121.     51.     47.     47.
  66          UI     47.     47.     47.      0.      0.      0.      0.      0.      0.      0.
  67          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  68          KK    CC12
  69          KM        COMBINE HYDROGRAPHS RC7 & SC10
  70          HC      2

  71          KK    RC14
  72          KM        ROUTE HYDROGRAPH CC12 THROUGH SC15
  73          RS      3    FLOW      -1
  74          RC  0.040   0.025   0.040 22017.6   0.024
  75          RX      0       8     108     109     139     140     240     248
  76          RY      6       4       3       0       0       3       4       6

  77          KK    SC15
  78          KM   SUB-BASIN C15
  79          BA    2.31
  80          LG     .15     .34    4.19     .38    6.15
  81          UI    160.    524.   1022.   1425.   1486.    945.    770.    615.    451.    367.
  82          UI    285.    201.    170.    123.     94.     78.     61.     31.     31.     31.
  83          UI     31.     31.      0.      0.      0.      0.      0.      0.      0.      0.
  84          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  85          KK    CC17
  86          KM        COMBINE HYDROGRAPHS SC15 & RC14
  87          HC      2
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  88          KK    RC19
  89          KM        ROUTE HYDROGRAPH CC17 THROUGH SC20
  90          RS       1    FLOW      -1
  91          RC   0.033   0.025   0.033    5016  0.0199
  92          RX       0       8     108     109     149     150     250     258
  93          RY       6       4       3       0       0       3       4       6

  94          KK    SC20
  95          KM   SUB-BASIN C20
  96          BA     .43
  97          LG     .15     .32    4.23     .44    9.10
  98          UI    374.    736.    319.    138.     59.     22.      0.      0.      0.      0.
  99          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 100          KK    CC22
 101          KM        COMBINE HYDROGRAPHS RC19 & SC20
 102          HC       2

 103          KK     SD5
 104          KM   SUB-BASIN D5
 105          BA    5.42
 106          LG     .15     .33    4.16     .38    8.10
 107          UI    208.    208.    649.    996.   1330.   1568.   1912.   2406.   1549.   1282.
 108          UI   1153.   1029.    911.    808.    681.    562.    502.    462.    396.    327.
 109          UI    266.    243.    228.    175.    160.    151.    102.    102.    102.    100.
 110          UI     40.     40.     40.     40.     40.     40.     40.     40.     40.     40.
 111          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 112          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 113          KK    SD10
 114          KM   SUB-BASIN D10
 115          BA    3.80
 116          LG     .15     .33    4.02     .35    8.60
 117          UI    162.    216.    558.    889.   1123.   1341.   1833.   1325.   1009.    894.
 118          UI    787.    688.    595.    484.    407.    372.    322.    259.    206.    186.
 119          UI    176.    124.    124.     95.     79.     79.     79.     35.     31.     31.
 120          UI     31.     31.     31.     31.     31.     31.      0.      0.      0.      0.
 121          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 122          KK    CD12
 123          KM        COMBINE HYDROGRAPHS SD5 & SD10
 124          HC       2

 125          KK    RD14
 126          KM        ROUTE HYDROGRAPH CD12 THROGH SD15
 127          RS       1    FLOW      -1
 128          RC   0.040   0.025   0.040 11510.4  0.0209
 129          RX       0       8     108     109     139     140     240     248
 130          RY       6       4       3       0       0       3       4       6
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 131          KK    SD15
 132          KM   SUB-BASIN D15
 133          BA     .93
 134          LG     .15     .34    4.24     .43    1.30
 135          UI    172.    634.    994.    598.    422.    270.    181.    119.     76.     51.
 136          UI     28.     20.     20.      0.      0.      0.      0.      0.      0.      0.
 137          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 138          KK    CD17
 139          KM        COMBINE HYDROGRAPHS SD15 & RD14
 140          HC       2

 141          KK    SD20
 142          KM   SUB-BASIN D20
 143          BA     .58
 144          LG     .15     .33    4.16     .38    4.20
 145          UI    107.    394.    619.    373.    264.    168.    113.     74.     47.     32.
 146          UI     18.     12.     12.      0.      0.      0.      0.      0.      0.      0.
 147          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 148          KK    RD22
 149          KM        ROUTE HYDROGRAPH SD20 THROUGH SD15
 150          RS       1    FLOW      -1
 151          RC   0.040   0.025   0.040    2500  0.0283
 152          RX       0       8     108     109     149     150     250     258
 153          RY       6       4       3       0       0       3       4       6

 154          KK    CD24
 155          KM        COMBINE HYDROGRAPHS RD22 & CD17
 156          HC       2

 157          KK     E5
 158          KM   SUB-BASIN E5
 159          BA     .37
 160          LG     .15     .31    3.95     .35   16.70
 161          UI     94.    336.    405.    229.    142.     90.     54.     32.     22.      9.
 162          UI      9.      9.      0.      0.      0.      0.      0.      0.      0.      0.
 163          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 164          KK    E10
 165          KM   SUB-BASIN E10
 166          BA     .94
 167          LG     .15     .30    3.93     .34   10.50
 168          UI     66.    223.    431.    608.    588.    383.    312.    246.    179.    148.
 169          UI    108.     81.     65.     51.     34.     32.     20.     13.     13.     13.
 170          UI     13.     13.      0.      0.      0.      0.      0.      0.      0.      0.
 171          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 172          KK    CE12
 173          KM        COMBINE HYDROGRAPHS FROM E5 & E10
 174          HC       2
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 175          KK   RE14
 176          KM       ROUTE HYDROGRAPH CE12 THROUGH E20
 177          RS      1    FLOW     -1
 178          RC  0.040   0.025   0.040    3000  0.0244
 179          RX      0       8     108     109     149     150     250     258
 180          RY      6       4       3       0       0       3       4       6

 181          KK    E15
 182          KM  SUB-BASIN E15
 183          BA   4.41
 184          LG    .15     .33    4.24     .43    8.20
 185          UI   251.    593.   1294.   1801.   2453.   2294.   1533.   1293.   1089.    886.
 186          UI   677.    582.    473.    354.    295.    248.    193.    154.    123.    123.
 187          UI    65.     48.     48.     48.     48.     48.     48.      0.      0.      0.
 188          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 189          KK   RE17
 190          KM       ROUTE HYDROGRAPH FROM E15 THROUGH E20
 191          RS      2    FLOW     -1
 192          RC  0.040   0.025   0.040 19008.0  0.0244
 193          RX      0       8     108     109     139     140     240     248
 194          RY      6       4       3       0       0       3       4       6

 195          KK   CE19
 196          KM       COMBINE HYDROGRAPHS RE17 & RE14
 197          HC      2

 198          KK   SE20
 199          KM  SUB-BASIN E20
 200          BA   1.11
 201          LG    .15     .32    4.24     .44    7.20
 202          UI    88.    351.    612.    897.    574.    445.    347.    248.    196.    139.
 203          UI   103.     78.     59.     42.     35.     17.     17.     17.     17.      0.
 204          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 205          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 206          KK   CE22
 207          KM       COMBINE HYDROGRAPHS E20 & CE19  (E)
 208          HC      2

 209          KK  NUL
 210          KM  COMBINING WASHES B, C, D, & E TO REDUCE THE NO. OF FREE HYDROGRAPHS
 211          HC  4.

 212          KK    S15
 213          KM  SUB-BASIN I5
 214          BA    .41
 215          LG    .15     .31    3.58     .27    7.90
 216          UI    68.    257.    425.    267.    191.    124.     87.     54.     38.     24.
 217          UI    18.      8.      8.      8.      0.      0.      0.      0.      0.      0.
 218          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
```

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

 219          KK   SI10
 220          KM   SUB-BASIN I10
 221          BA   1.61
 222          LG    .15     .31    3.77     .30    3.20
 223          UI   121.    456.    823.   1231.    875.    651.    518.    386.    292.    227.
 224          UI   160.    128.     92.     68.     59.     36.     23.     23.     23.     23.
 225          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 226          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 227          KK   CI12
 228          KM      COMBINE SI5 & SI10
 229          HC      2

 230          KK   RI14
 231          KM      ROUTE COMBINED HYDROGRAPHS FROM SI5 & SI10 (SI12) THROUGH SI15
 232          RS      1    FLOW     -1
 233          RC  0.040   0.025   0.040    5016  0.0279
 234          RX      0       8     108     109     139     140     240     248
 235          RY      6       4       3       0       0       3       4       6

 236          KK   SI15
 237          KM   SUB-BASIN I15
 238          BA    .25
 239          LG    .15     .34    3.91     .33    2.20
 240          UI   204.    424.    191.     85.     37.     15.     10.      0.      0.      0.
 241          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 242          KK   CI17
 243          KM      COMBINE RI14 & SI15
 244          HC      2

 245          KK     SJ
 246          KM   SUB-BASIN J
 247          BA    .42
 248          LG    .15     .32    3.74     .30    6.30
 249          UI   109.    389.    458.    259.    160.    100.     60.     36.     24.     11.
 250          UI    11.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 251          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 252          KK    SK5
 253          KM   SUB-BASIN K5
 254          BA    .84
 255          LG    .15     .31    3.78     .30     .00
 256          UI   145.    540.    881.    545.    389.    252.    177.    109.     76.     48.
 257          UI    33.     18.     18.     18.      0.      0.      0.      0.      0.      0.
 258          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 259          KK   SK10
 260          KM   SUB-BASIN K10
 261          BA   1.04
 262          LG    .15     .30    3.92     .24    3.70
 263          UI   106.    405.    689.    863.    520.    402.    291.    212.    154.    107.
 264          UI    80.     58.     44.     28.     17.     17.     17.     17.      0.      0.
 265          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
```

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

 266          KK    CK12
 267          KM        COMBINE HYDROGRAPHS FROM SK5 & SK10
 268          HC       2

 269          KK    RK14
 270          KM        ROUTE COMBINED HYDROGRRAPHS SK5 & SK10 (CK12) THROUGH SK15
 271          RS       1    FLOW      -1
 272          RC   0.040   0.025   0.040 13992.0  0.0243
 273          RX       0       8     108     109     149     150     250     258
 274          RY       6       4       3       0       0       3       4       6

 275          KK    SK15
 276          KM   SUB-BASIN K15
 277          BA    1.09
 278          LG     .15     .30    3.51     .26    9.70
 279          UI    117.    445.    757.    897.    542.    417.    295.    219.    151.    111.
 280          UI     78.     55.     47.     22.     18.     18.     18.      0.      0.      0.
 281          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 282          KK    CK17
 283          KM        COMBINE HYDROGRAPHS FROM SK15 & RK14
 284          HC       2

 285          KK      SL
 286          KM   SUB-BASIN L
 287          BA     .79
 288          LG     .15     .32    3.69     .29    7.05
 289          UI    126.    478.    809.    519.    372.    247.    174.    109.     76.     50.
 290          UI     38.     16.     16.     16.      0.      0.      0.      0.      0.      0.
 291          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 292          KK   NUL
 293          KM   COMBINING WASHES I, J, K, & L TO REDUCE THE NO. OF FREE HYDROGRAPHS
 294          HC   5.

 295          KK      SO
 296          KM   SUB-BASIN O
 297          BA    2.90
 298          LG     .15     .30    3.55     .26    5.90
 299          UI    166.    393.    856.   1190.   1626.   1500.   1008.    850.    715.    580.
 300          UI    443.    382.    309.    231.    193.    161.    127.     99.     81.     81.
 301          UI     40.     32.     32.     32.     32.     32.     32.      0.      0.      0.
 302          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 303          KK      SP
 304          KM   SUB-BASIN P
 305          BA     .87
 306          LG     .15     .32    3.76     .30    8.70
 307          UI    148.    554.    909.    566.    405.    262.    185.    114.     80.     51.
 308          UI     36.     18.     18.     18.      0.      0.      0.      0.      0.      0.
 309          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
```

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

 310          KK   NUL
 311          KM   COMBINING WASHES O & P TO REDUCE THE NO. OF FREE HYDROGRAPHS
 312          HC   3.

 313          KK     ST2
 314          KM   SUB-BASIN ST2
 315          BA    4.50
 316          LG     .15     .32    3.82     .31     .50
 317          UI    928.   3373.   4908.   2863.   1947.   1247.    779.    507.    323.    224.
 318          UI    102.    102.    102.      0.      0.      0.      0.      0.      0.      0.
 319          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 320          KK     RT4
 321          KM        SAN DOMINGO WASH WITHIN SUB BASIN ST6
 322          RS       1    FLOW      -1
 323          RC    .045     .03    .045    9200   .0337
 324          RX     442     446     476     480     520     524     554     558
 325          RY      16      12      12      10      10      12      12      16

 326          KK     ST6
 327          KM   SUB-BASIN ST6
 328          BA    3.93
 329          LG     .15     .34    4.12     .37    3.30
 330          UI    920.   3322.   4323.   2465.   1578.   1017.    605.    392.    240.    125.
 331          UI     94.     94.      0.      0.      0.      0.      0.      0.      0.      0.
 332          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 333          KK     CT8
 334          HC       2

 335          KK     RT9
 336          KM        SAN DOMINGO WASH WITHIN SUB BASIN ST10
 337          RS       1    FLOW      -1
 338          RC    .045     .03    .045   17800   .0264
 339          RX     442     446     476     480     520     524     554     558
 340          RY      16      12      12      10      10      12      12      16

 341          KK    ST10
 342          KM   SUB-BASIN ST10
 343          BA    2.70
 344          LG     .15     .32    3.86     .32    9.80
 345          UI    385.   1460.   2579.   1857.   1301.    912.    631.    421.    299.    202.
 346          UI    132.     93.     52.     52.     52.      0.      0.      0.      0.      0.
 347          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 348          KK    ST12
 349          KM   SUB-BASIN ST12
 350          BA    3.50
 351          LG     .15     .33    4.00     .35    7.30
 352          UI    352.   1348.   2294.   2906.   1751.   1355.    986.    715.    528.    361.
 353          UI    272.    198.    146.     99.     57.     57.     57.     57.      0.      0.
 354          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 355          KK    CT11
 356          HC       3

 357          KK    RT13
 358          KM        SAN DOMINGO WASH WITHIN SUB BASIN ST16
 359          RS       1    FLOW      -1
 360          RC    .045     .03    .045    4000   .0175
 361          RX     436     446     476     480     520     524     554     564
 362          RY      22      12      12      10      10      12      12      22

 363          KK    ST14
 364          KM   SUB-BASIN ST14
 365          BA    2.76
 366          LG     .15     .30    3.61     .28   10.60
 367          UI    460.   1730.   2865.   1802.   1290.    841.    591.    368.    257.    165.
 368          UI    120.     57.     57.     57.      0.      0.      0.      0.      0.      0.
 369          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 370          KK    CT14
 371          HC       2

 372          KK    RT15
 373          KM        SAN DOMINGO WASH WITHIN SUB BASIN ST16
 374          RS       1    FLOW      -1
 375          RC    .045     .03    .045   10200   .0206
 376          RX     444     454     474     480     520     526     546     556
 377          RY      23      13      13      10      10      13      13      23

 378          KK    ST16
 379          KM   SUB-BASIN ST16
 380          BA    1.35
 381          LG     .15     .29    3.78     .32   15.40
 382          UI    250.    920.   1443.    868.    613.    391.    262.    172.    110.     74.
 383          UI     41.     29.     29.      0.      0.      0.      0.      0.      0.      0.
 384          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 385          KK    CT17
 386          HC       2

 387          KK    RT18
 388          KM        SAN DOMINGO WITHIN WASH WITHIN SUB BASIN ST20
 389          RS       1    FLOW      -1
 390          RC    .045     .03    .045    4600   .0174
 391          RX     434     444     474     480     520     526     556     566
 392          RY      23      13      13      10      10      13      13      23

 393          KK    ST20
 394          KM   SUB-BASIN ST20
 395          BA     .28
 396          LG     .15     .34    3.68     .69    3.70
 397          UI    287.    484.    191.     75.     29.     13.      0.      0.      0.      0.
 398          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 399          KK    ST22
 400          KM   SUB-BASIN ST22
 401          BA     .72
 402          LG     .15     .29    3.82     .33   21.80
 403          UI    216.    774.    753.    431.    253.    149.     90.     53.     27.     19.
 404          UI     19.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 405          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 406          KK    CT24
 407          HC       3

 408          KK    RT25
 409          KM        SAN DOMINGO WASH WITHIN SUB BASIN ST26
 410          RS       1    FLOW      -1
 411          RC    .045     .03    .045    5000    .010
 412          RX     404     414     464     470     530     536     586     596
 413          RY      23      13      13      10      10      13      13      23

 414          KK    ST26
 415          KM   SUB-BASIN ST26
 416          BA     .59
 417          LG     .15     .33    4.10     .50    6.20
 418          UI    376.    953.    497.    241.    115.     58.     22.     22.      0.      0.
 419          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 420          KK    CT30
 421          HC       2
 422          ZZ
```

SCHEMATIC DIAGRAM OF STREAM NETWORK

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

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

21         SB5
            V
            V
29        RB7
           .
           .
35         .        SB10
           .          .
           .          .
42        CB12............
           .
           .
45         .         SC5
           .          V
           .          V
54         .         RC7
           .          .
           .          .
60         .          .        SC10
           .          .          .
           .          .          .
68         .        CC12............
           .          V
           .          V
71         .        RC14
           .          .
           .          .
77         .          .        SC15
           .          .          .
           .          .          .
85         .        CC17............
           .          V
           .          V
88         .        RC19
           .          .
           .          .
94         .          .        SC20
           .          .          .
           .          .          .
100        .        CC22............
           .          .
           .          .
103        .          .         SD5
           .          .          .
           .          .          .
113        .          .          .        SD10
           .          .          .          .
           .          .          .          .
122        .          .        CD12............
           .          .          V
           .          .          V
125        .          .        RD14
           .          .          .
           .          .          .
 1         .          .          .        SD15
           .          .          .          .
           .          .          .          .
138        .          .        CD17............
           .          .          .
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                .         .         .
141             .         .         .       SD20
                .         .         .         V
                .         .         .         V
8               .         .         .       RD22
                .         .         .         .
                .         .         .         .
154             .         .      CD24............
                .         .         .
                .         .         .
157             .         .         .         E5
                .         .         .         .
                .         .         .         .
164             .         .         .         .         E10
                .         .         .         .           .
                .         .         .         .           .
172             .         .         .       CE12............
                .         .         .         V
                .         .         .         V
175             .         .         .       RE14
                .         .         .         .
                .         .         .         .
181             .         .         .         .         E15
                .         .         .         .           V
                .         .         .         .           V
189             .         .         .         .        RE17
                .         .         .         .           .
                .         .         .         .           .
195             .         .         .       CE19............
                .         .         .         .
                .         .         .         .
198             .         .         .         .        SE20
                .         .         .         .           .
                .         .         .         .           .
206             .         .         .       CE22............
                .         .         .         .
                .         .         .         .
209        NUL  ................................
                .
                .
212             .      SI5
                .        .
                .        .
219             .        .      SI10
                .        .        .
                .        .        .
227             .     CI12............
                .        V
                .        V
230             .     RI14
                .        .
                .        .
236             .        .      SI15
                .        .        .
                .        .        .
242             .     CI17............
                .        .
                .        .
245             .        .        SJ
                .        .        .
                .        .        .
?               .        .        .       SK5
                .        .        .         .
                .        .        .         .
259             .        .        .         .        SK10
                .        .        .         .           .
```

```
                .         .         .         .         .
266             .         .         .      CK12.........
                .         .         .         V
                .         .         .         V
279             .         .         .      RK14
                .         .         .         .
                .         .         .         .
275             .         .         .         .      SK15
                .         .         .         .         .
                .         .         .         .         .
282             .         .         .      CK17.........
                .         .         .         .
                .         .         .         .
285             .         .         .         .        SL
                .         .         .         .         .
                .         .         .         .         .
292        NUL  ...........................................
                .
                .
295             .        SO
                .         .
                .         .
303             .         .        SP
                .         .         .
                .         .         .
310        NUL  ......................
                .
                .
313             .       ST2
                .         V
                .         V
320             .       RT4
                .         .
                .         .
326             .         .       ST6
                .         .         .
                .         .         .
333             .       CT8..........
                .         V
                .         V
335             .       RT9
                .         .
                .         .
341             .         .      ST10
                .         .         .
                .         .         .
348             .         .         .      ST12
                .         .         .         .
                .         .         .         .
355             .      CT11......................
                .         V
                .         V
357             .      RT13
                .         .
                .         .
363             .         .      ST14
                .         .         .
                .         .         .
370             .      CT14..........
                .         V
                .         V
?               .      RT15
                .         .
                .         .
378             .         .      ST16
                .         .         .
```

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                .          .          .
385             .       CT17............
                .          V
                .          V
387             .       RT18
                .          .
                .          .
393             .          .       ST20
                .          .          .
                .          .          .
399             .          .          .       ST22
                .          .          .          .
                .          .          .          .
406             .       CT24......................
                .          V
                .          V
408             .       RT25
                .          .
                .          .
414             .          .       ST26
                .          .          .
                .          .          .
420             .       CT30............
```

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

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****************************************                    ****************************************
*                                      *                    *                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *                    *   U.S. ARMY CORPS OF ENGINEERS       *
*            FEBRUARY 1981             *                    * THE HYDROLOGIC ENGINEERING CENTER    *
*          REVISED 02 AUG 88           *                    *         609 SECOND STREET            *
*                                      *                    *      DAVIS, CALIFORNIA 95616         *
* RUN DATE  12/02/1991  TIME  15:17:56 *                    *          (916) 551-1748              *
*                                      *                    *                                      *
****************************************                    ****************************************
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```
                    WICKENBURG ADMS - CONTRACT FCD 89-79
                    WASHES B(CALAMITY), C, D(MONARCH), E, I, J,
                    WASHES K, L, O, P, & T(SAN DOMINGO)
                    SCS TYPE II STORM :100YR - 24 HR: PHOENIX MOUNTAIN S-GRAPH
                    AERIAL REDUCTION FACTORS PER NWS HYDRO-40
                    NMIN = 10 min
                    E2-25 ; 25-YEAR EVENT

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

   IT        HYDROGRAPH TIME DATA
                 NMIN         10  MINUTES IN COMPUTATION INTERVAL
                IDATE      1    0  STARTING DATE
                ITIME       0000  STARTING TIME
                   NQ        300  NUMBER OF HYDROGRAPH ORDINATES
               NDDATE      3    0  ENDING DATE
               NDTIME       0150  ENDING TIME
               ICENT          19  CENTURY MARK

            COMPUTATION INTERVAL     .17 HOURS
                 TOTAL TIME BASE   49.83 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        3.43  PRECIPITATION DEPTH
                TRDA         .01  TRANSPOSITION DRAINAGE AREA

12 PI          PRECIPITATION PATTERN
               .00      .00      .00      .00      .00      .00      .00      .00      .00      .00
               .00      .00      .00      .00      .00      .00      .00      .00      .00      .00
               .00      .00      .00      .00      .00      .00      .00      .00      .00      .00
               .00      .00      .00      .00      .00      .00      .00      .00      .00      .00
               .00      .00      .00      .00      .00      .00      .00      .00      .00      .00
               .00      .00      .00      .00      .01      .01      .01      .01      .01      .01
               .01      .01      .01      .01      .01      .01      .02      .02      .02      .13
               .13      .13      .02      .02      .02      .01      .01      .01      .01      .01
               .01      .01      .01      .01      .01      .01      .01      .01      .01      .01
               .00      .00      .00      .00      .00      .00      .00      .00      .00      .00
               .00      .00      .00      .00      .00      .00      .00      .00      .00      .00
               .00      .00      .00      .00      .00      .00      .00      .00      .00      .00
               .00      .00      .00      .00      .00      .00      .00      .00      .00      .00
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                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00

17 JD        INDEX STORM NO. 2
                STRM        3.36  PRECIPITATION DEPTH
                TRDA        3.00  TRANSPOSITION DRAINAGE AREA

 0 PI         PRECIPITATION PATTERN
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .01       .01       .01       .01       .01       .01
                .01       .01       .01       .01       .01       .01       .02       .02       .02       .13
                .13       .13       .02       .02       .02       .01       .01       .01       .01       .01
                .01       .01       .01       .01       .01       .01       .01       .01       .01       .01
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00

18 JD        INDEX STORM NO. 3
                STRM        3.29  PRECIPITATION DEPTH
                TRDA       10.00  TRANSPOSITION DRAINAGE AREA

 0 PI         PRECIPITATION PATTERN
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .01       .01       .01       .01       .01       .01
                .01       .01       .01       .01       .01       .01       .02       .02       .02       .13
                .13       .13       .02       .02       .02       .01       .01       .01       .01       .01
                .01       .01       .01       .01       .01       .01       .01       .01       .01       .01
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00

19 JD        INDEX STORM NO. 4
                STRM        3.16  PRECIPITATION DEPTH
                TRDA       20.00  TRANSPOSITION DRAINAGE AREA

 0 PI         PRECIPITATION PATTERN
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .01       .01       .01       .01       .01       .01
                .01       .01       .01       .01       .01       .01       .02       .02       .02       .13
                .13       .13       .02       .02       .02       .01       .01       .01       .01       .01
                .01       .01       .01       .01       .01       .01       .01       .01       .01       .01
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00
```

20 JD INDEX STORM NO. 5

STRM 3.09 PRECIPITATION DEPTH

TRDA 30.00 TRANSPOSITION DRAINAGE AREA

PI PRECIPITATION PATTERN

.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.01	.02	.02	.02	.13
.13	.13	.02	.02	.02	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.01	.01	.01	.01	.01
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00						

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	SB5	1710.	12.33	306.	81.	39.	3.17		
ROUTED TO	RB7	1611.	12.50	305.	81.	39.	3.17	2.59	12.50
HYDROGRAPH AT	SB10	906.	12.17	132.	36.	17.	1.11		
2 COMBINED AT	CB12	2252.	12.33	432.	116.	56.	4.28		
HYDROGRAPH AT	SC5	2011.	12.67	497.	132.	64.	4.43		
ROUTED TO	RC7	1852.	12.83	494.	132.	64.	4.43	2.95	12.83
HYDROGRAPH AT	SC10	1715.	12.50	365.	100.	48.	3.66		
2 COMBINED AT	CC12	3018.	12.67	839.	228.	110.	8.09		
ROUTED TO	RC14	2575.	13.33	838.	228.	110.	8.09	3.61	13.33
HYDROGRAPH AT	SC15	1125.	12.33	228.	61.	29.	2.31		
2 COMBINED AT	CC17	2938.	13.17	1046.	284.	137.	10.40		
ROUTED TO	RC19	2909.	13.17	1045.	284.	137.	10.40	3.52	13.17
HYDROGRAPH AT	SC20	397.	12.00	43.	12.	6.	.43		
2 COMBINED AT	CC22	2909.	13.17	1081.	294.	142.	10.83		
HYDROGRAPH AT	SD5	1728.	13.00	539.	148.	71.	5.42		
HYDROGRAPH AT	SD10	1390.	12.83	402.	110.	53.	3.80		
2 COMBINED AT	CD12	3042.	12.83	923.	253.	122.	9.22		
ROUTED TO	RD14	2646.	13.17	921.	253.	122.	9.22		

								3.77	13.17
HYDROGRAPH AT	SD15	580.	12.17	79.	20.	10.	.93		
2 COMBINED AT	CD17	2700.	13.17	992.	271.	131.	10.15		
HYDROGRAPH AT	SD20	399.	12.17	56.	15.	7.	.58		
ROUTED TO	RD22	386.	12.17	56.	15.	7.	.58	.89	12.17
2 COMBINED AT	CD24	2744.	13.17	1039.	283.	137.	10.73		
HYDROGRAPH AT	E5	316.	12.17	46.	13.	6.	.37		
HYDROGRAPH AT	E10	523.	12.33	107.	29.	14.	.94		
2 COMBINED AT	CE12	779.	12.33	153.	42.	20.	1.31		
ROUTED TO	RE14	774.	12.33	152.	42.	20.	1.31	1.45	12.33
HYDROGRAPH AT	E15	1792.	12.50	423.	115.	56.	4.41		
ROUTED TO	RE17	1669.	12.83	421.	115.	56.	4.41	2.80	12.83
2 COMBINED AT	CE19	2158.	12.67	566.	156.	75.	5.72		
HYDROGRAPH AT	SE20	574.	12.33	106.	29.	14.	1.11		
2 COMBINED AT	CE22	2522.	12.67	665.	183.	88.	6.83		
4 COMBINED AT	NUL	8412.	12.67	2861.	782.	378.	32.67		
HYDROGRAPH AT	SI5	324.	12.17	48.	13.	6.	.41		
HYDROGRAPH AT	SI10	941.	12.33	172.	44.	21.	1.61		
2 COMBINED AT	CI12	1241.	12.33	219.	57.	27.	2.02		
ROUTED TO	RI14	1224.	12.33	219.	57.	27.	2.02	2.23	12.33
HYDROGRAPH AT	SI15	249.	12.00	25.	6.	3.	.25		

2 COMBINED AT	CI17	1320.	12.33	244.	63.	31.	2.27		
HYDROGRAPH AT	SJ	361.	12.17	47.	12.	6.	.42		
HYDROGRAPH AT	SK5	623.	12.17	86.	21.	10.	.84		
HYDROGRAPH AT	SK10	710.	12.33	119.	31.	15.	1.04		
2 COMBINED AT	CK12	1286.	12.17	204.	52.	25.	1.88		
ROUTED TO	RK14	1105.	12.50	204.	52.	25.	1.88	1.80	12.50
HYDROGRAPH AT	SK15	768.	12.33	133.	36.	17.	1.09		
2 COMBINED AT	CK17	1805.	12.33	335.	88.	42.	2.97		
HYDROGRAPH AT	SL	596.	12.17	90.	24.	12.	.79		
5 COMBINED AT	NUL	11077.	12.50	3425.	931.	450.	39.12		
HYDROGRAPH AT	SO	1480.	12.50	337.	89.	43.	2.90		
HYDROGRAPH AT	SP	666.	12.17	100.	27.	13.	.87		
3 COMBINED AT	NUL	12605.	12.50	3768.	1022.	494.	42.89		
HYDROGRAPH AT	ST2	3418.	12.17	447.	112.	54.	4.50		
ROUTED TO	RT4	3056.	12.33	446.	112.	54.	4.50	12.93	12.33
HYDROGRAPH AT	ST6	2866.	12.17	371.	96.	46.	3.93		
2 COMBINED AT	CT8	5349.	12.33	801.	204.	98.	8.43		
ROUTED TO	RT9	4240.	12.50	798.	204.	98.	8.43	13.61	12.50
HYDROGRAPH AT	ST10	1888.	12.17	306.	84.	40.	2.70		
HYDROGRAPH AT	ST12	2109.	12.33	367.	98.	47.	3.50		
3 COMBINED AT	CT11	7315.	12.33	1394.	367.	177.	14.63		

ROUTED TO	RT13	7220.	12.50	1394.	367.	177.	14.63	15.30	12.50
HYDROGRAPH AT	ST14	2175.	12.17	333.	91.	44.	2.76		
2 COMBINED AT	CT14	8729.	12.33	1679.	445.	215.	17.39		
ROUTED TO	RT15	8371.	12.50	1678.	445.	215.	17.39	16.07	12.50
HYDROGRAPH AT	ST16	1085.	12.17	168.	47.	23.	1.35		
2 COMBINED AT	CT17	8906.	12.50	1819.	486.	234.	18.74		
ROUTED TO	RT18	8762.	12.50	1819.	486.	234.	18.74	16.25	12.50
HYDROGRAPH AT	ST20	194.	12.00	19.	5.	2.	.28		
HYDROGRAPH AT	ST22	671.	12.17	97.	28.	14.	.72		
3 COMBINED AT	CT24	9020.	12.50	1912.	513.	248.	19.74		
ROUTED TO	RT25	8816.	12.67	1912.	513.	248.	19.74	15.95	12.67
HYDROGRAPH AT	ST26	461.	12.00	52.	14.	7.	.59		
2 COMBINED AT	CT30	8841.	12.67	1952.	524.	253.	20.33		

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

EAST TRIBUTARIES AREA
NMIN = 10
50-YEAR

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*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*            FEBRUARY 1981              *
*          REVISED 02 AUG 88            *
*                                       *
*  RUN DATE  12/02/1991  TIME  15:22:43 *
*                                       *
*****************************************
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*****************************************
*                                       *
*    U.S. ARMY CORPS OF ENGINEERS       *
*  THE 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       WICKENBURG ADMS - CONTRACT FCD 89-79
  2           ID       WASHES B(CALAMITY), C, D(MONARCH), E, I, J,
  3           ID       WASHES K, L, O, P, & T(SAN DOMINGO)
  4           ID       SCS TYPE II STORM :100YR - 24 HR: PHOENIX MOUNTAIN S-GRAPH
  5           ID       AERIAL REDUCTION FACTORS PER NWS HYDRO-40
  6           ID       NMIN = 10 min
  7           ID       E2-50 ; 50-YEAR EVENT
              *DIAGRAM
  8           IT      10                    300
  9           IO       5
 10           IN      30
 11           JD    3.84     .01
 12           PC    .000    .005    .011    .016    .022    .028    .035    .041    .048    .056
 13           PC    .068    .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           JD    3.76     3.0
 18           JD    3.69     10.
 19           JD    3.53    20.0

 20           KK     SB5
 21           KM   SUB-BASIN B5
 22           BA    3.17
 23           LG     .15     .34    4.21     .38    5.20
 24           UI    264.   1041.   1798.   2591.   1626.   1266.    976.    690.    556.    375.
 25           UI    291.    212.    158.    123.     85.     48.     48.     48.     48.      0.
 26           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 27           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 28           KK    RB7
 29           KM       ROUTE SB5 THROUGH SB10
 30           RS       1    FLOW      -1
 31           RC   0.040   0.025   0.040 11985.6  0.0284
 32           RX       0       8     108     109     139     140     240     248
 33           RY       6       4       3       0       0       3       4       6

 34           KK    SB10
 35           KM   SUB-BASIN B10
 36           BA    1.11
 37           LG     .15     .30    3.74     .30   10.70
 38           UI    219.    800.   1202.    709.    491.    312.    202.    132.     84.     62.
 39           UI     25.     25.     25.      0.      0.      0.      0.      0.      0.      0.
 40           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 41           KK    CB12
 42           KM       COMBINE RB7 & SB10
 43           HC       2

 44           KK     SC5
 45           KM   SUB-BASIN C5
 46           BA    4.43
 47           LG     .15     .31    3.68     .29    7.00
 48           UI    231.    453.   1069.   1544.   1933.   2542.   1608.   1323.   1136.    964.
 49           UI    794.    617.    542.    452.    346.    285.    253.    187.    177.    117.
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  50          UI    113.    113.     51.     44.     44.     44.     44.     44.     44.      0.
  51          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
  52          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  53          KK     RC7
  54          KM        ROUTE HYDROGRAPH SC5 (RC7) THROUGH SC10
  55          RS       2    FLOW      -1
  56          RC   0.040   0.025   0.040 24024.0  0.0233
  57          RX       0       3       5       6      36      37      39      42
  58          RY      10       3       2       0       0       2       3      10

  59          KK    SC10
  60          KM   SUB-BASIN C10
  61          BA    3.66
  62          LG     .15     .34    4.28     .41    9.40
  63          UI    247.    780.   1540.   2120.   2422.   1504.   1233.    994.    745.    590.
  64          UI    470.    340.    278.    207.    170.    121.    121.     51.     47.     47.
  65          UI     47.     47.     47.      0.      0.      0.      0.      0.      0.      0.
  66          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  67          KK    CC12
  68          KM        COMBINE HYDROGRAPHS RC7 & SC10
  69          HC       2

  70          KK    RC14
  71          KM        ROUTE HYDROGRAPH CC12 THROUGH SC15
  72          RS       3    FLOW      -1
  73          RC   0.040   0.025   0.040 22017.6   0.024
  74          RX       0       8     108     109     139     140     240     248
  75          RY       6       4       3       0       0       3       4       6

  76          KK    SC15
  77          KM   SUB-BASIN C15
  78          BA    2.31
  79          LG     .15     .34    4.19     .38    6.15
  80          UI    160.    524.   1022.   1425.   1486.    945.    770.    615.    451.    367.
  81          UI    285.    201.    170.    123.     94.     78.     61.     31.     31.     31.
  82          UI     31.     31.      0.      0.      0.      0.      0.      0.      0.      0.
  83          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  84          KK    CC17
  85          KM        COMBINE HYDROGRAPHS SC15 & RC14
  86          HC       2

  87          KK    RC19
  88          KM        ROUTE HYDROGRAPH CC17 THROUGH SC20
  89          RS       1    FLOW      -1
  90          RC   0.033   0.025   0.033    5016  0.0199
  91          RX       0       8     108     109     149     150     250     258
  92          RY       6       4       3       0       0       3       4       6
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  93          KK    SC20
  94          KM   SUB-BASIN C20
  95          BA     .43
  96          LG     .15     .32    4.23     .44    9.10
  97          UI    374.    736.    319.    138.     59.     22.      0.      0.      0.      0.
  98          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  99          KK    CC22
 100          KM        COMBINE HYDROGRAPHS RC19 & SC20
 101          HC       2

 102          KK     SD5
 103          KM   SUB-BASIN D5
 104          BA    5.42
 105          LG     .15     .33    4.16     .38    8.10
 106          UI    208.    208.    649.    996.   1330.   1568.   1912.   2406.   1549.   1282.
 107          UI   1153.   1029.    911.    808.    681.    562.    502.    462.    396.    327.
 108          UI    266.    243.    228.    175.    160.    151.    102.    102.    102.    100.
 109          UI     40.     40.     40.     40.     40.     40.     40.     40.     40.     40.
 110          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 111          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 112          KK    SD10
 113          KM   SUB-BASIN D10
 114          BA    3.80
 115          LG     .15     .33    4.02     .35    8.60
 116          UI    162.    216.    558.    889.   1123.   1341.   1833.   1325.   1009.    894.
 117          UI    787.    688.    595.    484.    407.    372.    322.    259.    206.    186.
 118          UI    176.    124.    124.     95.     79.     79.     79.     35.     31.     31.
 119          UI     31.     31.     31.     31.     31.     31.      0.      0.      0.      0.
 120          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 121          KK    CD12
 122          KM        COMBINE HYDROGRAPHS SD5 & SD10
 123          HC       2

 124          KK    RD14
 125          KM        ROUTE HYDROGRAPH CD12 THROGH SD15
 126          RS       1    FLOW      -1
 127          RC   0.040   0.025   0.040 11510.4  0.0209
 128          RX       0       8     108     109     139     140     240     248
 129          RY       6       4       3       0       0       3       4       6

 130          KK    SD15
 131          KM   SUB-BASIN D15
 132          BA     .93
 133          LG     .15     .34    4.24     .43    1.30
 134          UI    172.    634.    994.    598.    422.    270.    181.    119.     76.     51.
 135          UI     28.     20.     20.      0.      0.      0.      0.      0.      0.      0.
 136          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 137          KK    CD17
 138          KM        COMBINE HYDROGRAPHS SD15 & RD14
 139          HC       2

 140          KK    SD20
 141          KM   SUB-BASIN D20
 142          BA     .58
 143          LG     .15     .33    4.16     .38    4.20
 144          UI    107.    394.    619.    373.    264.    168.    113.     74.     47.     32.
 145          UI     18.     12.     12.      0.      0.      0.      0.      0.      0.      0.
 146          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 147          KK    RD22
 148          KM        ROUTE HYDROGRAPH SD20 THROUGH SD15
 149          RS       1    FLOW      -1
 150          RC   0.040   0.025   0.040    2500  0.0283
 151          RX       0       8     108     109     149     150     250     258
 152          RY       6       4       3       0       0       3       4       6

 153          KK    CD24
 154          KM        COMBINE HYDROGRAPHS RD22 & CD17
 155          HC       2

 156          KK      E5
 157          KM   SUB-BASIN E5
 158          BA     .37
 159          LG     .15     .31    3.95     .35   16.70
 160          UI     94.    336.    405.    229.    142.     90.     54.     32.     22.      9.
 161          UI      9.      9.      0.      0.      0.      0.      0.      0.      0.      0.
 162          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 163          KK     E10
 164          KM   SUB-BASIN E10
 165          BA     .94
 166          LG     .15     .30    3.93     .34   10.50
 167          UI     66.    223.    431.    608.    588.    383.    312.    246.    179.    148.
 168          UI    108.     81.     65.     51.     34.     32.     20.     13.     13.     13.
 169          UI     13.     13.      0.      0.      0.      0.      0.      0.      0.      0.
 170          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 171          KK    CE12
 172          KM        COMBINE HYDROGRAPHS FROM E5 & E10
 173          HC       2

 174          KK    RE14
 175          KM        ROUTE HYDROGRAPH CE12 THROUGH E20
 176          RS       1    FLOW      -1
 177          RC   0.040   0.025   0.040    3000  0.0244
 178          RX       0       8     108     109     149     150     250     258
 179          RY       6       4       3       0       0       3       4       6
```

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

 180          KK     E15
 181          KM   SUB-BASIN E15
 182          BA    4.41
 183          LG     .15     .33    4.24     .43    8.20
 184          UI    251.    593.   1294.   1801.   2453.   2294.   1533.   1293.   1089.    886.
 185          UI    677.    582.    473.    354.    295.    248.    193.    154.    123.    123.
 186          UI     65.     48.     48.     48.     48.     48.     48.      0.      0.      0.
 187          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 188          KK    RE17
 189          KM        ROUTE HYDROGRAPH FROM E15 THROUGH E20
 190          RS       2    FLOW      -1
 191          RC   0.040   0.025   0.040 19008.0  0.0244
 192          RX       0       8     108     109     139     140     240     248
 193          RY       6       4       3       0       0       3       4       6

 194          KK    CE19
 195          KM        COMBINE HYDROGRAPHS RE17 & RE14
 196          HC       2

 197          KK    SE20
 198          KM   SUB-BASIN E20
 199          BA    1.11
 200          LG     .15     .32    4.24     .44    7.20
 201          UI     88.    351.    612.    897.    574.    445.    347.    248.    196.    139.
 202          UI    103.     78.     59.     42.     35.     17.     17.     17.     17.      0.
 203          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 204          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 205          KK    CE22
 206          KM        COMBINE HYDROGRAPHS E20 & CE19  (E)
 207          HC       2

 208          KK   NUL
 209          KM   COMBINING WASHES B, C, D, & E TO REDUCE THE NO. OF FREE HYDROGRAPHS
 210          HC   4.

 211          KK     SI5
 212          KM   SUB-BASIN I5
 213          BA     .41
 214          LG     .15     .31    3.58     .27    7.90
 215          UI     68.    257.    425.    267.    191.    124.     87.     54.     38.     24.
 216          UI     18.      8.      8.      8.      0.      0.      0.      0.      0.      0.
 217          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 218          KK    SI10
 219          KM   SUB-BASIN I10
 220          BA    1.61
 221          LG     .15     .31    3.77     .30    3.20
 222          UI    121.    456.    823.   1231.    875.    651.    518.    386.    292.    227.
 223          UI    160.    128.     92.     68.     59.     36.     23.     23.     23.     23.
 224          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 225          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
```

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

 226          KK    CI12
 227          KM       COMBINE SI5 & SI10
 228          HC       2

 229          KK    RI14
 230          KM       ROUTE COMBINED HYDROGRAPHS FROM SI5 & SI10 (SI12) THROUGH SI15
 231          RS       1    FLOW      -1
 232          RC   0.040   0.025   0.040    5016  0.0279
 233          RX       0       8     108     109     139     140     240     248
 234          RY       6       4       3       0       0       3       4       6

 235          KK    SI15
 236          KM   SUB-BASIN I15
 237          BA     .25
 238          LG     .15     .34    3.91     .33    2.20
 239          UI    204.    424.    191.     85.     37.     15.     10.      0.      0.      0.
 240          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 241          KK    CI17
 242          KM       COMBINE RI14 & SI15
 243          HC       2

 244          KK      SJ
 245          KM   SUB-BASIN J
 246          BA     .42
 247          LG     .15     .32    3.74     .30    6.30
 248          UI    109.    389.    458.    259.    160.    100.     60.     36.     24.     11.
 249          UI     11.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 250          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 251          KK     SK5
 252          KM   SUB-BASIN K5
 253          BA     .84
 254          LG     .15     .31    3.78     .30     .00
 255          UI    145.    540.    881.    545.    389.    252.    177.    109.     76.     48.
 256          UI     33.     18.     18.     18.      0.      0.      0.      0.      0.      0.
 257          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 258          KK    SK10
 259          KM   SUB-BASIN K10
 260          BA    1.04
 261          LG     .15     .30    3.92     .24    3.70
 262          UI    106.    405.    689.    863.    520.    402.    291.    212.    154.    107.
 263          UI     80.     58.     44.     28.     17.     17.     17.     17.      0.      0.
 264          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 265          KK    CK12
 266          KM        COMBINE HYDROGRAPHS FROM SK5 & SK10
 267          HC       2
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  268         KK   RK14
  269         KM       ROUTE COMBINED HYDROGRRAPHS SK5 & SK10 (CK12) THROUGH SK15
  270         RS      1    FLOW      -1
  271         RC  0.040   0.025   0.040 13992.0  0.0243
  272         RX      0       8     108     109     149     150     250     258
  273         RY      6       4       3       0       0       3       4       6

  274         KK   SK15
  275         KM  SUB-BASIN K15
  276         BA   1.09
  277         LG    .15     .30    3.51     .26    9.70
  278         UI   117.    445.    757.    897.    542.    417.    295.    219.    151.    111.
  279         UI    78.     55.     47.     22.     18.     18.     18.      0.      0.      0.
  280         UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  281         KK   CK17
  282         KM       COMBINE HYDROGRAPHS FROM SK15 & RK14
  283         HC      2

  284         KK     SL
  285         KM  SUB-BASIN L
  286         BA    .79
  287         LG    .15     .32    3.69     .29    7.05
  288         UI   126.    478.    809.    519.    372.    247.    174.    109.     76.     50.
  289         UI    38.     16.     16.     16.      0.      0.      0.      0.      0.      0.
  290         UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  291         KK   NUL
  292         KM  COMBINING WASHES I, J, K, & L TO REDUCE THE NO. OF FREE HYDROGRAPHS
  293         HC  5.

  294         KK     SO
  295         KM  SUB-BASIN O
  296         BA   2.90
  297         LG    .15     .30    3.55     .26    5.90
  298         UI   166.    393.    856.   1190.   1626.   1500.   1008.    850.    715.    580.
  299         UI   443.    382.    309.    231.    193.    161.    127.     99.     81.     81.
  300         UI    40.     32.     32.     32.     32.     32.     32.      0.      0.      0.
  301         UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  302         KK     SP
  303         KM  SUB-BASIN P
  304         BA    .87
  305         LG    .15     .32    3.76     .30    8.70
  306         UI   148.    554.    909.    566.    405.    262.    185.    114.     80.     51.
  307         UI    36.     18.     18.     18.      0.      0.      0.      0.      0.      0.
  308         UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  309         KK   NUL
  310         KM  COMBINING WASHES O & P TO REDUCE THE NO. OF FREE HYDROGRAPHS
  311         HC  3.
```

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

 312          KK    ST2
 313          KM   SUB-BASIN ST2
 314          BA   4.50
 315          LG    .15     .32    3.82     .31     .50
 316          UI   928.   3373.   4908.   2863.   1947.   1247.    779.    507.    323.    224.
 317          UI   102.    102.    102.      0.      0.      0.      0.      0.      0.      0.
 318          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 319          KK    RT4
 320          KM       SAN DOMINGO WASH WITHIN SUB BASIN ST6
 321          RS      1    FLOW     -1
 322          RC   .045     .03    .045    9200   .0337
 323          RX    442     446     476     480     520     524     554     558
 324          RY     16      12      12      10      10      12      12      16

 325          KK    ST6
 326          KM   SUB-BASIN ST6
 327          BA   3.93
 328          LG    .15     .34    4.12     .37    3.30
 329          UI   920.   3322.   4323.   2465.   1578.   1017.    605.    392.    240.    125.
 330          UI    94.     94.      0.      0.      0.      0.      0.      0.      0.      0.
 331          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 332          KK    CT8
 333          HC      2

 334          KK    RT9
 335          KM       SAN DOMINGO WASH WITHIN SUB BASIN ST10
 336          RS      1    FLOW     -1
 337          RC   .045     .03    .045   17800   .0264
 338          RX    442     446     476     480     520     524     554     558
 339          RY     16      12      12      10      10      12      12      16

 340          KK   ST10
 341          KM   SUB-BASIN ST10
 342          BA   2.70
 343          LG    .15     .32    3.86     .32    9.80
 344          UI   385.   1460.   2579.   1857.   1301.    912.    631.    421.    299.    202.
 345          UI   132.     93.     52.     52.     52.      0.      0.      0.      0.      0.
 346          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 347          KK   ST12
 348          KM   SUB-BASIN ST12
 349          BA   3.50
 350          LG    .15     .33    4.00     .35    7.30
 351          UI   352.   1348.   2294.   2906.   1751.   1355.    986.    715.    528.    361.
 352          UI   272.    198.    146.     99.     57.     57.     57.     57.      0.      0.
 353          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
```

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

 354          KK    CT11
 355          HC       3

 356          KK    RT13
 357          KM        SAN DOMINGO WASH WITHIN SUB BASIN ST16
 358          RS       1    FLOW      -1
 359          RC    .045     .03    .045    4000   .0175
 360          RX     436     446     476     480     520     524     554     564
 361          RY      22      12      12      10      10      12      12      22

 362          KK    ST14
 363          KM   SUB-BASIN ST14
 364          BA    2.76
 365          LG     .15     .30    3.61     .28   10.60
 366          UI    460.   1730.   2865.   1802.   1290.    841.    591.    368.    257.    165.
 367          UI    120.     57.     57.     57.      0.      0.      0.      0.      0.      0.
 368          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 369          KK    CT14
 370          HC       2

 371          KK    RT15
 372          KM        SAN DOMINGO WASH WITHIN SUB BASIN ST16
 373          RS       1    FLOW      -1
 374          RC    .045     .03    .045   10200   .0206
 375          RX     444     454     474     480     520     526     546     556
 376          RY      23      13      13      10      10      13      13      23

 377          KK    ST16
 378          KM   SUB-BASIN ST16
 379          BA    1.35
 380          LG     .15     .29    3.78     .32   15.40
 381          UI    250.    920.   1443.    868.    613.    391.    262.    172.    110.     74.
 382          UI     41.     29.     29.      0.      0.      0.      0.      0.      0.      0.
 383          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 384          KK    CT17
 385          HC       2

 386          KK    RT18
 387          KM        SAN DOMINGO WITHIN WASH WITHIN SUB BASIN ST20
 388          RS       1    FLOW      -1
 389          RC    .045     .03    .045    4600   .0174
 390          RX     434     444     474     480     520     526     556     566
 391          RY      23      13      13      10      10      13      13      23

 392          KK    ST20
 393          KM   SUB-BASIN ST20
 394          BA     .28
 395          LG     .15     .34    3.68     .69    3.70
 396          UI    287.    484.    191.     75.     29.     13.      0.      0.      0.      0.
 397          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 398          KK   ST22
 399          KM   SUB-BASIN ST22
 400          BA    .72
 401          LG    .15     .29    3.82     .33   21.80
 402          UI   216.    774.    753.    431.    253.    149.     90.     53.     27.     19.
 403          UI    19.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 404          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 405          KK   CT24
 406          HC      3

 407          KK   RT25
 408          KM       SAN DOMINGO WASH WITHIN SUB BASIN ST26
 409          RS      1    FLOW      -1
 410          RC   .045     .03    .045    5000    .010
 411          RX    404     414     464     470     530     536     586     596
 412          RY     23      13      13      10      10      13      13      23

 413          KK   ST26
 414          KM   SUB-BASIN ST26
 415          BA    .59
 416          LG    .15     .33    4.10     .50    6.20
 417          UI   376.    953.    497.    241.    115.     58.     22.     22.      0.      0.
 418          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 419          KK   CT30
 420          HC      2
 421          ZZ
```

SCHEMATIC DIAGRAM OF STREAM NETWORK

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

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

 20         SB5
             V
             V
 28        RB7
             .
             .
 34          .        SB10
             .          .
             .          .
 41        CB12............
             .
             .
 44          .         SC5
             .           V
             .           V
 53          .         RC7
             .           .
             .           .
 59          .           .        SC10
             .           .          .
             .           .          .
 67          .        CC12............
             .           V
             .           V
 70          .        RC14
             .           .
             .           .
  6          .           .        SC15
             .           .          .
             .           .          .
 84          .        CC17............
             .           V
             .           V
 87          .        RC19
             .           .
             .           .
 93          .           .        SC20
             .           .          .
             .           .          .
 99          .        CC22............
             .           .
             .           .
102          .           .         SD5
             .           .          .
             .           .          .
112          .           .          .        SD10
             .           .          .          .
             .           .          .          .
121          .           .        CD12............
             .           .          V
             .           .          V
124          .           .        RD14
             .           .          .
             .           .          .
70           .           .          .        SD15
             .           .          .          .
             .           .          .          .
137          .           .        CD17............
             .           .          .
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140          .          .          .        SD20
             .          .          .           V
             .          .          .           V
47           .          .          .        RD22
             .          .          .           .
             .          .          .           .
153          .          .       CD24............
             .          .          .
             .          .          .
156          .          .          .          E5
             .          .          .           .
             .          .          .           .
163          .          .          .           .         E10
             .          .          .           .           .
             .          .          .           .           .
171          .          .          .       CE12............
             .          .          .           V
             .          .          .           V
174          .          .          .       RE14
             .          .          .           .
             .          .          .           .
180          .          .          .           .         E15
             .          .          .           .           V
             .          .          .           .           V
188          .          .          .           .       RE17
             .          .          .           .           .
             .          .          .           .           .
194          .          .          .       CE19............
             .          .          .           .
             .          .          .           .
197          .          .          .           .       SE20
             .          .          .           .           .
             .          .          .           .           .
5            .          .          .       CE22............
             .          .          .           .
             .          .          .           .
208       NUL ...................................
             .
             .
211          .       SI5
             .          .
             .          .
218          .          .       SI10
             .          .          .
             .          .          .
226          .       CI12............
             .          V
             .          V
229          .       RI14
             .          .
             .          .
235          .          .       SI15
             .          .          .
             .          .          .
241          .       CI17............
             .          .
             .          .
244          .          .         SJ
             .          .          .
             .          .          .
1            .          .          .       SK5
             .          .          .         .
             .          .          .         .
258          .          .          .         .       SK10
             .          .          .         .         .
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                .         .         .         .         .
265             .         .         .      CK12.........
                .         .         .         V
                .         .         .         V
268             .         .         .      RK14
                .         .         .         .
                .         .         .         .
274             .         .         .         .      SK15
                .         .         .         .         .
                .         .         .         .         .
281             .         .         .      CK17.........
                .         .         .         .
                .         .         .         .
284             .         .         .         .        SL
                .         .         .         .         .
                .         .         .         .         .
291        NUL  ..........................................
                .
                .
294             .        SO
                .         .
                .         .
302             .         .        SP
                .         .         .
                .         .         .
309        NUL  ......................
                .
                .
312             .       ST2
                .         V
                .         V
319             .       RT4
                .         .
                .         .
 5              .         .       ST6
                .         .         .
                .         .         .
332             .       CT8..........
                .         V
                .         V
334             .       RT9
                .         .
                .         .
340             .         .      ST10
                .         .         .
                .         .         .
347             .         .         .      ST12
                .         .         .         .
                .         .         .         .
354             .      CT11......................
                .         V
                .         V
356             .      RT13
                .         .
                .         .
362             .         .      ST14
                .         .         .
                .         .         .
369             .      CT14..........
                .         V
                .         V
 1              .      RT15
                .         .
                .         .
377             .         .      ST16
                .         .         .
```

```
                .          .          .
384             .       CT17............
                .          V
                .          V
386             .       RT18
                .          .
                .          .
392             .          .       ST20
                .          .          .
                .          .          .
398             .          .          .       ST22
                .          .          .          .
                .          .          .          .
405             .       CT24........................
                .          V
                .          V
407             .       RT25
                .          .
                .          .
413             .          .       ST26
                .          .          .
                .          .          .
419             .       CT30............
```

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

```
****************************************                    ****************************************
*                                      *                    *                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *                    *   U.S. ARMY CORPS OF ENGINEERS       *
*            FEBRUARY 1981             *                    * THE HYDROLOGIC ENGINEERING CENTER    *
*          REVISED 02 AUG 88           *                    *        609 SECOND STREET             *
*                                      *                    *      DAVIS, CALIFORNIA 95616         *
* RUN DATE  12/02/1991  TIME  15:22:43 *                    *         (916) 551-1748               *
*                                      *                    *                                      *
****************************************                    ****************************************
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```
                    WICKENBURG ADMS - CONTRACT FCD 89-79
                    WASHES B(CALAMITY), C, D(MONARCH), E, I, J,
                    WASHES K, L, O, P, & T(SAN DOMINGO)
                    SCS TYPE II STORM :100YR - 24 HR: PHOENIX MOUNTAIN S-GRAPH
                    AERIAL REDUCTION FACTORS PER NWS HYDRO-40
                    NMIN = 10 min
                    E2-50 ; 50-YEAR EVENT

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

   IT        HYDROGRAPH TIME DATA
                 NMIN         10  MINUTES IN COMPUTATION INTERVAL
                IDATE      1    0  STARTING DATE
                ITIME       0000  STARTING TIME
                   NQ        300  NUMBER OF HYDROGRAPH ORDINATES
               NDDATE      3    0  ENDING DATE
               NDTIME       0150  ENDING TIME
               ICENT          19  CENTURY MARK

            COMPUTATION INTERVAL     .17 HOURS
                 TOTAL TIME BASE   49.83 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       3.84  PRECIPITATION DEPTH
                 TRDA        .01  TRANSPOSITION DRAINAGE AREA

12 PI          PRECIPITATION PATTERN
               .00     .00     .00     .00     .00     .00     .00     .00     .00     .00
               .00     .00     .00     .00     .00     .00     .00     .00     .00     .00
               .00     .00     .00     .00     .00     .00     .00     .00     .00     .00
               .00     .00     .00     .00     .00     .00     .00     .00     .00     .00
               .00     .00     .00     .00     .00     .00     .00     .00     .00     .00
               .00     .00     .00     .00     .01     .01     .01     .01     .01     .01
               .01     .01     .01     .01     .01     .01     .02     .02     .02     .13
               .13     .13     .02     .02     .02     .01     .01     .01     .01     .01
               .01     .01     .01     .01     .01     .01     .01     .01     .01     .01
               .00     .00     .00     .00     .00     .00     .00     .00     .00     .00
               .00     .00     .00     .00     .00     .00     .00     .00     .00     .00
               .00     .00     .00     .00     .00     .00     .00     .00     .00     .00
               .00     .00     .00     .00     .00     .00     .00     .00     .00     .00
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                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00

17 JD        INDEX STORM NO. 2
                STRM        3.76  PRECIPITATION DEPTH
                TRDA        3.00  TRANSPOSITION DRAINAGE AREA

 0 PI         PRECIPITATION PATTERN
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .01       .01       .01       .01       .01       .01
                .01       .01       .01       .01       .01       .01       .02       .02       .02       .13
                .13       .13       .02       .02       .02       .01       .01       .01       .01       .01
                .01       .01       .01       .01       .01       .01       .01       .01       .01       .01
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00

18 JD        INDEX STORM NO. 3
                STRM        3.69  PRECIPITATION DEPTH
                TRDA       10.00  TRANSPOSITION DRAINAGE AREA

 0 PI         PRECIPITATION PATTERN
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .01       .01       .01       .01       .01       .01
                .01       .01       .01       .01       .01       .01       .02       .02       .02       .13
                .13       .13       .02       .02       .02       .01       .01       .01       .01       .01
                .01       .01       .01       .01       .01       .01       .01       .01       .01       .01
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00

19 JD        INDEX STORM NO. 4
                STRM        3.53  PRECIPITATION DEPTH
                TRDA       20.00  TRANSPOSITION DRAINAGE AREA

 0 PI         PRECIPITATION PATTERN
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .01       .01       .01       .01       .01       .01
                .01       .01       .01       .01       .01       .01       .02       .02       .02       .13
                .13       .13       .02       .02       .02       .01       .01       .01       .01       .01
                .01       .01       .01       .01       .01       .01       .01       .01       .01       .01
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00
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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	SB5	2062.	12.33	368.	97.	47.	3.17		
ROUTED TO	RB7	1926.	12.50	367.	97.	47.	3.17		
								2.99	12.50
HYDROGRAPH AT	SB10	1058.	12.17	154.	42.	20.	1.11		
2 COMBINED AT	CB12	2713.	12.33	516.	137.	66.	4.28		
HYDROGRAPH AT	SC5	2358.	12.67	583.	155.	75.	4.43		
ROUTED TO	RC7	2208.	12.83	580.	155.	75.	4.43		
								3.34	12.83
HYDROGRAPH AT	SC10	2071.	12.50	439.	120.	58.	3.66		
2 COMBINED AT	CC12	3654.	12.67	998.	270.	130.	8.09		
ROUTED TO	RC14	3059.	13.33	996.	270.	130.	8.09		
								3.91	13.33
HYDROGRAPH AT	SC15	1357.	12.33	273.	72.	35.	2.31		
2 COMBINED AT	CC17	3488.	13.17	1248.	338.	163.	10.40		
ROUTED TO	RC19	3448.	13.33	1248.	337.	163.	10.40		
								3.82	13.33
HYDROGRAPH AT	SC20	481.	12.00	51.	14.	7.	.43		
2 COMBINED AT	CC22	3448.	13.33	1293.	350.	169.	10.83		
HYDROGRAPH AT	SD5	2073.	13.00	645.	176.	85.	5.42		
HYDROGRAPH AT	SD10	1652.	12.83	476.	129.	62.	3.80		
2 COMBINED AT	CD12	3656.	12.83	1104.	301.	145.	9.22		
ROUTED TO	RD14	3164.	13.17	1102.	301.	145.	9.22		

								4.06	13.17
HYDROGRAPH AT	SD15	713.	12.17	97.	25.	12.	.93		
2 COMBINED AT	CD17	3231.	13.17	1190.	323.	156.	10.15		
HYDROGRAPH AT	SD20	480.	12.17	67.	18.	8.	.58		
ROUTED TO	RD22	469.	12.17	67.	18.	8.	.58		
								1.03	12.17
2 COMBINED AT	CD24	3280.	13.17	1247.	338.	163.	10.73		
HYDROGRAPH AT	E5	372.	12.17	53.	15.	7.	.37		
HYDROGRAPH AT	E10	617.	12.33	126.	34.	17.	.94		
2 COMBINED AT	CE12	917.	12.33	179.	49.	24.	1.31		
ROUTED TO	RE14	915.	12.33	179.	49.	24.	1.31		
								1.65	12.33
HYDROGRAPH AT	E15	2182.	12.50	511.	138.	67.	4.41		
ROUTED TO	RE17	1931.	12.83	510.	138.	67.	4.41		
								3.19	12.83
2 COMBINED AT	CE19	2496.	12.67	680.	186.	90.	5.72		
HYDROGRAPH AT	SE20	697.	12.33	128.	34.	17.	1.11		
2 COMBINED AT	CE22	3001.	12.50	802.	219.	106.	6.83		
4 COMBINED AT	NUL	9865.	12.67	3417.	929.	449.	32.67		
HYDROGRAPH AT	SI5	378.	12.17	57.	15.	7.	.41		
HYDROGRAPH AT	SI10	1107.	12.33	202.	52.	25.	1.61		
2 COMBINED AT	CI12	1458.	12.33	258.	67.	32.	2.02		
ROUTED TO	RI14	1443.	12.33	258.	67.	32.	2.02		
								2.53	12.33
HYDROGRAPH AT	SI15	297.	12.00	30.	8.	4.	.25		

2 COMBINED AT								
+	CI17	1556.	12.33	287.	74.	36.	2.27	
HYDROGRAPH AT								
	SJ	424.	12.17	55.	14.	7.	.42	
HYDROGRAPH AT								
+	SK5	735.	12.17	101.	25.	12.	.84	
HYDROGRAPH AT								
+	SK10	832.	12.33	143.	37.	18.	1.04	
2 COMBINED AT								
+	CK12	1509.	12.17	243.	62.	30.	1.88	
ROUTED TO								
+	RK14	1314.	12.50	242.	62.	30.	1.88	
+								2.06 12.50
HYDROGRAPH AT								
+	SK15	896.	12.33	158.	43.	21.	1.09	
2 COMBINED AT								
+	CK17	2153.	12.33	398.	104.	50.	2.97	
HYDROGRAPH AT								
+	SL	699.	12.17	105.	28.	13.	.79	
5 COMBINED AT								
+	NUL	13167.	12.50	4067.	1099.	531.	39.12	
HYDROGRAPH AT								
.	SO	1735.	12.50	400.	105.	51.	2.90	
HYDROGRAPH AT								
+	SP	781.	12.17	117.	31.	15.	.87	
3 COMBINED AT								
+	NUL	14936.	12.50	4458.	1203.	581.	42.89	
HYDROGRAPH AT								
+	ST2	4052.	12.17	530.	133.	64.	4.50	
ROUTED TO								
+	RT4	3671.	12.33	529.	133.	64.	4.50	
+								13.25 12.33
HYDROGRAPH AT								
+	ST6	3453.	12.17	446.	115.	56.	3.93	
2 COMBINED AT								
+	CT8	6489.	12.17	960.	244.	118.	8.43	
ROUTED TO								
+	RT9	5238.	12.50	957.	244.	118.	8.43	
+								14.08 12.50
HYDROGRAPH AT								
+	ST10	2225.	12.17	359.	98.	47.	2.70	
HYDROGRAPH AT								
	ST12	2509.	12.33	435.	116.	56.	3.50	
3 COMBINED AT								
+	CT11	8978.	12.33	1664.	436.	210.	14.63	

ROUTED TO	RT13	8803.	12.50	1664.	436.	210.	14.63	15.99	12.50
HYDROGRAPH AT	ST14	2533.	12.17	391.	106.	51.	2.76		
2 COMBINED AT	CT14	10646.	12.33	1995.	527.	254.	17.39		
ROUTED TO	RT15	10258.	12.50	1994.	527.	254.	17.39	16.87	12.50
HYDROGRAPH AT	ST16	1267.	12.17	195.	55.	26.	1.35		
2 COMBINED AT	CT17	10878.	12.50	2158.	574.	277.	18.74		
ROUTED TO	RT18	10795.	12.50	2157.	574.	277.	18.74	17.06	12.50
HYDROGRAPH AT	ST20	252.	12.00	25.	6.	3.	.28		
HYDROGRAPH AT	ST22	780.	12.17	112.	33.	16.	.72		
3 COMBINED AT	CT24	11093.	12.50	2268.	606.	293.	19.74		
ROUTED TO	RT25	10750.	12.67	2268.	606.	293.	19.74	16.67	12.67
HYDROGRAPH AT	ST26	569.	12.00	64.	17.	8.	.59		
2 COMBINED AT	CT30	10780.	12.67	2317.	620.	299.	20.33		

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

EAST TRIBUTARIES AREA
NMIN = 10
100-YEAR

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****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*            FEBRUARY 1981             *
*          REVISED 02 AUG 88           *
*                                      *
*  RUN DATE  12/02/1991  TIME  15:26:09 *
*                                      *
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*                                      *
*    U.S. ARMY CORPS OF ENGINEERS      *
*  THE 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       WICKENBURG ADMS - CONTRACT FCD 89-79
  2           ID       WASHES B(CALAMITY), C, D(MONARCH), E, I, J,
  3           ID       WASHES K, L, O, P, & T(SAN DOMINGO)
  4           ID       SCS TYPE II STORM :100YR - 24 HR: PHOENIX MOUNTAIN S-GRAPH
  5           ID       AERIAL REDUCTION FACTORS PER NWS HYDRO-40
  6           ID       NMIN = 10 min
  7           ID       E2-100 ; 100-YEAR EVENT
              *DIAGRAM
  8           IT      10                    300
  9           IO       5
 10           IN      30
 11           JD    4.25     .01
 12           PC    .000    .005    .011    .016    .022    .028    .035    .041    .048    .056
 13           PC    .068    .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           JD    4.17     3.0
 18           JD    4.08     10.
 19           JD    3.91    20.0

 20           KK     SB5
 21           KM   SUB-BASIN B5
 22           BA    3.17
 23           LG     .15     .34    4.21     .38    5.20
 24           UI    264.   1041.   1798.   2591.   1626.   1266.    976.    690.    556.    375.
 25           UI    291.    212.    158.    123.     85.     48.     48.     48.     48.      0.
 26           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 27           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 28           KK    RB7
 29           KM       ROUTE SB5 THROUGH SB10
 30           RS       1    FLOW      -1
 31           RC   0.040   0.025   0.040 11985.6  0.0284
 32           RX       0       8     108     109     139     140     240     248
 33           RY       6       4       3       0       0       3       4       6

 34           KK    SB10
 35           KM   SUB-BASIN B10
 36           BA    1.11
 37           LG     .15     .30    3.74     .30   10.70
 38           UI    219.    800.   1202.    709.    491.    312.    202.    132.     84.     62.
 39           UI     25.     25.     25.      0.      0.      0.      0.      0.      0.      0.
 40           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 41           KK    CB12
 42           KM       COMBINE RB7 & SB10
 43           HC       2

 44           KK     SC5
 45           KM   SUB-BASIN C5
 46           BA    4.43
 47           LG     .15     .31    3.68     .29    7.00
 48           UI    231.    453.   1069.   1544.   1933.   2542.   1608.   1323.   1136.    964.
 49           UI    794.    617.    542.    452.    346.    285.    253.    187.    177.    117.
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  50          UI    113.    113.     51.     44.     44.     44.     44.     44.     44.      0.
  51          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
  52          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  53          KK     RC7
  54          KM        ROUTE HYDROGRAPH SC5 (RC7) THROUGH SC10
  55          RS       2    FLOW      -1
  56          RC   0.040   0.025   0.040 24024.0  0.0233
  57          RX       0       3       5       6      36      37      39      42
  58          RY      10       3       2       0       0       2       3      10

  59          KK    SC10
  60          KM   SUB-BASIN C10
  61          BA    3.66
  62          LG     .15     .34    4.28     .41    9.40
  63          UI    247.    780.   1540.   2120.   2422.   1504.   1233.    994.    745.    590.
  64          UI    470.    340.    278.    207.    170.    121.    121.     51.     47.     47.
  65          UI     47.     47.     47.      0.      0.      0.      0.      0.      0.      0.
  66          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  67          KK    CC12
  68          KM        COMBINE HYDROGRAPHS RC7 & SC10
  69          HC       2

  70          KK    RC14
  71          KM        ROUTE HYDROGRAPH CC12 THROUGH SC15
  72          RS       3    FLOW      -1
  73          RC   0.040   0.025   0.040 22017.6   0.024
  74          RX       0       8     108     109     139     140     240     248
  75          RY       6       4       3       0       0       3       4       6

  76          KK    SC15
  77          KM   SUB-BASIN C15
  78          BA    2.31
  79          LG     .15     .34    4.19     .38    6.15
  80          UI    160.    524.   1022.   1425.   1486.    945.    770.    615.    451.    367.
  81          UI    285.    201.    170.    123.     94.     78.     61.     31.     31.     31.
  82          UI     31.     31.      0.      0.      0.      0.      0.      0.      0.      0.
  83          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  84          KK    CC17
  85          KM        COMBINE HYDROGRAPHS SC15 & RC14
  86          HC       2

  87          KK    RC19
  88          KM        ROUTE HYDROGRAPH CC17 THROUGH SC20
  89          RS       1    FLOW      -1
  90          RC   0.033   0.025   0.033    5016  0.0199
  91          RX       0       8     108     109     149     150     250     258
  92          RY       6       4       3       0       0       3       4       6
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 93           KK   SC20
 94           KM   SUB-BASIN C20
 95           BA    .43
 96           LG    .15     .32    4.23     .44    9.10
 97           UI   374.    736.    319.    138.     59.     22.      0.      0.      0.      0.
 98           UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 99           KK   CC22
100           KM       COMBINE HYDROGRAPHS RC19 & SC20
101           HC      2

102           KK    SD5
103           KM   SUB-BASIN D5
104           BA   5.42
105           LG    .15     .33    4.16     .38    8.10
106           UI   208.    208.    649.    996.   1330.   1568.   1912.   2406.   1549.   1282.
107           UI  1153.   1029.    911.    808.    681.    562.    502.    462.    396.    327.
108           UI   266.    243.    228.    175.    160.    151.    102.    102.    102.    100.
109           UI    40.     40.     40.     40.     40.     40.     40.     40.     40.     40.
110           UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
111           UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

112           KK   SD10
113           KM   SUB-BASIN D10
114           BA   3.80
115           LG    .15     .33    4.02     .35    8.60
116           UI   162.    216.    558.    889.   1123.   1341.   1833.   1325.   1009.    894.
117           UI   787.    688.    595.    484.    407.    372.    322.    259.    206.    186.
118           UI   176.    124.    124.     95.     79.     79.     79.     35.     31.     31.
119           UI    31.     31.     31.     31.     31.     31.      0.      0.      0.      0.
120           UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

121           KK   CD12
122           KM       COMBINE HYDROGRAPHS SD5 & SD10
123           HC      2

124           KK   RD14
125           KM       ROUTE HYDROGRAPH CD12 THROGH SD15
126           RS      1    FLOW     -1
127           RC  0.040   0.025   0.040 11510.4  0.0209
128           RX      0       8     108     109     139     140     240     248
129           RY      6       4       3       0       0       3       4       6

130           KK   SD15
131           KM   SUB-BASIN D15
132           BA    .93
133           LG    .15     .34    4.24     .43    1.30
134           UI   172.    634.    994.    598.    422.    270.    181.    119.     76.     51.
135           UI    28.     20.     20.      0.      0.      0.      0.      0.      0.      0.
136           UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 137          KK    CD17
 138          KM        COMBINE HYDROGRAPHS SD15 & RD14
 139          HC       2

 140          KK    SD20
 141          KM   SUB-BASIN D20
 142          BA     .58
 143          LG     .15     .33    4.16     .38    4.20
 144          UI    107.    394.    619.    373.    264.    168.    113.     74.     47.     32.
 145          UI     18.     12.     12.      0.      0.      0.      0.      0.      0.      0.
 146          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 147          KK    RD22
 148          KM        ROUTE HYDROGRAPH SD20 THROUGH SD15
 149          RS       1    FLOW     -1
 150          RC   0.040   0.025   0.040    2500  0.0283
 151          RX       0       8     108     109     149     150     250     258
 152          RY       6       4       3       0       0       3       4       6

 153          KK    CD24
 154          KM        COMBINE HYDROGRAPHS RD22 & CD17
 155          HC       2

 156          KK     E5
 157          KM   SUB-BASIN E5
 158          BA     .37
 159          LG     .15     .31    3.95     .35   16.70
 160          UI     94.    336.    405.    229.    142.     90.     54.     32.     22.      9.
 161          UI      9.      9.      0.      0.      0.      0.      0.      0.      0.      0.
 162          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 163          KK    E10
 164          KM   SUB-BASIN E10
 165          BA     .94
 166          LG     .15     .30    3.93     .34   10.50
 167          UI     66.    223.    431.    608.    588.    383.    312.    246.    179.    148.
 168          UI    108.     81.     65.     51.     34.     32.     20.     13.     13.     13.
 169          UI     13.     13.      0.      0.      0.      0.      0.      0.      0.      0.
 170          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 171          KK    CE12
 172          KM        COMBINE HYDROGRAPHS FROM E5 & E10
 173          HC       2

 174          KK    RE14
 175          KM        ROUTE HYDROGRAPH CE12 THROUGH E20
 176          RS       1    FLOW     -1
 177          RC   0.040   0.025   0.040    3000  0.0244
 178          RX       0       8     108     109     149     150     250     258
 179          RY       6       4       3       0       0       3       4       6
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 180        KK     E15
 181        KM   SUB-BASIN E15
 182        BA    4.41
 183        LG     .15     .33    4.24     .43    8.20
 184        UI    251.    593.   1294.   1801.   2453.   2294.   1533.   1293.   1089.    886.
 185        UI    677.    582.    473.    354.    295.    248.    193.    154.    123.    123.
 186        UI     65.     48.     48.     48.     48.     48.     48.      0.      0.      0.
 187        UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 188        KK    RE17
 189        KM        ROUTE HYDROGRAPH FROM E15 THROUGH E20
 190        RS       2    FLOW      -1
 191        RC   0.040   0.025   0.040 19008.0  0.0244
 192        RX       0       8     108     109     139     140     240     248
 193        RY       6       4       3       0       0       3       4       6

 194        KK    CE19
 195        KM        COMBINE HYDROGRAPHS RE17 & RE14
 196        HC       2

 197        KK    SE20
 198        KM   SUB-BASIN E20
 199        BA    1.11
 200        LG     .15     .32    4.24     .44    7.20
 201        UI     88.    351.    612.    897.    574.    445.    347.    248.    196.    139.
 202        UI    103.     78.     59.     42.     35.     17.     17.     17.     17.      0.
 203        UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 204        UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 205        KK    CE22
 206        KM        COMBINE HYDROGRAPHS E20 & CE19  (E)
 207        HC       2

 208        KK   NUL
 209        KM   COMBINING WASHES B, C, D, & E TO REDUCE THE NO. OF FREE HYDROGRAPHS
 210        HC   4.

 211        KK     SI5
 212        KM   SUB-BASIN I5
 213        BA     .41
 214        LG     .15     .31    3.58     .27    7.90
 215        UI     68.    257.    425.    267.    191.    124.     87.     54.     38.     24.
 216        UI     18.      8.      8.      8.      0.      0.      0.      0.      0.      0.
 217        UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 218        KK    SI10
 219        KM   SUB-BASIN I10
 220        BA    1.61
 221        LG     .15     .31    3.77     .30    3.20
 222        UI    121.    456.    823.   1231.    875.    651.    518.    386.    292.    227.
 223        UI    160.    128.     92.     68.     59.     36.     23.     23.     23.     23.
 224        UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 225        UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 226          KK    CI12
 227          KM       COMBINE SI5 & SI10
 228          HC       2

 229          KK    RI14
 230          KM       ROUTE COMBINED HYDROGRAPHS FROM SI5 & SI10 (SI12) THROUGH SI15
 231          RS       1    FLOW      -1
 232          RC   0.040   0.025   0.040    5016  0.0279
 233          RX       0       8     108     109     139     140     240     248
 234          RY       6       4       3       0       0       3       4       6

 235          KK    SI15
 236          KM   SUB-BASIN I15
 237          BA     .25
 238          LG     .15     .34    3.91     .33    2.20
 239          UI    204.    424.    191.     85.     37.     15.     10.      0.      0.      0.
 240          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 241          KK    CI17
 242          KM       COMBINE RI14 & SI15
 243          HC       2

 244          KK      SJ
 245          KM   SUB-BASIN J
 246          BA     .42
 247          LG     .15     .32    3.74     .30    6.30
 248          UI    109.    389.    458.    259.    160.    100.     60.     36.     24.     11.
 249          UI     11.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 250          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 251          KK     SK5
 252          KM   SUB-BASIN K5
 253          BA     .84
 254          LG     .15     .31    3.78     .30     .00
 255          UI    145.    540.    881.    545.    389.    252.    177.    109.     76.     48.
 256          UI     33.     18.     18.     18.      0.      0.      0.      0.      0.      0.
 257          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 258          KK    SK10
 259          KM   SUB-BASIN K10
 260          BA    1.04
 261          LG     .15     .30    3.92     .24    3.70
 262          UI    106.    405.    689.    863.    520.    402.    291.    212.    154.    107.
 263          UI     80.     58.     44.     28.     17.     17.     17.     17.      0.      0.
 264          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 265          KK    CK12
 266          KM        COMBINE HYDROGRAPHS FROM SK5 & SK10
 267          HC       2
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 268          KK   RK14
 269          KM       ROUTE COMBINED HYDROGRRAPHS SK5 & SK10 (CK12) THROUGH SK15
 270          RS      1    FLOW      -1
 271          RC  0.040   0.025   0.040 13992.0  0.0243
 272          RX      0       8     108     109     149     150     250     258
 273          RY      6       4       3       0       0       3       4       6

 274          KK   SK15
 275          KM  SUB-BASIN K15
 276          BA   1.09
 277          LG    .15     .30    3.51     .26    9.70
 278          UI   117.    445.    757.    897.    542.    417.    295.    219.    151.    111.
 279          UI    78.     55.     47.     22.     18.     18.     18.      0.      0.      0.
 280          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 281          KK   CK17
 282          KM       COMBINE HYDROGRAPHS FROM SK15 & RK14
 283          HC      2

 284          KK     SL
 285          KM  SUB-BASIN L
 286          BA    .79
 287          LG    .15     .32    3.69     .29    7.05
 288          UI   126.    478.    809.    519.    372.    247.    174.    109.     76.     50.
 289          UI    38.     16.     16.     16.      0.      0.      0.      0.      0.      0.
 290          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 291          KK  NUL
 292          KM  COMBINING WASHES I, J, K, & L TO REDUCE THE NO. OF FREE HYDROGRAPHS
 293          HC  5.

 294          KK     SO
 295          KM  SUB-BASIN O
 296          BA   2.90
 297          LG    .15     .30    3.55     .26    5.90
 298          UI   166.    393.    856.   1190.   1626.   1500.   1008.    850.    715.    580.
 299          UI   443.    382.    309.    231.    193.    161.    127.     99.     81.     81.
 300          UI    40.     32.     32.     32.     32.     32.     32.      0.      0.      0.
 301          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 302          KK     SP
 303          KM  SUB-BASIN P
 304          BA    .87
 305          LG    .15     .32    3.76     .30    8.70
 306          UI   148.    554.    909.    566.    405.    262.    185.    114.     80.     51.
 307          UI    36.     18.     18.     18.      0.      0.      0.      0.      0.      0.
 308          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 309          KK  NUL
 310          KM  COMBINING WASHES O & P TO REDUCE THE NO. OF FREE HYDROGRAPHS
 311          HC  3.
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 312          KK     ST2
 313          KM   SUB-BASIN ST2
 314          BA    4.50
 315          LG     .15     .32    3.82     .31     .50
 316          UI    928.   3373.   4908.   2863.   1947.   1247.    779.    507.    323.    224.
 317          UI    102.    102.    102.      0.      0.      0.      0.      0.      0.      0.
 318          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 319          KK     RT4
 320          KM        SAN DOMINGO WASH WITHIN SUB BASIN ST6
 321          RS       1    FLOW      -1
 322          RC    .045     .03    .045    9200   .0337
 323          RX    442     446     476     480     520     524     554     558
 324          RY     16      12      12      10      10      12      12      16

 325          KK     ST6
 326          KM   SUB-BASIN ST6
 327          BA    3.93
 328          LG     .15     .34    4.12     .37    3.30
 329          UI    920.   3322.   4323.   2465.   1578.   1017.    605.    392.    240.    125.
 330          UI     94.     94.      0.      0.      0.      0.      0.      0.      0.      0.
 331          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 332          KK     CT8
 333          HC       2

 334          KK     RT9
 335          KM        SAN DOMINGO WASH WITHIN SUB BASIN ST10
 336          RS       1    FLOW      -1
 337          RC    .045     .03    .045   17800   .0264
 338          RX    442     446     476     480     520     524     554     558
 339          RY     16      12      12      10      10      12      12      16

 340          KK    ST10
 341          KM   SUB-BASIN ST10
 342          BA    2.70
 343          LG     .15     .32    3.86     .32    9.80
 344          UI    385.   1460.   2579.   1857.   1301.    912.    631.    421.    299.    202.
 345          UI    132.     93.     52.     52.     52.      0.      0.      0.      0.      0.
 346          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 347          KK    ST12
 348          KM   SUB-BASIN ST12
 349          BA    3.50
 350          LG     .15     .33    4.00     .35    7.30
 351          UI    352.   1348.   2294.   2906.   1751.   1355.    986.    715.    528.    361.
 352          UI    272.    198.    146.     99.     57.     57.     57.     57.      0.      0.
 353          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 354          KK    CT11
 355          HC       3

 356          KK    RT13
 357          KM        SAN DOMINGO WASH WITHIN SUB BASIN ST16
 358          RS       1    FLOW      -1
 359          RC    .045     .03    .045    4000   .0175
 360          RX     436     446     476     480     520     524     554     564
 361          RY      22      12      12      10      10      12      12      22

 362          KK    ST14
 363          KM   SUB-BASIN ST14
 364          BA    2.76
 365          LG     .15     .30    3.61     .28   10.60
 366          UI    460.   1730.   2865.   1802.   1290.    841.    591.    368.    257.    165.
 367          UI    120.     57.     57.     57.      0.      0.      0.      0.      0.      0.
 368          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 369          KK    CT14
 370          HC       2

 371          KK    RT15
 372          KM        SAN DOMINGO WASH WITHIN SUB BASIN ST16
 373          RS       1    FLOW      -1
 374          RC    .045     .03    .045   10200   .0206
 375          RX     444     454     474     480     520     526     546     556
 376          RY      23      13      13      10      10      13      13      23

 377          KK    ST16
 378          KM   SUB-BASIN ST16
 379          BA    1.35
 380          LG     .15     .29    3.78     .32   15.40
 381          UI    250.    920.   1443.    868.    613.    391.    262.    172.    110.     74.
 382          UI     41.     29.     29.      0.      0.      0.      0.      0.      0.      0.
 383          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 384          KK    CT17
 385          HC       2

 386          KK    RT18
 387          KM        SAN DOMINGO WITHIN WASH WITHIN SUB BASIN ST20
 388          RS       1    FLOW      -1
 389          RC    .045     .03    .045    4600   .0174
 390          RX     434     444     474     480     520     526     556     566
 391          RY      23      13      13      10      10      13      13      23

 392          KK    ST20
 393          KM   SUB-BASIN ST20
 394          BA     .28
 395          LG     .15     .34    3.68     .69    3.70
 396          UI    287.    484.    191.     75.     29.     13.      0.      0.      0.      0.
 397          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
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LINE          IO.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 398          KK    ST22
 399          KM   SUB-BASIN ST22
 400          BA     .72
 401          LG     .15     .29    3.82     .33   21.80
 402          UI    216.    774.    753.    431.    253.    149.     90.     53.     27.     19.
 403          UI     19.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 404          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 405          KK    CT24
 406          HC       3

 407          KK    RT25
 408          KM        SAN DOMINGO WASH WITHIN SUB BASIN ST26
 409          RS       1    FLOW      -1
 410          RC    .045     .03    .045    5000    .010
 411          RX     404     414     464     470     530     536     586     596
 412          RY      23      13      13      10      10      13      13      23

 413          KK    ST26
 414          KM   SUB-BASIN ST26
 415          BA     .59
 416          LG     .15     .33    4.10     .50    6.20
 417          UI    376.    953.    497.    241.    115.     58.     22.     22.      0.      0.
 418          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 419          KK    CT30
 420          HC       2
 421          ZZ
```

SCHEMATIC DIAGRAM OF STREAM NETWORK

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

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

20         SB5
            V
            V
28        RB7
            .
            .
34          .        SB10
            .          .
            .          .
41        CB12............
            .
            .
44          .         SC5
            .           V
            .           V
53          .         RC7
            .           .
            .           .
59          .           .        SC10
            .           .          .
            .           .          .
67          .        CC12............
            .           V
            .           V
70          .        RC14
            .           .
            .           .
76          .           .        SC15
            .           .          .
            .           .          .
84          .        CC17............
            .           V
            .           V
87          .        RC19
            .           .
            .           .
93          .           .        SC20
            .           .          .
            .           .          .
99          .        CC22............
            .           .
            .           .
102         .           .         SD5
            .           .          .
            .           .          .
112         .           .          .        SD10
            .           .          .          .
            .           .          .          .
121         .           .        CD12............
            .           .          V
            .           .          V
124         .           .        RD14
            .           .          .
            .           .          .
1           .           .          .        SD15
            .           .          .          .
            .           .          .          .
137         .           .        CD17............
            .           .          .
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140                                  SD20
                                        V
                                        V
 7                                   RD22
                                        .
                                        .
153                            CD24............
                                        .
                                        .
156                                     E5
                                        .
                                        .
163                                     .          E10
                                        .            .
                                        .            .
171                                  CE12............
                                        V
                                        V
174                                  RE14
                                        .
                                        .
180                                     .          E15
                                        .            V
                                        .            V
188                                     .         RE17
                                        .            .
                                        .            .
194                                  CE19............
                                        .
                                        .
197                                     .         SE20
                                        .            .
                                        .            .
205                                  CE22............
                                        .
                                        .
208   NUL  ..................................
                                        .
                                        .
211                 SI5
                     .
                     .
218                  .          SI10
                     .            .
                     .            .
226                 CI12............
                     V
                     V
229                 RI14
                     .
                     .
235                  .          SI15
                     .            .
                     .            .
241                 CI17............
                     .
                     .
244                  .           SJ
                     .            .
                     .            .
                     .            .          SK5
                     .            .            .
                     .            .            .
258                  .            .            .         SK10
                     .            .            .           .
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                .         .         .         .         .
265             .         .         .       CK12.........
                .         .         .         V
                .         .         .         V
                .         .         .       RK14
                .         .         .         .
                .         .         .         .
274             .         .         .         .       SK15
                .         .         .         .         .
                .         .         .         .         .
281             .         .         .       CK17.........
                .         .         .         .
                .         .         .         .
284             .         .         .         .         SL
                .         .         .         .         .
                .         .         .         .         .
291     NUL     ..........................................
                .
                .
294             .        SO
                .         .
                .         .
302             .         .        SP
                .         .         .
                .         .         .
309     NUL     ......................
                .
                .
312             .       ST2
                .         V
                .         V
319             .       RT4
                .         .
                .         .
325             .         .       ST6
                .         .         .
                .         .         .
332             .       CT8..........
                .         V
                .         V
334             .       RT9
                .         .
                .         .
340             .         .      ST10
                .         .         .
                .         .         .
347             .         .         .      ST12
                .         .         .         .
                .         .         .         .
354             .      CT11......................
                .         V
                .         V
356             .      RT13
                .         .
                .         .
362             .         .      ST14
                .         .         .
                .         .         .
369             .      CT14..........
                .         V
                .         V
                .      RT15
                .         .
                .         .
377             .         .      ST16
                .         .         .
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                .          .          .
384             .       CT17...........
                .          V
                .          V
386             .       RT18
                .          .
                .          .
392             .          .       ST20
                .          .          .
                .          .          .
398             .          .          .       ST22
                .          .          .          .
                .          .          .          .
405             .       CT24........................
                .          V
                .          V
407             .       RT25
                .          .
                .          .
413             .          .       ST26
                .          .          .
                .          .          .
419             .       CT30...........
```

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

```
****************************************                    ****************************************
*                                      *                    *                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *                    *   U.S. ARMY CORPS OF ENGINEERS       *
*            FEBRUARY 1981             *                    *  THE HYDROLOGIC ENGINEERING CENTER   *
*          REVISED 02 AUG 88           *                    *          609 SECOND STREET           *
*                                      *                    *       DAVIS, CALIFORNIA 95616        *
*  RUN DATE  12/02/1991  TIME  15:26:09 *                    *          (916) 551-1748              *
*                                      *                    *                                      *
****************************************                    ****************************************
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                    WICKENBURG ADMS - CONTRACT FCD 89-79
                    WASHES B(CALAMITY), C, D(MONARCH), E, I, J,
                    WASHES K, L, O, P, & T(SAN DOMINGO)
                    SCS TYPE II STORM :100YR - 24 HR: PHOENIX MOUNTAIN S-GRAPH
                    AERIAL REDUCTION FACTORS PER NWS HYDRO-40
                    NMIN = 10 min
                    E2-100 ; 100-YEAR EVENT

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

   IT        HYDROGRAPH TIME DATA
                 NMIN         10  MINUTES IN COMPUTATION INTERVAL
                IDATE     1    0  STARTING DATE
                ITIME       0000  STARTING TIME
                   NQ        300  NUMBER OF HYDROGRAPH ORDINATES
               NDDATE     3    0  ENDING DATE
               NDTIME       0150  ENDING TIME
               ICENT          19  CENTURY MARK

            COMPUTATION INTERVAL     .17 HOURS
                 TOTAL TIME BASE   49.83 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       4.25  PRECIPITATION DEPTH
                TRDA        .01  TRANSPOSITION DRAINAGE AREA

12 PI          PRECIPITATION PATTERN
               .00      .00      .00      .00      .00      .00      .00      .00      .00      .00
               .00      .00      .00      .00      .00      .00      .00      .00      .00      .00
               .00      .00      .00      .00      .00      .00      .00      .00      .00      .00
               .00      .00      .00      .00      .00      .00      .00      .00      .00      .00
               .00      .00      .00      .00      .00      .00      .00      .00      .00      .00
               .00      .00      .00      .00      .01      .01      .01      .01      .01      .01
               .01      .01      .01      .01      .01      .01      .02      .02      .02      .13
               .13      .13      .02      .02      .02      .01      .01      .01      .01      .01
               .01      .01      .01      .01      .01      .01      .01      .01      .01      .01
               .00      .00      .00      .00      .00      .00      .00      .00      .00      .00
               .00      .00      .00      .00      .00      .00      .00      .00      .00      .00
               .00      .00      .00      .00      .00      .00      .00      .00      .00      .00
               .00      .00      .00      .00      .00      .00      .00      .00      .00      .00
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                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00

17 JD        INDEX STORM NO. 2
                STRM        4.17  PRECIPITATION DEPTH
                TRDA        3.00  TRANSPOSITION DRAINAGE AREA

 0 PI         PRECIPITATION PATTERN
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .01       .01       .01       .01       .01       .01
                .01       .01       .01       .01       .01       .01       .02       .02       .02       .13
                .13       .13       .02       .02       .02       .01       .01       .01       .01       .01
                .01       .01       .01       .01       .01       .01       .01       .01       .01       .01
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00

18 JD        INDEX STORM NO. 3
                STRM        4.08  PRECIPITATION DEPTH
                TRDA       10.00  TRANSPOSITION DRAINAGE AREA

 0 PI         PRECIPITATION PATTERN
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .01       .01       .01       .01       .01       .01
                .01       .01       .01       .01       .01       .01       .02       .02       .02       .13
                .13       .13       .02       .02       .02       .01       .01       .01       .01       .01
                .01       .01       .01       .01       .01       .01       .01       .01       .01       .01
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00

19 JD        INDEX STORM NO. 4
                STRM        3.91  PRECIPITATION DEPTH
                TRDA       20.00  TRANSPOSITION DRAINAGE AREA

 0 PI         PRECIPITATION PATTERN
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .01       .01       .01       .01       .01       .01
                .01       .01       .01       .01       .01       .01       .02       .02       .02       .13
                .13       .13       .02       .02       .02       .01       .01       .01       .01       .01
                .01       .01       .01       .01       .01       .01       .01       .01       .01       .01
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00
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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	SB5	2415.	12.33	430.	113.	54.	3.17		
ROUTED TO	RB7	2171.	12.50	429.	113.	54.	3.17	3.23	12.50
HYDROGRAPH AT	SB10	1214.	12.17	179.	49.	23.	1.11		
2 COMBINED AT	CB12	3098.	12.33	602.	160.	77.	4.28		
HYDROGRAPH AT	SC5	2732.	12.67	682.	181.	87.	4.43		
ROUTED TO	RC7	2583.	12.83	678.	180.	87.	4.43	3.66	12.83
HYDROGRAPH AT	SC10	2427.	12.50	512.	139.	67.	3.66		
2 COMBINED AT	CC12	4290.	12.67	1164.	314.	152.	8.09		
ROUTED TO	RC14	3597.	13.33	1162.	314.	152.	8.09	4.14	13.33
HYDROGRAPH AT	SC15	1590.	12.33	319.	84.	41.	2.31		
2 COMBINED AT	CC17	4140.	13.17	1455.	392.	189.	10.40		
ROUTED TO	RC19	4071.	13.33	1455.	392.	189.	10.40	4.05	13.33
HYDROGRAPH AT	SC20	564.	12.00	60.	16.	8.	.43		
2 COMBINED AT	CC22	4071.	13.33	1508.	407.	197.	10.83		
HYDROGRAPH AT	SD5	2413.	13.00	749.	204.	98.	5.42		
HYDROGRAPH AT	SD10	1914.	12.83	550.	149.	72.	3.80		
2 COMBINED AT	CD12	4245.	12.83	1278.	347.	167.	9.22		
ROUTED TO	RD14	3694.	13.17	1275.	347.	167.	9.22		

								4.27	13.17
HYDROGRAPH AT	SD15	845.	12.17	115.	29.	14.	.93		
2 COMBINED AT	CD17	3774.	13.17	1380.	373.	180.	10.15		
HYDROGRAPH AT	SD20	561.	12.17	79.	20.	10.	.58		
ROUTED TO	RD22	552.	12.17	79.	20.	10.	.58		
								1.14	12.17
2 COMBINED AT	CD24	3832.	13.17	1448.	391.	189.	10.73		
HYDROGRAPH AT	E5	427.	12.17	61.	17.	8.	.37		
HYDROGRAPH AT	E10	711.	12.33	145.	39.	19.	.94		
2 COMBINED AT	CE12	1056.	12.33	205.	57.	27.	1.31		
ROUTED TO	RE14	1052.	12.33	205.	57.	27.	1.31		
								1.80	12.33
HYDROGRAPH AT	E15	2567.	12.50	599.	161.	78.	4.41		
ROUTED TO	RE17	2167.	13.00	597.	161.	78.	4.41		
								3.39	12.83
2 COMBINED AT	CE19	2754.	12.67	793.	216.	104.	5.72		
HYDROGRAPH AT	SE20	820.	12.33	150.	40.	19.	1.11		
2 COMBINED AT	CE22	3459.	12.50	935.	254.	122.	6.83		
4 COMBINED AT	NUL	11259.	12.67	4013.	1086.	525.	32.67		
HYDROGRAPH AT	SI5	432.	12.17	66.	18.	9.	.41		
HYDROGRAPH AT	SI10	1279.	12.33	237.	61.	29.	1.61		
2 COMBINED AT	CI12	1684.	12.33	303.	78.	38.	2.02		
ROUTED TO	RI14	1663.	12.33	303.	78.	38.	2.02		
								2.76	12.33
HYDROGRAPH AT	SI15	344.	12.00	35.	9.	4.	.25		

2 COMBINED AT	CI17	1795.	12.33	337.	87.	42.	2.27	
HYDROGRAPH AT	SJ	488.	12.17	64.	17.	8.	.42	
HYDROGRAPH AT	SK5	848.	12.17	120.	30.	14.	.84	
HYDROGRAPH AT	SK10	955.	12.33	166.	43.	21.	1.04	
2 COMBINED AT	CK12	1739.	12.33	284.	72.	35.	1.88	
ROUTED TO	RK14	1534.	12.50	284.	72.	35.	1.88	2.26 12.50
HYDROGRAPH AT	SK15	1025.	12.33	183.	49.	24.	1.09	
2 COMBINED AT	CK17	2508.	12.33	464.	121.	58.	2.97	
HYDROGRAPH AT	SL	802.	12.17	123.	33.	16.	.79	
5 COMBINED AT	NUL	15177.	12.50	4776.	1285.	621.	39.12	
HYDROGRAPH AT	SO	1995.	12.50	466.	122.	59.	2.90	
HYDROGRAPH AT	SP	898.	12.17	136.	37.	18.	.87	
3 COMBINED AT	NUL	17239.	12.50	5238.	1408.	680.	42.89	
HYDROGRAPH AT	ST2	4682.	12.17	619.	155.	75.	4.50	
ROUTED TO	RT4	4283.	12.33	619.	155.	75.	4.50	13.50 12.33
HYDROGRAPH AT	ST6	4037.	12.17	521.	135.	65.	3.93	
2 COMBINED AT	CT8	7621.	12.17	1118.	284.	137.	8.43	
ROUTED TO	RT9	6206.	12.50	1115.	284.	137.	8.43	14.45 12.50
HYDROGRAPH AT	ST10	2563.	12.17	415.	112.	54.	2.70	
HYDROGRAPH AT	ST12	2910.	12.33	504.	134.	65.	3.50	
3 COMBINED AT	CT11	10655.	12.33	1932.	505.	244.	14.63	

ROUTED TO	RT13	10377.	12.50	1932.	505.	244.	14.63	16.53	12.50
HYDROGRAPH AT	ST14	2900.	12.17	455.	123.	59.	2.76		
2 COMBINED AT	CT14	12612.	12.33	2320.	611.	295.	17.39		
ROUTED TO	RT15	12195.	12.50	2318.	611.	295.	17.39	17.51	12.50
HYDROGRAPH AT	ST16	1452.	12.17	225.	63.	30.	1.35		
2 COMBINED AT	CT17	12911.	12.50	2506.	665.	321.	18.74		
ROUTED TO	RT18	12895.	12.50	2506.	665.	321.	18.74	17.72	12.50
HYDROGRAPH AT	ST20	310.	12.00	30.	8.	4.	.28		
HYDROGRAPH AT	ST22	891.	12.17	128.	37.	18.	.72		
3 COMBINED AT	CT24	13242.	12.50	2635.	702.	339.	19.74		
ROUTED TO	RT25	12721.	12.67	2634.	702.	339.	19.74	17.24	12.67
HYDROGRAPH AT	ST26	678.	12.00	76.	20.	10.	.59		
2 COMBINED AT	CT30	12760.	12.67	2694.	718.	347.	20.33		

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

EAST TRIBUTARIES AREA
NMIN = 6
2-YEAR

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****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*            FEBRUARY 1981             *
*          REVISED 02 AUG 88           *
*                                      *
* RUN DATE  10/13/1992  TIME  14:23:34 *
*                                      *
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*                                      *
*    U.S. ARMY CORPS OF ENGINEERS      *
*  THE 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       WICKENBURG ADMS - CONTRACT FCD 89-79
  2           ID       WASHES AA(POWDER HOUSE), M, N
  3           ID       WASHES H, G, F, V(OX WASH), & S(LITTLE SAN DOMINGO)
  4           ID       SCS TYPE II STORM :100YR - 24 HR: PHOENIX MOUNTAIN S-GRAPH
  5           ID       AERIAL REDUCTION FACTORS PER NWS HYDRO-40
  6           ID       NMIN = 6 min
  7           ID       E1-2 ; 2-YEAR EVENT
              *DIAGRAM
  8           IT       6                    300
  9           IO       5
 10           IN      30
 11           JD    1.91     .01
 12           PC    .000    .005    .011    .016    .022    .028    .035    .041    .048    .056
 13           PC    .068    .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           JD    1.87     3.0
 18           JD    1.83     10.
 19           JD    1.76    20.0
 20           JD    1.72    30.0

 21           KK    SAA5
 22           KM   SUB-BASIN AA5
 23           BA    1.33
 24           LG     .15     .32    3.70     .29   10.90
 25           UI    156.    526.   1018.   1438.   1385.    903.    735.    579.    422.    349.
 26           UI    254.    190.    154.    120.     80.     76.     46.     30.     30.     30.
 27           UI     30.     30.     0.      0.      0.      0.      0.      0.      0.      0.
 28           UI      0.      0.     0.      0.      0.      0.      0.      0.      0.      0.

 29           KK   SAA10
 30           KM   SUB-BASIN AA10
 31           BA     .50
 32           LG     .15     .33    3.93     .33    3.10
 33           UI     87.    331.    563.    690.    415.    321.    230.    168.    120.     85.
 34           UI     62.     44.     35.     20.     14.     14.     14.      0.      0.      0.
 35           UI      0.      0.     0.      0.      0.      0.      0.      0.      0.      0.

 36           KK   CAA12
 37           KM        COMBINE HYDROGRAPH SAA5 & SAA10
 38           HC       2

 39           KK   RAA14
 40           KM        ROUTE HYDROGRAPH CAA12 THROUGH SAA15
 41           RS       1    FLOW      -1
 42           RC   0.030   0.015   0.030    4000  0.0199
 43           RX       0       0      10      10      40      40      50      50
 44           RY       5       1      .5       0       0      .5       1       5

 47           RA      12
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  45          KK   SAA15
  46          KM   SUB-BASIN AA15
  47          BA     .12
  48          LG     .12     .30    4.21     .40   23.50
  49          UI    137.    329.    164.     78.     37.     17.      8.      0.      0.      0.
  50          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  51          KK   CAA17
  52          KM        COMBINE HYDROGRAPH RAA14 & SAA15
  53          HC       2

  54          KK     SAF
  55          KM   SUB-BASIN AF
  56          BA     .30
  57          LG     .15     .28    3.72     .26   14.50
  58          UI     71.    269.    476.    345.    241.    169.    117.     78.     56.     38.
  59          UI     24.     17.     10.     10.     10.      0.      0.      0.      0.      0.
  60          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  61          KK      SM
  62          KM   SUB-BASIN M
  63          BA     .30
  64          LG     .15     .30    3.51     .26   10.80
  65          UI     54.    206.    351.    411.    248.    191.    134.    100.     68.     51.
  66          UI     35.     25.     22.      9.      8.      8.      8.      0.      0.      0.
  67          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  68          KK      SN
  69          KM   SUB-BASIN N
  70          BA     .33
  71          LG     .15     .29    3.72     .25   12.30
  72          UI     58.    220.    375.    455.    274.    211.    151.    111.     78.     56.
  73          UI     41.     29.     23.     12.      9.      9.      9.      0.      0.      0.
  74          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  75          KK   NUL
  76          KM   COMBINING WASHES AA, AF, M, & N TO REDUCE THE NO. OF FREE HYDROGRAPHS
  77          HC   4.

  78          KK     SH2
  79          KM   SUB-BASIN SH2
  80          BA    1.34
  81          LG     .15     .30    3.88     .33   18.60
  82          UI    279.   1054.   1827.   1719.   1099.    812.    549.    410.    266.    195.
  83          UI    136.    103.     56.     40.     40.     40.      0.      0.      0.      0.
  84          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  85          KK     RH4
  86          KM        WASH "H"
  87          RS       3    FLOW      -1
  88          RC    .045    .030    .045    7400   .0216
  89          RX     365     373     483     485     515     517     627     635
  90          RY      16      12      12      10      10      12      12      16
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  91          KK    SH6
  92          KM   SUB-BASIN SH6
  93          BA    .42
  94          LG    .15     .34    4.15     .48     .90
  95          UI   120.    449.    733.    454.    325.    210.    148.     91.     64.     40.
  96          UI    28.     15.     15.     15.      0.      0.      0.      0.      0.      0.
  97          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  98          KK    CH8
  99          HC      2

 100          KK    SG2
 101          KM   SUB-BASIN SG2
 102          BA    .40
 103          LG    .15     .34    3.97     .34    1.40
 104          UI   130.    476.    721.    426.    296.    188.    123.     80.     51.     37.
 105          UI    15.     15.     15.      0.      0.      0.      0.      0.      0.      0.
 106          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 107          KK    SF2
 108          KM   SUB-BASIN SF2
 109          BA    .24
 110          LG    .15     .33    3.98     .34    7.20
 111          UI   122.    440.    414.    238.    139.     81.     50.     29.     14.     11.
 112          UI    11.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 113          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 114          KK    SV2
 115          KM   SUB-BASIN SV2
 116          BA   3.16
 117          LG    .15     .30    3.70     .25    9.10
 118          UI   328.    895.   1882.   2539.   3544.   2250.   1806.   1501.   1215.    908.
 119          UI   761.    607.    445.    371.    287.    247.    160.    160.    111.     63.
 120          UI    63.     63.     63.     63.      0.      0.      0.      0.      0.      0.
 121          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 122          KK    RV3
 123          KM        OX WASH
 124          RS      3    FLOW     -1
 125          RC   .045     .03    .045   11720   .0162
 126          RX   429     433     473     475     525     527     567     571
 127          RY    16      12      12      10      10      12      12      16

 128          KK    SV4
 129          KM   SUB-BASIN SV4
 130          BA    .74
 131          LG    .15     .32    4.16     .38    3.50
 132          UI    87.    296.    571.    811.    764.    502.    408.    320.    234.    194.
 133          UI   139.    105.     84.     67.     43.     43.     24.     17.     17.     17.
 134          UI    17.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 135          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 136          KK     CV6
 137          HC       2

 138          KK     RV8
 139          KM        OX WASH U/S OF HWY 60
 140          RS       1    FLOW      -1
 141          RC    .045     .03    .045    2700    .011
 142          RX     429     433     473     475     525     527     567     571
 143          RY      16      12      12      10      10      12      12      16

 144          KK    SV10
 145          KM   SUB-BASIN SV10
 146          BA    1.72
 147          LG     .15     .32    3.86     .33    7.50
 148          UI    208.    742.   1387.   2030.   1674.   1163.    937.    727.    524.    434.
 149          UI    303.    240.    179.    141.    102.     93.     40.     40.     40.     40.
 150          UI     40.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 151          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 152          KK    CV12
 153          HC       2

 154          KK    RV14
 155          KM        OX WASH U/S OF HWY 60
 156          RS       1    FLOW      -1
 157          RC    .045     .03    .045    5100   .0157
 158          RX     429     433     473     475     525     527     567     571
 159          RY      16      12      12      10      10      12      12      16

 160          KK    SV16
 161          KM   SUB-BASIN SV16
 162          BA     .48
 163          LG     .15     .33    4.20     .45    4.30
 164          UI    185.    668.    880.    503.    323.    208.    124.     82.     49.     27.
 165          UI     19.     19.      0.      0.      0.      0.      0.      0.      0.      0.
 166          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 167          KK    CV18
 168          HC       2

 169          KK    RV19
 170          KM        OX WASH D/S OF HWY 60
 171          RS       1    FLOW      -1
 172          RC    .045     .03    .045    5100   .0157
 173          RX     458     462     482     485     515     518     538     542
 174          RY      17      13      13      10      10      13      13      17

 175          KK    SV20
 176          KM   SUB-BASIN SV20
 177          BA     .32
 178          LG     .15     .29    3.64     .28    6.00
 179          UI     70.    264.    462.    395.    261.    190.    128.     93.     61.     44.
 180          UI     30.     25.     10.     10.     10.     10.      0.      0.      0.      0.
 181          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 182          KK   SV22
 183          KM   SUB-BASIN SV22
 184          BA    .19
 185          LG    .15     .32    3.79     .31    3.30
 186          UI   125.    431.    291.    170.     96.     52.     29.     15.      9.      0.
 187          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 188          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 189          KK   CV24
 190          HC      3

 191          KK   NUL
 192          KM   COMBINING WASHES H, G, F, & V TO REDUCE THE NO. OF FREE HYDROGRAPHS
 193          HC   4.

 194          KK    SS2
 195          KM   SUB-BASIN SS2
 196          BA   4.60
 197          LG    .15     .31    3.69     .29    8.80
 198          UI   237.    237.    454.    820.   1194.   1490.   1712.   1919.   2408.   2726.
 199          UI  1786.   1511.   1378.   1255.   1149.   1045.    942.    843.    726.    617.
 200          UI   573.    541.    495.    403.    360.    302.    286.    259.    253.    181.
 201          UI   181.    181.    128.    116.    116.    116.    116.     68.     45.     45.
 202          UI    45.     45.     45.     45.     45.     45.     45.     45.     45.     45.
 203          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 204          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 205          KK    RS4
 206          KM       LITTLE SAN DOMINGO WASH
 207          RS      2    FLOW     -1
 208          RC   .045     .03    .045    8400   .0131
 209          RX   439     443     488     490     510     512     557     561
 210          RY    16      12      12      10      10      12      12      16

 211          KK    SS6
 212          KM   SUB-BASIN SS6
 213          BA   1.60
 214          LG    .15     .30    4.18     .46     .00
 215          UI   142.    291.    674.    963.   1222.   1524.    953.    795.    681.    573.
 216          UI   462.    361.    320.    260.    197.    167.    145.    109.     96.     69.
 217          UI    69.     55.     27.     27.     27.     27.     27.     27.     27.      0.
 218          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 219          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 220          KK    CS8
 221          HC      2

 222          KK   RS10
 223          KM       LITTLE SAN DOMINGO WASH
 224          RS      1    FLOW     -1
 225          RC   .045     .03    .045    6400   .0172
 226          RX   429     435     475     480     520     525     565     571
 227          RY    17      13      13      10      10      13      13      17
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 228          KK   SS12
 229          KM   SUB-BASIN SS12
 230          BA    .86
 231          LG    .15     .31    4.15     .47     .00
 232          UI   108.    411.    739.   1104.    773.    579.    461.    341.    259.    201.
 233          UI   140.    113.     83.     59.     53.     30.     21.     21.     21.     21.
 234          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 235          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 236          KK   SS14
 237          KM   SUB-BASIN SS14
 238          BA   1.31
 239          LG    .15     .30    3.81     .61     .00
 240          UI   330.   1257.   2181.   1453.   1040.    707.    498.    318.    221.    150.
 241          UI   110.     55.     43.     43.     43.      0.      0.      0.      0.      0.
 242          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 243          KK   CS16
 244          HC      3

 245          KK   RS18
 246          KM       LITTLE SAN DOMINGO WASH
 247          RS      1    FLOW      -1
 248          RC   .045     .03    .045    3200   .0156
 249          RX    433     437     477     480     520     523     563     567
 250          RY     17      13      13      10      10      13      13      17

 251          KK   SS20
 252          KM   SUB-BASIN SS20
 253          BA    .41
 254          LG    .15     .34    3.86     .58     .00
 255          UI   193.    687.    732.    415.    249.    150.     90.     54.     32.     18.
 256          UI    18.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 257          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 258          KK   CS22
 259          HC      2
 260          ZZ
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SCHEMATIC DIAGRAM OF STREAM NETWORK

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

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

 21       SAA5
           .
           .
 29        .       SAA10
           .          .
           .          .
 36      CAA12............
           V
           V
 39      RAA14
           .
           .
 45        .       SAA15
           .          .
           .          .
 51      CAA17............
           .
           .
 54        .        SAF
           .          .
           .          .
 61        .          .         SM
           .          .          .
           .          .          .
 68        .          .          .         SN
           .          .          .          .
           .          .          .          .
 75      NUL  ...................................
           .
           .
 78        .        SH2
           .          V
           .          V
 85        .        RH4
           .          .
           .          .
 91        .          .        SH6
           .          .          .
           .          .          .
 98        .        CH8............
           .          .
           .          .
100        .          .        SG2
           .          .          .
           .          .          .
107        .          .          .        SF2
           .          .          .          .
           .          .          .          .
114        .          .          .          .        SV2
           .          .          .          .          V
           .          .          .          .          V
122        .          .          .          .        RV3
           .          .          .          .          .
           .          .          .          .          .
[illegible]3 .          .          .          .          .        SV4
           .          .          .          .          .          .
           .          .          .          .          .          .
136        .          .          .          .        CV6............
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                                                V
138                                            RV8
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                                                .
4                                               .        SV10
                                                .          .
                                                .          .
152                                            CV12.........
                                                V
                                                V
154                                            RV14
                                                .
                                                .
160                                             .        SV16
                                                .          .
                                                .          .
167                                            CV18.........
                                                V
                                                V
169                                            RV19
                                                .
                                                .
175                                             .        SV20
                                                .          .
                                                .          .
182                                             .          .        SV22
                                                .          .          .
                                                .          .          .
189                                            CV24......................
                                                .
                                                .
191                 NUL ...............................
                     .
                     .
.4                   .        SS2
                     .         V
                     .         V
205                  .        RS4
                     .         .
                     .         .
211                  .         .        SS6
                     .         .          .
                     .         .          .
220                  .        CS8.........
                     .         V
                     .         V
222                  .        RS10
                     .         .
                     .         .
228                  .         .        SS12
                     .         .          .
                     .         .          .
236                  .         .          .        SS14
                     .         .          .          .
                     .         .          .          .
243                  .        CS16......................
                     .         V
                     .         V
245                  .        RS18
                     .         .
                     .         .
1                    .         .        SS20
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                     .         .          .
258                  .        CS22.........
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(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

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****************************************                    ****************************************
*                                      *                    *                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *                    *   U.S. ARMY CORPS OF ENGINEERS       *
*            FEBRUARY 1981             *                    *  THE HYDROLOGIC ENGINEERING CENTER   *
*          REVISED 02 AUG 88           *                    *         609 SECOND STREET            *
*                                      *                    *      DAVIS, CALIFORNIA 95616         *
*  RUN DATE  10/13/1992  TIME  14:23:34 *                    *          (916) 551-1748              *
*                                      *                    *                                      *
****************************************                    ****************************************
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                         WICKENBURG ADMS - CONTRACT FCD 89-79
                         WASHES AA(POWDER HOUSE), M, N
                         WASHES H, G, F, V(OX WASH), & S(LITTLE SAN DOMINGO)
                         SCS TYPE II STORM :100YR - 24 HR: PHOENIX MOUNTAIN S-GRAPH
                         AERIAL REDUCTION FACTORS PER NWS HYDRO-40
                         NMIN = 6 min
                         E1-2 ; 2-YEAR EVENT

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

   IT          HYDROGRAPH TIME DATA
                      NMIN          6  MINUTES IN COMPUTATION INTERVAL
                     IDATE      1   0  STARTING DATE
                     ITIME       0000  STARTING TIME
                        NQ        300  NUMBER OF HYDROGRAPH ORDINATES
                    NDDATE      2   0  ENDING DATE
                    NDTIME       0554  ENDING TIME
                     ICENT         19  CENTURY MARK

               COMPUTATION INTERVAL     .10 HOURS
                    TOTAL TIME BASE   29.90 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       1.91  PRECIPITATION DEPTH
                      TRDA        .01  TRANSPOSITION DRAINAGE AREA

12 PI            PRECIPITATION PATTERN
                  .00      .00      .00      .00      .00      .00      .00      .00      .00      .00
                  .00      .00      .00      .00      .00      .00      .00      .00      .00      .00
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17 JD INDEX STORM NO. 2

STRM 1.87 PRECIPITATION DEPTH

TRDA 3.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

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18 JD INDEX STORM NO. 3

STRM 1.83 PRECIPITATION DEPTH

TRDA 10.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

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19 JD INDEX STORM NO. 4

STRM 1.76 PRECIPITATION DEPTH

TRDA 20.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

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20 JD INDEX STORM NO. 5

STRM 1.72 PRECIPITATION DEPTH

TRDA 30.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
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.01	.01	.01	.01	.01	.08	.08	.08	.08	.08
.01	.01	.01	.01	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

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	SAA5	372.	12.20	56.	16.	13.	1.33		
HYDROGRAPH AT	SAA10	111.	12.20	13.	3.	3.	.50		
2 COMBINED AT	CAA12	480.	12.20	68.	19.	16.	1.83		
ROUTED TO	RAA14	460.	12.30	68.	19.	16.	1.83	.89	12.30
HYDROGRAPH AT	SAA15	47.	12.00	6.	2.	1.	.12		
2 COMBINED AT	CAA17	473.	12.30	74.	21.	17.	1.95		
HYDROGRAPH AT	SAF	124.	12.10	16.	5.	4.	.30		
HYDROGRAPH AT	SM	110.	12.10	14.	4.	3.	.30		
HYDROGRAPH AT	SN	124.	12.10	17.	5.	4.	.33		
4 COMBINED AT	NUL	806.	12.20	120.	34.	28.	2.88		
HYDROGRAPH AT	SH2	440.	12.10	63.	19.	16.	1.34		
ROUTED TO	RH4	415.	12.30	63.	19.	16.	1.34	11.26	12.30
HYDROGRAPH AT	SH6	31.	12.20	3.	1.	1.	.42		
2 COMBINED AT	CH8	433.	12.30	65.	20.	16.	1.76		
HYDROGRAPH AT	SG2	94.	12.10	9.	2.	2.	.40		
HYDROGRAPH AT	SF2	72.	12.10	7.	2.	2.	.24		
HYDROGRAPH AT	SV2	911.	12.20	144.	40.	32.	3.16		
ROUTED TO	RV3	825.	12.50	144.	40.	32.	3.16	11.55	12.50

HYDROGRAPH AT	SV4	110.	12.20	15.	4.	3.	.74		
2 COMBINED AT	CV6	880.	12.50	157.	44.	35.	3.90		
ROUTED TO	RV8	841.	12.60	157.	44.	35.	3.90	11.78	12.60
HYDROGRAPH AT	SV10	391.	12.20	55.	16.	13.	1.72		
2 COMBINED AT	CV12	1027.	12.50	207.	58.	47.	5.62		
ROUTED TO	RV14	969.	12.60	206.	58.	47.	5.62	11.73	12.70
HYDROGRAPH AT	SV16	66.	12.10	7.	2.	2.	.48		
2 COMBINED AT	CV18	976.	12.60	211.	60.	48.	6.10		
ROUTED TO	RV19	958.	12.70	211.	60.	48.	6.10	12.32	12.80
HYDROGRAPH AT	SV20	111.	12.10	13.	4.	3.	.32		
HYDROGRAPH AT	SV22	64.	12.10	6.	2.	1.	.19		
3 COMBINED AT	CV24	976.	12.70	228.	64.	52.	6.61		
4 COMBINED AT	NUL	1179.	12.60	299.	86.	69.	9.01		
HYDROGRAPH AT	SS2	691.	12.70	180.	51.	41.	4.60		
ROUTED TO	RS4	587.	13.00	180.	51.	41.	4.60	12.23	13.00
HYDROGRAPH AT	SS6	105.	12.40	14.	4.	3.	1.60		
2 COMBINED AT	CS8	608.	13.00	190.	53.	43.	6.20		
ROUTED TO	RS10	589.	13.10	189.	53.	43.	6.20	11.40	13.20
HYDROGRAPH AT	SS12	64.	12.30	7.	2.	1.	.86		
HYDROGRAPH AT	SS14	32.	12.20	2.	1.	0.	1.31		
3 COMBINED AT									

+	CS16	589.	13.10	194.	55.	44.	8.37		
ROUTED TO									
+	RS18	582.	13.20	193.	54.	44.	8.37		
								11.46	13.30
HYDROGRAPH AT									
+	SS20	8.	12.20	1.	0.	0.	.41		
2 COMBINED AT									
+	CS22	582.	13.20	193.	54.	44.	8.78		

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

EAST TRIBUTARIES AREA
NMIN = 6
10-YEAR

```
****************************************
*                                      *
*  FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*          FEBRUARY 1981               *
*        REVISED 02 AUG 88             *
*                                      *
* RUN DATE  10/13/1992  TIME  14:21:03 *
*                                      *
****************************************
```

```
****************************************
*                                      *
*    U.S. ARMY CORPS OF ENGINEERS      *
*  THE 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

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

  1           ID       WICKENBURG ADMS - CONTRACT FCD 89-79
  2           ID       WASHES AA(POWDER HOUSE), M, N
  3           ID       WASHES H, G, F, V(OX WASH), & S(LITTLE SAN DOMINGO)
  4           ID       SCS TYPE II STORM :100YR - 24 HR: PHOENIX MOUNTAIN S-GRAPH
  5           ID       AERIAL REDUCTION FACTORS PER NWS HYDRO-40
  6           ID       NMIN = 6 min
  7           ID       E1-10 ; 10-YEAR EVENT
              *DIAGRAM
  8           IT       6                    300
  9           IO       5
 10           IN      30
 11           JD    2.85     .01
 12           PC    .000    .005    .011    .016    .022    .028    .035    .041    .048    .056
 13           PC    .068    .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           JD    2.79     3.0
 18           JD    2.74     10.
 19           JD    2.62    20.0
 20           JD    2.57    30.0

 21           KK    SAA5
 22           KM   SUB-BASIN AA5
 23           BA    1.33
 24           LG     .15     .32    3.70     .29   10.90
 25           UI    156.    526.   1018.   1438.   1385.    903.    735.    579.    422.    349.
 26           UI    254.    190.    154.    120.     80.     76.     46.     30.     30.     30.
 27           UI     30.     30.      0.      0.      0.      0.      0.      0.      0.      0.
 28           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 29           KK   SAA10
 30           KM   SUB-BASIN AA10
 31           BA     .50
 32           LG     .15     .33    3.93     .33    3.10
 33           UI     87.    331.    563.    690.    415.    321.    230.    168.    120.     85.
 34           UI     62.     44.     35.     20.     14.     14.     14.      0.      0.      0.
 35           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 36           KK   CAA12
 37           KM        COMBINE HYDROGRAPH SAA5 & SAA10
 38           HC       2

 39           KK   RAA14
 40           KM        ROUTE HYDROGRAPH CAA12 THROUGH SAA15
 41           RS       1    FLOW      -1
 42           RC   0.030   0.015   0.030    4000  0.0199
 43           RX       0       0      10      10      40      40      50      50
 44           RY       5       1      .5       0       0      .5       1       5
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  45          KK   SAA15
  46          KM   SUB-BASIN AA15
  47          BA     .12
  48          LG     .12     .30    4.21     .40    23.5
  49          UI    137.    329.    164.     78.     37.     17.      8.      0.      0.      0.
  50          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  51          KK   CAA17
  52          KM       COMBINE HYDROGRAPH RAA14 & SAA15
  53          HC       2

  54          KK     SAF
  55          KM   SUB-BASIN AF
  56          BA     .30
  57          LG     .15     .28    3.72     .26   14.50
  58          UI     71.    269.    476.    345.    241.    169.    117.     78.     56.     38.
  59          UI     24.     17.     10.     10.     10.      0.      0.      0.      0.      0.
  60          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  61          KK      SM
  62          KM   SUB-BASIN M
  63          BA     .30
  64          LG     .15     .30    3.51     .26   10.80
  65          UI     54.    206.    351.    411.    248.    191.    134.    100.     68.     51.
  66          UI     35.     25.     22.      9.      8.      8.      8.      0.      0.      0.
  67          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  68          KK      SN
  69          KM   SUB-BASIN N
  70          BA     .33
  71          LG     .15     .29    3.72     .25   12.30
  72          UI     58.    220.    375.    455.    274.    211.    151.    111.     78.     56.
  73          UI     41.     29.     23.     12.      9.      9.      9.      0.      0.      0.
  74          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  75          KK   NUL
  76          KM   COMBINING WASHES AA, AF, M, & N TO REDUCE THE NO. OF FREE HYDROGRAPHS
  77          HC   4.

  78          KK     SH2
  79          KM   SUB-BASIN SH2
  80          BA    1.34
  81          LG     .15     .30    3.88     .33   18.60
  82          UI    279.   1054.   1827.   1719.   1099.    812.    549.    410.    266.    195.
  83          UI    136.    103.     56.     40.     40.     40.      0.      0.      0.      0.
  84          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  85          KK     RH4
  86          KM       WASH "H"
  87          RS       3    FLOW      -1
  88          RC    .045    .030    .045    7400   .0216
  89          RX     365     373     483     485     515     517     627     635
  90          RY      16      12      12      10      10      12      12      16
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  91          KK     SH6
  92          KM   SUB-BASIN SH6
  93          BA     .42
  94          LG     .15     .34    4.15     .48     .90
  95          UI    120.    449.    733.    454.    325.    210.    148.     91.     64.     40.
  96          UI     28.     15.     15.     15.      0.      0.      0.      0.      0.      0.
  97          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  98          KK     CH8
  99          HC       2

 100          KK     SG2
 101          KM   SUB-BASIN SG2
 102          BA     .40
 103          LG     .15     .34    3.97     .34    1.40
 104          UI    130.    476.    721.    426.    296.    188.    123.     80.     51.     37.
 105          UI     15.     15.     15.      0.      0.      0.      0.      0.      0.      0.
 106          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 107          KK     SF2
 108          KM   SUB-BASIN SF2
 109          BA     .24
 110          LG     .15     .33    3.98     .34    7.20
 111          UI    122.    440.    414.    238.    139.     81.     50.     29.     14.     11.
 112          UI     11.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 113          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 114          KK     SV2
 115          KM   SUB-BASIN SV2
 116          BA    3.16
 117          LG     .15     .30    3.70     .25    9.10
 118          UI    328.    895.   1882.   2539.   3544.   2250.   1806.   1501.   1215.    908.
 119          UI    761.    607.    445.    371.    287.    247.    160.    160.    111.     63.
 120          UI     63.     63.     63.     63.      0.      0.      0.      0.      0.      0.
 121          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 122          KK     RV3
 123          KM         OX WASH
 124          RS       3    FLOW      -1
 125          RC    .045     .03    .045   11720   .0162
 126          RX    429     433     473     475     525     527     567     571
 127          RY     16      12      12      10      10      12      12      16

 128          KK     SV4
 129          KM   SUB-BASIN SV4
 130          BA     .74
 131          LG     .15     .32    4.16     .38    3.50
 132          UI     87.    296.    571.    811.    764.    502.    408.    320.    234.    194.
 133          UI    139.    105.     84.     67.     43.     43.     24.     17.     17.     17.
 134          UI     17.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 135          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 136          KK     CV6
 137          HC       2

 138          KK     RV8
 139          KM        OX WASH U/S OF HWY 60
 140          RS       1    FLOW      -1
 141          RC    .045     .03    .045    2700    .011
 142          RX     429     433     473     475     525     527     567     571
 143          RY      16      12      12      10      10      12      12      16

 144          KK    SV10
 145          KM   SUB-BASIN SV10
 146          BA    1.72
 147          LG     .15     .32    3.86     .33    7.50
 148          UI    208.    742.   1387.   2030.   1674.   1163.    937.    727.    524.    434.
 149          UI    303.    240.    179.    141.    102.     93.     40.     40.     40.     40.
 150          UI     40.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 151          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 152          KK    CV12
 153          HC       2

 154          KK    RV14
 155          KM        OX WASH U/S OF HWY 60
 156          RS       1    FLOW      -1
 157          RC    .045     .03    .045    5100   .0157
 158          RX     429     433     473     475     525     527     567     571
 159          RY      16      12      12      10      10      12      12      16

 160          KK    SV16
 161          KM   SUB-BASIN SV16
 162          BA     .48
 163          LG     .15     .33    4.20     .45    4.30
 164          UI    185.    668.    880.    503.    323.    208.    124.     82.     49.     27.
 165          UI     19.     19.      0.      0.      0.      0.      0.      0.      0.      0.
 166          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 167          KK    CV18
 168          HC       2

 169          KK    RV19
 170          KM        OX WASH D/S OF HWY 60
 171          RS       1    FLOW      -1
 172          RC    .045     .03    .045    5100   .0157
 173          RX     458     462     482     485     515     518     538     542
 174          RY      17      13      13      10      10      13      13      17

 175          KK    SV20
 176          KM   SUB-BASIN SV20
 177          BA     .32
 178          LG     .15     .29    3.64     .28    6.00
 179          UI     70.    264.    462.    395.    261.    190.    128.     93.     61.     44.
 180          UI     30.     25.     10.     10.     10.     10.      0.      0.      0.      0.
 181          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 182          KK    SV22
 183          KM   SUB-BASIN SV22
 184          BA     .19
 185          LG     .15     .32    3.79     .31    3.30
 186          UI    125.    431.    291.    170.     96.     52.     29.     15.      9.      0.
 187          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 188          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 189          KK    CV24
 190          HC       3

 191          KK   NUL
 192          KM   COMBINING WASHES H, G, F, & V TO REDUCE THE NO. OF FREE HYDROGRAPHS
 193          HC   4.

 194          KK     SS2
 195          KM   SUB-BASIN SS2
 196          BA    4.60
 197          LG     .15     .31    3.69     .29    8.80
 198          UI    237.    237.    454.    820.   1194.   1490.   1712.   1919.   2408.   2726.
 199          UI   1786.   1511.   1378.   1255.   1149.   1045.    942.    843.    726.    617.
 200          UI    573.    541.    495.    403.    360.    302.    286.    259.    253.    181.
 201          UI    181.    181.    128.    116.    116.    116.    116.     68.     45.     45.
 202          UI     45.     45.     45.     45.     45.     45.     45.     45.     45.     45.
 203          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 204          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 205          KK     RS4
 206          KM        LITTLE SAN DOMINGO WASH
 207          RS       2    FLOW      -1
 208          RC    .045     .03    .045    8400   .0131
 209          RX     439     443     488     490     510     512     557     561
 210          RY      16      12      12      10      10      12      12      16

 211          KK     SS6
 212          KM   SUB-BASIN SS6
 213          BA    1.60
 214          LG     .15     .30    4.18     .46     .00
 215          UI    142.    291.    674.    963.   1222.   1524.    953.    795.    681.    573.
 216          UI    462.    361.    320.    260.    197.    167.    145.    109.     96.     69.
 217          UI     69.     55.     27.     27.     27.     27.     27.     27.     27.      0.
 218          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 219          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 220          KK     CS8
 221          HC       2

 222          KK    RS10
 223          KM        LITTLE SAN DOMINGO WASH
 224          RS       1    FLOW      -1
 225          RC    .045     .03    .045    6400   .0172
 226          RX     429     435     475     480     520     525     565     571
 227          RY      17      13      13      10      10      13      13      17
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 228          KK    SS12
 229          KM   SUB-BASIN SS12
 230          BA     .86
 231          LG     .15     .31    4.15     .47     .00
 232          UI    108.    411.    739.   1104.    773.    579.    461.    341.    259.    201.
 233          UI    140.    113.     83.     59.     53.     30.     21.     21.     21.     21.
 234          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 235          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 236          KK    SS14
 237          KM   SUB-BASIN SS14
 238          BA    1.31
 239          LG     .15     .30    3.81     .61     .00
 240          UI    330.   1257.   2181.   1453.   1040.    707.    498.    318.    221.    150.
 241          UI    110.     55.     43.     43.     43.      0.      0.      0.      0.      0.
 242          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 243          KK    CS16
 244          HC       3

 245          KK    RS18
 246          KM        LITTLE SAN DOMINGO WASH
 247          RS       1    FLOW      -1
 248          RC    .045     .03    .045    3200   .0156
 249          RX     433     437     477     480     520     523     563     567
 250          RY      17      13      13      10      10      13      13      17

 251          KK    SS20
 252          KM   SUB-BASIN SS20
 253          BA     .41
 254          LG     .15     .34    3.86     .58     .00
 255          UI    193.    687.    732.    415.    249.    150.     90.     54.     32.     18.
 256          UI     18.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 257          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 258          KK    CS22
 259          HC       2
 260          ZZ
```

SCHEMATIC DIAGRAM OF STREAM NETWORK

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

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

 21       SAA5
           .
           .
 29        .       SAA10
           .          .
           .          .
 36      CAA12............
           V
           V
 39      RAA14
           .
           .
 45        .       SAA15
           .          .
           .          .
 51      CAA17............
           .
           .
 54        .         SAF
           .          .
           .          .
 61        .          .          SM
           .          .           .
           .          .           .
 68        .          .           .          SN
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 75      NUL  ................................
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 78        .         SH2
           .          V
           .          V
 85        .         RH4
           .          .
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 91        .          .         SH6
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 98        .         CH8............
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           .          .
100        .          .         SG2
           .          .           .
           .          .           .
107        .          .           .        SF2
           .          .           .         .
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114        .          .           .         .        SV2
           .          .           .         .         V
           .          .           .         .         V
122        .          .           .         .        RV3
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128        .          .           .         .         .         SV4
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136        .          .           .         .        CV6............
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138                                              RV8
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                                                   .        SV10
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152                                            CV12............
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                                                   V
154                                              RV14
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160                                                .        SV16
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167                                            CV18............
                                                   V
                                                   V
169                                              RV19
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                                                   .
175                                                .        SV20
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182                                                .           .        SV22
                                                   .           .           .
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189                                            CV24........................
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191                 NUL ...................................
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194                     .      SS2
                        .        V
                        .        V
205                     .      RS4
                        .        .
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211                     .        .        SS6
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220                     .      CS8............
                        .        V
                        .        V
222                     .      RS10
                        .        .
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228                     .        .        SS12
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236                     .        .          .        SS14
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243                     .      CS16........................
                        .        V
                        .        V
245                     .      RS18
                        .        .
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251                     .        .        SS20
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                        .        .          .
258                     .      CS22............
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***) RUNOFF ALSO COMPUTED AT THIS LOCATION

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****************************************                    ****************************************
*                                      *                    *                                      *
*  FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *                    *   U.S. ARMY CORPS OF ENGINEERS       *
*          FEBRUARY 1981               *                    * THE HYDROLOGIC ENGINEERING CENTER    *
*        REVISED 02 AUG 88             *                    *         609 SECOND STREET            *
*                                      *                    *      DAVIS, CALIFORNIA 95616         *
* RUN DATE  10/13/1992  TIME  14:21:03 *                    *          (916) 551-1748              *
*                                      *                    *                                      *
****************************************                    ****************************************
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                        WICKENBURG ADMS - CONTRACT FCD 89-79
                        WASHES AA(POWDER HOUSE), M, N
                        WASHES H, G, F, V(OX WASH), & S(LITTLE SAN DOMINGO)
                        SCS TYPE II STORM :100YR - 24 HR: PHOENIX MOUNTAIN S-GRAPH
                        AERIAL REDUCTION FACTORS PER NWS HYDRO-40
                        NMIN = 6 min
                        E1-10 ; 10-YEAR EVENT

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

   IT          HYDROGRAPH TIME DATA
                      NMIN          6  MINUTES IN COMPUTATION INTERVAL
                     IDATE      1   0  STARTING DATE
                     ITIME       0000  STARTING TIME
                        NQ        300  NUMBER OF HYDROGRAPH ORDINATES
                    NDDATE      2   0  ENDING DATE
                    NDTIME       0554  ENDING TIME
                     ICENT         19  CENTURY MARK

              COMPUTATION INTERVAL     .10 HOURS
                   TOTAL TIME BASE   29.90 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       2.85  PRECIPITATION DEPTH
                      TRDA        .01  TRANSPOSITION DRAINAGE AREA

12 PI            PRECIPITATION PATTERN
                    .00      .00      .00      .00      .00      .00      .00      .00      .00      .00
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17 JD INDEX STORM NO. 2

STRM 2.79 PRECIPITATION DEPTH

TRDA 3.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

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18 JD INDEX STORM NO. 3

STRM 2.74 PRECIPITATION DEPTH

TRDA 10.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

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19 JD INDEX STORM NO. 4

STRM 2.62 PRECIPITATION DEPTH

TRDA 20.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

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20 JD INDEX STORM NO. 5

STRM 2.57 PRECIPITATION DEPTH

TRDA 30.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

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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	SAA5	831.	12.20	121.	33.	27.	1.33		
HYDROGRAPH AT	SAA10	310.	12.10	37.	10.	8.	.50		
2 COMBINED AT	CAA12	1127.	12.20	157.	43.	34.	1.83		
ROUTED TO	RAA14	1116.	12.20	157.	43.	34.	1.83	1.56	12.20
HYDROGRAPH AT	SAA15	108.	12.00	12.	4.	3.	.12		
2 COMBINED AT	CAA17	1164.	12.20	169.	46.	37.	1.95		
HYDROGRAPH AT	SAF	246.	12.10	30.	9.	7.	.30		
HYDROGRAPH AT	SM	227.	12.10	29.	8.	6.	.30		
HYDROGRAPH AT	SN	251.	12.10	33.	9.	7.	.33		
4 COMBINED AT	NUL	1835.	12.20	259.	72.	57.	2.88		
HYDROGRAPH AT	SH2	982.	12.10	131.	38.	31.	1.34		
ROUTED TO	RH4	795.	12.40	131.	38.	31.	1.34	11.99	12.40
HYDROGRAPH AT	SH6	214.	12.10	22.	5.	4.	.42		
2 COMBINED AT	CH8	896.	12.20	152.	44.	35.	1.76		
HYDROGRAPH AT	SG2	274.	12.10	28.	7.	6.	.40		
HYDROGRAPH AT	SF2	183.	12.00	19.	5.	4.	.24		
HYDROGRAPH AT	SV2	1910.	12.20	294.	80.	64.	3.16		
ROUTED TO	RV3	1609.	12.50	294.	80.	64.	3.16	12.37	12.60

HYDROGRAPH AT									
+	SV4	375.	12.20	50.	13.	11.	.74		
2 COMBINED AT									
+	CV6	1806.	12.50	342.	92.	74.	3.90		
ROUTED TO									
	RV8	1773.	12.60	342.	92.	74.	3.90		
+								12.71	12.60
HYDROGRAPH AT									
	SV10	1002.	12.20	139.	38.	30.	1.72		
2 COMBINED AT									
	CV12	2268.	12.40	474.	128.	103.	5.62		
ROUTED TO									
	RV14	2196.	12.60	474.	128.	103.	5.62		
								12.76	12.60
HYDROGRAPH AT									
	SV16	285.	12.10	29.	8.	6.	.48		
2 COMBINED AT									
+	CV18	2228.	12.60	501.	135.	109.	6.10		
ROUTED TO									
+	RV19	2186.	12.70	500.	135.	109.	6.10		
+								13.83	12.70
HYDROGRAPH AT									
+	SV20	242.	12.10	28.	7.	6.	.32		
HYDROGRAPH AT									
+	SV22	158.	12.00	15.	4.	3.	.19		
3 COMBINED AT									
	CV24	2232.	12.60	541.	146.	118.	6.61		
4 COMBINED AT									
	NUL	3036.	12.50	727.	199.	160.	9.01		
HYDROGRAPH AT									
+	SS2	1585.	12.60	401.	109.	88.	4.60		
ROUTED TO									
+	RS4	1461.	12.90	400.	109.	88.	4.60		
								13.18	12.90
HYDROGRAPH AT									
+	SS6	567.	12.30	88.	22.	18.	1.60		
2 COMBINED AT									
+	CS8	1653.	12.80	483.	130.	104.	6.20		
ROUTED TO									
	RS10	1612.	12.90	482.	130.	104.	6.20		
+								12.70	13.00
HYDROGRAPH AT									
	SS12	375.	12.20	46.	12.	9.	.86		
HYDROGRAPH AT									
	SS14	550.	12.10	56.	14.	11.	1.31		
3 COMBINED AT									

	CS16	1692.	12.90	574.	153.	123.	8.37		
ROUTED TO									
	RS18	1668.	13.00	573.	153.	123.	8.37		
								12.91	13.00
HYDROGRAPH AT									
	SS20	189.	12.10	17.	4.	3.	.41		
2 COMBINED AT									
	CS22	1668.	13.00	588.	156.	126.	8.78		

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

EAST TRIBUTARIES AREA
NMIN = 6
25-YEAR

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****************************************
*                                      *
*  FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*          FEBRUARY 1981               *
*         REVISED 02 AUG 88            *
*                                      *
* RUN DATE  10/13/1992  TIME  14:24:35 *
*                                      *
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*                                      *
*    U.S. ARMY CORPS OF ENGINEERS      *
*  THE 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       WICKENBURG ADMS - CONTRACT FCD 89-79
  2           ID       WASHES AA(POWDER HOUSE), M, N
  3           ID       WASHES H, G, F, V(OX WASH), & S(LITTLE SAN DOMINGO)
  4           ID       SCS TYPE II STORM :100YR - 24 HR: PHOENIX MOUNTAIN S-GRAPH
  5           ID       AERIAL REDUCTION FACTORS PER NWS HYDRO-40
  6           ID       NMIN = 6 min
  7           ID       E1-25 ; 25-YEAR EVENT
              *DIAGRAM
  8           IT       6                    300
  9           IO       5
 10           IN      30
 11           JD    3.43     .01
 12           PC    .000    .005    .011    .016    .022    .028    .035    .041    .048    .056
 13           PC    .068    .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           JD    3.36     3.0
 18           JD    3.29     10.
 19           JD    3.16    20.0
 20           JD    3.09    30.0

 21           KK    SAA5
 22           KM   SUB-BASIN AA5
 23           BA    1.33
 24           LG     .15     .32    3.70     .29   10.90
 25           UI    156.    526.   1018.   1438.   1385.    903.    735.    579.    422.    349.
 26           UI    254.    190.    154.    120.     80.     76.     46.     30.     30.     30.
 27           UI     30.     30.      0.      0.      0.      0.      0.      0.      0.      0.
 28           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 29           KK   SAA10
 30           KM   SUB-BASIN AA10
 31           BA     .50
 32           LG     .15     .33    3.93     .33    3.10
 33           UI     87.    331.    563.    690.    415.    321.    230.    168.    120.     85.
 34           UI     62.     44.     35.     20.     14.     14.     14.      0.      0.      0.
 35           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 36           KK   CAA12
 37           KM        COMBINE HYDROGRAPH SAA5 & SAA10
 38           HC       2

 39           KK   RAA14
 40           KM        ROUTE HYDROGRAPH CAA12 THROUGH SAA15
 41           RS       1    FLOW      -1
 42           RC   0.030   0.015   0.030    4000  0.0199
 43           RX       0       0      10      10      40      40      50      50
 44           RY       5       1      .5       0       0      .5       1       5
```

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

  45          KK   SAA15
  46          KM   SUB-BASIN AA15
  47          BA     .12
  48          LG     .12     .30    4.21     .40   23.50
  49          UI    137.    329.    164.     78.     37.     17.      8.      0.      0.      0.
  50          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  51          KK   CAA17
  52          KM        COMBINE HYDROGRAPH RAA14 & SAA15
  53          HC       2

  54          KK     SAF
  55          KM   SUB-BASIN AF
  56          BA     .30
  57          LG     .15     .28    3.72     .26   14.50
  58          UI     71.    269.    476.    345.    241.    169.    117.     78.     56.     38.
  59          UI     24.     17.     10.     10.     10.      0.      0.      0.      0.      0.
  60          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  61          KK     SM
  62          KM   SUB-BASIN M
  63          BA     .30
  64          LG     .15     .30    3.51     .26   10.80
  65          UI     54.    206.    351.    411.    248.    191.    134.    100.     68.     51.
  66          UI     35.     25.     22.      9.      8.      8.      8.      0.      0.      0.
  67          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  68          KK     SN
  69          KM   SUB-BASIN N
  70          BA     .33
  71          LG     .15     .29    3.72     .25   12.30
  72          UI     58.    220.    375.    455.    274.    211.    151.    111.     78.     56.
  73          UI     41.     29.     23.     12.      9.      9.      9.      0.      0.      0.
  74          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  75          KK   NUL
  76          KM   COMBINING WASHES AA, AF, M, & N TO REDUCE THE NO. OF FREE HYDROGRAPHS
  77          HC   4.

  78          KK     SH2
  79          KM   SUB-BASIN SH2
  80          BA    1.34
  81          LG     .15     .30    3.88     .33   18.60
  82          UI    279.   1054.   1827.   1719.   1099.    812.    549.    410.    266.    195.
  83          UI    136.    103.     56.     40.     40.     40.      0.      0.      0.      0.
  84          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  85          KK     RH4
  86          KM        WASH "H"
  87          RS       3    FLOW     -1
  88          RC    .045    .030    .045    7400   .0216
  89          RX    365     373     483     485     515     517     627     635
  90          RY     16      12      12      10      10      12      12      16
```

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

  91          KK    SH6
  92          KM   SUB-BASIN SH6
  93          BA    .42
  94          LG    .15     .34    4.15     .48     .90
  95          UI   120.    449.    733.    454.    325.    210.    148.     91.     64.     40.
  96          UI    28.     15.     15.     15.      0.      0.      0.      0.      0.      0.
  97          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  98          KK    CH8
  99          HC      2

 100          KK    SG2
 101          KM   SUB-BASIN SG2
 102          BA    .40
 103          LG    .15     .34    3.97     .34    1.40
 104          UI   130.    476.    721.    426.    296.    188.    123.     80.     51.     37.
 105          UI    15.     15.     15.      0.      0.      0.      0.      0.      0.      0.
 106          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 107          KK    SF2
 108          KM   SUB-BASIN SF2
 109          BA    .24
 110          LG    .15     .33    3.98     .34    7.20
 111          UI   122.    440.    414.    238.    139.     81.     50.     29.     14.     11.
 112          UI    11.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 113          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 114          KK    SV2
 115          KM   SUB-BASIN SV2
 116          BA   3.16
 117          LG    .15     .30    3.70     .25    9.10
 118          UI   328.    895.   1882.   2539.   3544.   2250.   1806.   1501.   1215.    908.
 119          UI   761.    607.    445.    371.    287.    247.    160.    160.    111.     63.
 120          UI    63.     63.     63.     63.      0.      0.      0.      0.      0.      0.
 121          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 122          KK    RV3
 123          KM         OX WASH
 124          RS      3    FLOW      -1
 125          RC   .045     .03    .045   11720   .0162
 126          RX   429     433     473     475     525     527     567     571
 127          RY    16      12      12      10      10      12      12      16

 128          KK    SV4
 129          KM   SUB-BASIN SV4
 130          BA    .74
 131          LG    .15     .32    4.16     .38    3.50
 132          UI    87.    296.    571.    811.    764.    502.    408.    320.    234.    194.
 133          UI   139.    105.     84.     67.     43.     43.     24.     17.     17.     17.
 134          UI    17.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 135          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
```

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

 136          KK     CV6
 137          HC       2

 138          KK     RV8
 139          KM        OX WASH U/S OF HWY 60
 140          RS       1    FLOW      -1
 141          RC    .045     .03    .045    2700    .011
 142          RX     429     433     473     475     525     527     567     571
 143          RY      16      12      12      10      10      12      12      16

 144          KK    SV10
 145          KM   SUB-BASIN SV10
 146          BA    1.72
 147          LG     .15     .32    3.86     .33    7.50
 148          UI    208.    742.   1387.   2030.   1674.   1163.    937.    727.    524.    434.
 149          UI    303.    240.    179.    141.    102.     93.     40.     40.     40.     40.
 150          UI     40.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 151          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 152          KK    CV12
 153          HC       2

 154          KK    RV14
 155          KM        OX WASH U/S OF HWY 60
 156          RS       1    FLOW      -1
 157          RC    .045     .03    .045    5100   .0157
 158          RX     429     433     473     475     525     527     567     571
 159          RY      16      12      12      10      10      12      12      16

 160          KK    SV16
 161          KM   SUB-BASIN SV16
 162          BA     .48
 163          LG     .15     .33    4.20     .45    4.30
 164          UI    185.    668.    880.    503.    323.    208.    124.     82.     49.     27.
 165          UI     19.     19.      0.      0.      0.      0.      0.      0.      0.      0.
 166          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 167          KK    CV18
 168          HC       2

 169          KK    RV19
 170          KM        OX WASH D/S OF HWY 60
 171          RS       1    FLOW      -1
 172          RC    .045     .03    .045    5100   .0157
 173          RX     458     462     482     485     515     518     538     542
 174          RY      17      13      13      10      10      13      13      17

 175          KK    SV20
 176          KM   SUB-BASIN SV20
 177          BA     .32
 178          LG     .15     .29    3.64     .28    6.00
 179          UI     70.    264.    462.    395.    261.    190.    128.     93.     61.     44.
 180          UI     30.     25.     10.     10.     10.     10.      0.      0.      0.      0.
 181          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 182          KK   SV22
 183          KM   SUB-BASIN SV22
 184          BA    .19
 185          LG    .15     .32    3.79     .31    3.30
 186          UI   125.    431.    291.    170.     96.     52.     29.     15.      9.      0.
 187          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 188          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 189          KK   CV24
 190          HC      3

 191          KK   NUL
 192          KM   COMBINING WASHES H, G, F, & V TO REDUCE THE NO. OF FREE HYDROGRAPHS
 193          HC   4.

 194          KK    SS2
 195          KM   SUB-BASIN SS2
 196          BA   4.60
 197          LG    .15     .31    3.69     .29    8.80
 198          UI   237.    237.    454.    820.   1194.   1490.   1712.   1919.   2408.   2726.
 199          UI  1786.   1511.   1378.   1255.   1149.   1045.    942.    843.    726.    617.
 200          UI   573.    541.    495.    403.    360.    302.    286.    259.    253.    181.
 201          UI   181.    181.    128.    116.    116.    116.    116.     68.     45.     45.
 202          UI    45.     45.     45.     45.     45.     45.     45.     45.     45.     45.
 203          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 204          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 205          KK    RS4
 206          KM       LITTLE SAN DOMINGO WASH
 207          RS      2    FLOW     -1
 208          RC   .045     .03    .045    8400   .0131
 209          RX   439     443     488     490     510     512     557     561
 210          RY    16      12      12      10      10      12      12      16

 211          KK    SS6
 212          KM   SUB-BASIN SS6
 213          BA   1.60
 214          LG    .15     .30    4.18     .46     .00
 215          UI   142.    291.    674.    963.   1222.   1524.    953.    795.    681.    573.
 216          UI   462.    361.    320.    260.    197.    167.    145.    109.     96.     69.
 217          UI    69.     55.     27.     27.     27.     27.     27.     27.     27.      0.
 218          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 219          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 220          KK    CS8
 221          HC      2

 222          KK   RS10
 223          KM       LITTLE SAN DOMINGO WASH
 224          RS      1    FLOW     -1
 225          RC   .045     .03    .045    6400   .0172
 226          RX   429     435     475     480     520     525     565     571
 227          RY    17      13      13      10      10      13      13      17
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 228          KK   SS12
 229          KM   SUB-BASIN SS12
 230          BA    .86
 231          LG    .15     .31    4.15     .47     .00
 232          UI   108.    411.    739.   1104.    773.    579.    461.    341.    259.    201.
 233          UI   140.    113.     83.     59.     53.     30.     21.     21.     21.     21.
 234          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 235          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 236          KK   SS14
 237          KM   SUB-BASIN SS14
 238          BA   1.31
 239          LG    .15     .30    3.81     .61     .00
 240          UI   330.   1257.   2181.   1453.   1040.    707.    498.    318.    221.    150.
 241          UI   110.     55.     43.     43.     43.      0.      0.      0.      0.      0.
 242          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 243          KK   CS16
 244          HC      3

 245          KK   RS18
 246          KM       LITTLE SAN DOMINGO WASH
 247          RS      1    FLOW     -1
 248          RC   .045     .03    .045    3200   .0156
 249          RX   433     437     477     480     520     523     563     567
 250          RY    17      13      13      10      10      13      13      17

 251          KK   SS20
 252          KM   SUB-BASIN SS20
 253          BA    .41
 254          LG    .15     .34    3.86     .58     .00
 255          UI   193.    687.    732.    415.    249.    150.     90.     54.     32.     18.
 256          UI    18.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 257          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 258          KK   CS22
 259          HC      2
 260          ZZ
```

SCHEMATIC DIAGRAM OF STREAM NETWORK

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

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

21        SAA5
             .
             .
29           .       SAA10
             .          .
             .          .
36      CAA12............
             V
             V
39      RAA14
             .
             .
45           .       SAA15
             .          .
             .          .
51      CAA17............
             .
             .
54           .         SAF
             .          .
             .          .
61           .          .          SM
             .          .           .
             .          .           .
68           .          .           .          SN
             .          .           .           .
             .          .           .           .
75      NUL  ...................................
             .
             .
78           .         SH2
             .           V
             .           V
85           .         RH4
             .          .
             .          .
91           .          .        SH6
             .          .         .
             .          .         .
98           .         CH8............
             .          .
             .          .
100          .          .        SG2
             .          .         .
             .          .         .
107          .          .          .        SF2
             .          .          .         .
             .          .          .         .
114          .          .          .         .        SV2
             .          .          .         .         V
             .          .          .         .         V
122          .          .          .         .        RV3
             .          .          .         .         .
             .          .          .         .         .
128          .          .          .         .         .        SV4
             .          .          .         .         .         .
             .          .          .         .         .         .
136          .          .          .         .        CV6............
             .          .          .         .         V
```

```
                                                  V
138                                              RV8
                                                  .
                                                  .
                                                  .          SV10
                                                  .            .
                                                  .            .
152                                           CV12............
                                                  V
                                                  V
154                                              RV14
                                                  .
                                                  .
160                                                .          SV16
                                                  .            .
                                                  .            .
167                                           CV18............
                                                  V
                                                  V
169                                              RV19
                                                  .
                                                  .
175                                                .          SV20
                                                  .            .
                                                  .            .
182                                                .            .          SV22
                                                  .            .            .
                                                  .            .            .
189                                           CV24......................
                                                  .
                                                  .
191                 NUL ...............................
                      .
                      .
194                 .     SS2
                      .     V
                      .     V
205                 .     RS4
                      .     .
                      .     .
211                 .     .       SS6
                      .     .       .
                      .     .       .
220                 .     CS8............
                      .     V
                      .     V
222                 .     RS10
                      .     .
                      .     .
228                 .     .       SS12
                      .     .       .
                      .     .       .
236                 .     .       .       SS14
                      .     .       .        .
                      .     .       .        .
243                 .     CS16......................
                      .     V
                      .     V
245                 .     RS18
                      .     .
                      .     .
251                 .     .       SS20
                      .     .       .
                      .     .       .
258                 .     CS22............
```

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

```
****************************************                    ****************************************
*                                      *                    *                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *                    *   U.S. ARMY CORPS OF ENGINEERS       *
*            FEBRUARY 1981             *                    *  THE HYDROLOGIC ENGINEERING CENTER   *
*          REVISED 02 AUG 88           *                    *          609 SECOND STREET           *
*                                      *                    *       DAVIS, CALIFORNIA 95616        *
*  RUN DATE  10/13/1992  TIME  14:24:35 *                    *           (916) 551-1748             *
*                                      *                    *                                      *
****************************************                    ****************************************
```

```
                         WICKENBURG ADMS - CONTRACT FCD 89-79
                         WASHES AA(POWDER HOUSE), M, N
                         WASHES H, G, F, V(OX WASH), & S(LITTLE SAN DOMINGO)
                         SCS TYPE II STORM :100YR - 24 HR: PHOENIX MOUNTAIN S-GRAPH
                         AERIAL REDUCTION FACTORS PER NWS HYDRO-40
                         NMIN = 6 min
                         E1-25 ; 25-YEAR EVENT

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

   IT          HYDROGRAPH TIME DATA
                      NMIN          6  MINUTES IN COMPUTATION INTERVAL
                     IDATE      1   0  STARTING DATE
                     ITIME       0000  STARTING TIME
                        NQ        300  NUMBER OF HYDROGRAPH ORDINATES
                    NDDATE      2   0  ENDING DATE
                    NDTIME       0554  ENDING TIME
                     ICENT         19  CENTURY MARK

               COMPUTATION INTERVAL     .10 HOURS
                    TOTAL TIME BASE   29.90 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       3.43  PRECIPITATION DEPTH
                      TRDA        .01  TRANSPOSITION DRAINAGE AREA

12 PI            PRECIPITATION PATTERN
                    .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                    .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                    .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                    .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                    .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                    .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                    .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                    .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                    .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                    .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                    .00       .00       .00       .00       .00       .01       .01       .01       .01       .01
                    .01       .01       .01       .01       .01       .08       .08       .08       .08       .08
                    .01       .01       .01       .01       .01       .01       .01       .01       .01       .01
```

.01	.01	.01	.01	.01	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

17 JD INDEX STORM NO. 2

STRM 3.36 PRECIPITATION DEPTH

TRDA 3.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.08	.08	.08	.08	.08
.01	.01	.01	.01	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
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18 JD INDEX STORM NO. 3

STRM 3.29 PRECIPITATION DEPTH

TRDA 10.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
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.00	.00	.00	.00	.00	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.08	.08	.08	.08	.08
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19 JD INDEX STORM NO. 4

STRM 3.16 PRECIPITATION DEPTH

TRDA 20.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
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.01	.01	.01	.01	.01	.08	.08	.08	.08	.08
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20 JD INDEX STORM NO. 5

STRM 3.09 PRECIPITATION DEPTH

TRDA 30.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
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.01	.01	.01	.01	.01	.08	.08	.08	.08	.08
.01	.01	.01	.01	.01	.01	.01	.01	.01	.01
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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	SAA5	1101.	12.20	159.	44.	35.	1.33		
HYDROGRAPH AT	SAA10	427.	12.10	51.	13.	11.	.50		
2 COMBINED AT	CAA12	1508.	12.20	209.	57.	45.	1.83		
ROUTED TO	RAA14	1501.	12.20	209.	57.	45.	1.83	1.86	12.20
HYDROGRAPH AT	SAA15	144.	12.00	16.	5.	4.	.12		
2 COMBINED AT	CAA17	1564.	12.20	225.	61.	49.	1.95		
HYDROGRAPH AT	SAF	319.	12.10	39.	11.	9.	.30		
HYDROGRAPH AT	SM	295.	12.10	37.	10.	8.	.30		
HYDROGRAPH AT	SN	325.	12.10	42.	12.	9.	.33		
4 COMBINED AT	NUL	2439.	12.10	341.	93.	75.	2.88		
HYDROGRAPH AT	SH2	1301.	12.10	171.	49.	40.	1.34		
ROUTED TO	RH4	1054.	12.40	171.	49.	40.	1.34	12.22	12.40
HYDROGRAPH AT	SH6	326.	12.10	34.	9.	7.	.42		
2 COMBINED AT	CH8	1179.	12.40	204.	58.	46.	1.76		
HYDROGRAPH AT	SG2	380.	12.10	39.	10.	8.	.40		
HYDROGRAPH AT	SF2	251.	12.00	26.	7.	6.	.24		
HYDROGRAPH AT	SV2	2494.	12.20	383.	103.	83.	3.16		
ROUTED TO	RV3	2179.	12.50	382.	103.	83.	3.16	12.73	12.50

HYDROGRAPH AT	SV4	531.	12.20	71.	19.	15.	.74		
2 COMBINED AT	CV6	2455.	12.50	450.	121.	97.	3.90		
ROUTED TO	RV8	2389.	12.50	450.	121.	97.	3.90	13.13	12.60
HYDROGRAPH AT	SV10	1360.	12.20	188.	50.	40.	1.72		
2 COMBINED AT	CV12	3099.	12.40	629.	169.	136.	5.62		
ROUTED TO	RV14	3010.	12.60	629.	169.	136.	5.62	13.21	12.60
HYDROGRAPH AT	SV16	416.	12.10	43.	11.	9.	.48		
2 COMBINED AT	CV18	3084.	12.50	669.	179.	144.	6.10		
ROUTED TO	RV19	3036.	12.60	669.	179.	144.	6.10	14.47	12.60
HYDROGRAPH AT	SV20	319.	12.10	37.	10.	8.	.32		
HYDROGRAPH AT	SV22	214.	12.00	20.	5.	4.	.19		
3 COMBINED AT	CV24	3116.	12.60	722.	193.	156.	6.61		
4 COMBINED AT	NUL	4215.	12.50	975.	264.	212.	9.01		
HYDROGRAPH AT	SS2	2106.	12.60	528.	143.	115.	4.60		
ROUTED TO	RS4	1968.	12.90	528.	143.	115.	4.60	13.59	12.90
HYDROGRAPH AT	SS6	849.	12.30	133.	33.	27.	1.60		
2 COMBINED AT	CS8	2302.	12.80	653.	174.	140.	6.20		
ROUTED TO	RS10	2181.	12.90	652.	174.	140.	6.20	13.22	13.00
HYDROGRAPH AT	SS12	563.	12.20	70.	18.	14.	.86		
HYDROGRAPH AT	SS14	893.	12.10	93.	23.	19.	1.31		
3 COMBINED AT									

+	CS16	2302.	12.90	802.	212.	170.	8.37		
ROUTED TO +	RS18	2279.	13.00	802.	212.	170.	8.37	13.43	13.00
HYDROGRAPH AT +	SS20	304.	12.10	29.	7.	6.	.41		
2 COMBINED AT +	CS22	2279.	13.00	828.	218.	175.	8.78		

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

EAST TRIBUTARIES AREA
NMIN = 6
50-YEAR

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****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*            FEBRUARY 1981             *
*           REVISED 02 AUG 88          *
*                                      *
*  RUN DATE  10/13/1992  TIME  14:25:34 *
*                                      *
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*                                      *
*    U.S. ARMY CORPS OF ENGINEERS      *
*  THE 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       WICKENBURG ADMS - CONTRACT FCD 89-79
  2           ID       WASHES AA(POWDER HOUSE), M, N
  3           ID       WASHES H, G, F, V(OX WASH), & S(LITTLE SAN DOMINGO)
  4           ID       SCS TYPE II STORM :100YR - 24 HR: PHOENIX MOUNTAIN S-GRAPH
  5           ID       AERIAL REDUCTION FACTORS PER NWS HYDRO-40
  6           ID       NMIN = 6 min
  7           ID       E1-50 ; 50-YEAR EVENT
              *DIAGRAM
  8           IT       6                    300
  9           IO       5
 10           IN      30
 11           JD    3.84     .01
 12           PC    .000    .005    .011    .016    .022    .028    .035    .041    .048    .056
 13           PC    .068    .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           JD    3.76     3.0
 18           JD    3.69     10.
 19           JD    3.53    20.0
 20           JD    3.46    30.0

 21           KK    SAA5
 22           KM   SUB-BASIN AA5
 23           BA    1.33
 24           LG     .15     .32    3.70     .29   10.90
 25           UI    156.    526.   1018.   1438.   1385.    903.    735.    579.    422.    349.
 26           UI    254.    190.    154.    120.     80.     76.     46.     30.     30.     30.
 27           UI     30.     30.      0.      0.      0.      0.      0.      0.      0.      0.
 28           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 29           KK   SAA10
 30           KM   SUB-BASIN AA10
 31           BA     .50
 32           LG     .15     .33    3.93     .33    3.10
 33           UI     87.    331.    563.    690.    415.    321.    230.    168.    120.     85.
 34           UI     62.     44.     35.     20.     14.     14.     14.      0.      0.      0.
 35           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 36           KK   CAA12
 37           KM        COMBINE HYDROGRAPH SAA5 & SAA10
 38           HC       2

 39           KK   RAA14
 40           KM        ROUTE HYDROGRAPH CAA12 THROUGH SAA15
 41           RS       1    FLOW      -1
 42           RC   0.030   0.015   0.030    4000  0.0199
 43           RX       0       0      10      10      40      40      50      50
 44           RY       5       1      .5       0       0      .5       1       5
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  45          KK   SAA15
  46          KM   SUB-BASIN AA15
  47          BA     .12
  48          LG     .12     .30    4.21     .40   23.50
  49          UI    137.    329.    164.     78.     37.     17.      8.      0.      0.      0.
  50          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  51          KK   CAA17
  52          KM        COMBINE HYDROGRAPH RAA14 & SAA15
  53          HC       2

  54          KK     SAF
  55          KM   SUB-BASIN AF
  56          BA     .30
  57          LG     .15     .28    3.72     .26   14.50
  58          UI     71.    269.    476.    345.    241.    169.    117.     78.     56.     38.
  59          UI     24.     17.     10.     10.     10.      0.      0.      0.      0.      0.
  60          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  61          KK      SM
  62          KM   SUB-BASIN M
  63          BA     .30
  64          LG     .15     .30    3.51     .26   10.80
  65          UI     54.    206.    351.    411.    248.    191.    134.    100.     68.     51.
  66          UI     35.     25.     22.      9.      8.      8.      8.      0.      0.      0.
  67          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  68          KK      SN
  69          KM   SUB-BASIN N
  70          BA     .33
  71          LG     .15     .29    3.72     .25   12.30
  72          UI     58.    220.    375.    455.    274.    211.    151.    111.     78.     56.
  73          UI     41.     29.     23.     12.      9.      9.      9.      0.      0.      0.
  74          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  75          KK   NUL
  76          KM   COMBINING WASHES AA, AF, M, & N TO REDUCE THE NO. OF FREE HYDROGRAPHS
  77          HC   4.

  78          KK     SH2
  79          KM   SUB-BASIN SH2
  80          BA    1.34
  81          LG     .15     .30    3.88     .33   18.60
  82          UI    279.   1054.   1827.   1719.   1099.    812.    549.    410.    266.    195.
  83          UI    136.    103.     56.     40.     40.     40.      0.      0.      0.      0.
  84          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  85          KK     RH4
  86          KM        WASH "H"
  87          RS       3    FLOW      -1
  88          RC    .045    .030    .045    7400   .0216
  89          RX     365     373     483     485     515     517     627     635
  90          RY      16      12      12      10      10      12      12      16
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  91          KK    SH6
  92          KM   SUB-BASIN SH6
  93          BA    .42
  94          LG    .15     .34    4.15     .48     .90
  95          UI   120.    449.    733.    454.    325.    210.    148.     91.     64.     40.
  96          UI    28.     15.     15.     15.      0.      0.      0.      0.      0.      0.
  97          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  98          KK    CH8
  99          HC      2

 100          KK    SG2
 101          KM   SUB-BASIN SG2
 102          BA    .40
 103          LG    .15     .34    3.97     .34    1.40
 104          UI   130.    476.    721.    426.    296.    188.    123.     80.     51.     37.
 105          UI    15.     15.     15.      0.      0.      0.      0.      0.      0.      0.
 106          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 107          KK    SF2
 108          KM   SUB-BASIN SF2
 109          BA    .24
 110          LG    .15     .33    3.98     .34    7.20
 111          UI   122.    440.    414.    238.    139.     81.     50.     29.     14.     11.
 112          UI    11.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 113          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 114          KK    SV2
 115          KM   SUB-BASIN SV2
 116          BA   3.16
 117          LG    .15     .30    3.70     .25    9.10
 118          UI   328.    895.   1882.   2539.   3544.   2250.   1806.   1501.   1215.    908.
 119          UI   761.    607.    445.    371.    287.    247.    160.    160.    111.     63.
 120          UI    63.     63.     63.     63.      0.      0.      0.      0.      0.      0.
 121          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 122          KK    RV3
 123          KM         OX WASH
 124          RS      3    FLOW      -1
 125          RC   .045     .03    .045   11720   .0162
 126          RX   429     433     473     475     525     527     567     571
 127          RY    16      12      12      10      10      12      12      16

 128          KK    SV4
 129          KM   SUB-BASIN SV4
 130          BA    .74
 131          LG    .15     .32    4.16     .38    3.50
 132          UI    87.    296.    571.    811.    764.    502.    408.    320.    234.    194.
 133          UI   139.    105.     84.     67.     43.     43.     24.     17.     17.     17.
 134          UI    17.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 135          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 136          KK     CV6
 137          HC       2

 138          KK     RV8
 139          KM        OX WASH U/S OF HWY 60
 140          RS       1    FLOW      -1
 141          RC    .045     .03    .045    2700    .011
 142          RX     429     433     473     475     525     527     567     571
 143          RY      16      12      12      10      10      12      12      16

 144          KK    SV10
 145          KM   SUB-BASIN SV10
 146          BA    1.72
 147          LG     .15     .32    3.86     .33    7.50
 148          UI    208.    742.   1387.   2030.   1674.   1163.    937.    727.    524.    434.
 149          UI    303.    240.    179.    141.    102.     93.     40.     40.     40.     40.
 150          UI     40.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 151          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 152          KK    CV12
 153          HC       2

 154          KK    RV14
 155          KM        OX WASH U/S OF HWY 60
 156          RS       1    FLOW      -1
 157          RC    .045     .03    .045    5100   .0157
 158          RX     429     433     473     475     525     527     567     571
 159          RY      16      12      12      10      10      12      12      16

 160          KK    SV16
 161          KM   SUB-BASIN SV16
 162          BA     .48
 163          LG     .15     .33    4.20     .45    4.30
 164          UI    185.    668.    880.    503.    323.    208.    124.     82.     49.     27.
 165          UI     19.     19.      0.      0.      0.      0.      0.      0.      0.      0.
 166          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 167          KK    CV18
 168          HC       2

 169          KK    RV19
 170          KM        OX WASH D/S OF HWY 60
 171          RS       1    FLOW      -1
 172          RC    .045     .03    .045    5100   .0157
 173          RX     458     462     482     485     515     518     538     542
 174          RY      17      13      13      10      10      13      13      17

 175          KK    SV20
 176          KM   SUB-BASIN SV20
 177          BA     .32
 178          LG     .15     .29    3.64     .28    6.00
 179          UI     70.    264.    462.    395.    261.    190.    128.     93.     61.     44.
 180          UI     30.     25.     10.     10.     10.     10.      0.      0.      0.      0.
 181          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 182          KK    SV22
 183          KM   SUB-BASIN SV22
 184          BA     .19
 185          LG     .15     .32    3.79     .31    3.30
 186          UI    125.    431.    291.    170.     96.     52.     29.     15.      9.      0.
 187          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 188          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 189          KK    CV24
 190          HC       3

 191          KK   NUL
 192          KM   COMBINING WASHES H, G, F, & V TO REDUCE THE NO. OF FREE HYDROGRAPHS
 193          HC   4.

 194          KK     SS2
 195          KM   SUB-BASIN SS2
 196          BA    4.60
 197          LG     .15     .31    3.69     .29    8.80
 198          UI    237.    237.    454.    820.   1194.   1490.   1712.   1919.   2408.   2726.
 199          UI   1786.   1511.   1378.   1255.   1149.   1045.    942.    843.    726.    617.
 200          UI    573.    541.    495.    403.    360.    302.    286.    259.    253.    181.
 201          UI    181.    181.    128.    116.    116.    116.    116.     68.     45.     45.
 202          UI     45.     45.     45.     45.     45.     45.     45.     45.     45.     45.
 203          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 204          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 205          KK     RS4
 206          KM        LITTLE SAN DOMINGO WASH
 207          RS       2    FLOW      -1
 208          RC    .045     .03    .045    8400   .0131
 209          RX     439     443     488     490     510     512     557     561
 210          RY      16      12      12      10      10      12      12      16

 211          KK     SS6
 212          KM   SUB-BASIN SS6
 213          BA    1.60
 214          LG     .15     .30    4.18     .46     .00
 215          UI    142.    291.    674.    963.   1222.   1524.    953.    795.    681.    573.
 216          UI    462.    361.    320.    260.    197.    167.    145.    109.     96.     69.
 217          UI     69.     55.     27.     27.     27.     27.     27.     27.     27.      0.
 218          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 219          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 220          KK     CS8
 221          HC       2

 222          KK    RS10
 223          KM        LITTLE SAN DOMINGO WASH
 224          RS       1    FLOW      -1
 225          RC    .045     .03    .045    6400   .0172
 226          RX     429     435     475     480     520     525     565     571
 227          RY      17      13      13      10      10      13      13      17
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 228          KK   SS12
 229          KM   SUB-BASIN SS12
 230          BA    .86
 231          LG    .15     .31    4.15     .47     .00
 232          UI   108.    411.    739.   1104.    773.    579.    461.    341.    259.    201.
 233          UI   140.    113.     83.     59.     53.     30.     21.     21.     21.     21.
 234          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 235          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 236          KK   SS14
 237          KM   SUB-BASIN SS14
 238          BA   1.31
 239          LG    .15     .30    3.81     .61     .00
 240          UI   330.   1257.   2181.   1453.   1040.    707.    498.    318.    221.    150.
 241          UI   110.     55.     43.     43.     43.      0.      0.      0.      0.      0.
 242          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 243          KK   CS16
 244          HC      3

 245          KK   RS18
 246          KM       LITTLE SAN DOMINGO WASH
 247          RS      1    FLOW     -1
 248          RC   .045     .03    .045    3200   .0156
 249          RX   433     437     477     480     520     523     563     567
 250          RY    17      13      13      10      10      13      13      17

 251          KK   SS20
 252          KM   SUB-BASIN SS20
 253          BA    .41
 254          LG    .15     .34    3.86     .58     .00
 255          UI   193.    687.    732.    415.    249.    150.     90.     54.     32.     18.
 256          UI    18.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 257          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 258          KK   CS22
 259          HC      2
 260          ZZ
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SCHEMATIC DIAGRAM OF STREAM NETWORK

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

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

 21     SAA5
         .
         .
 29      .      SAA10
         .          .
         .          .
 36    CAA12............
         V
         V
 39    RAA14
         .
         .
 45      .      SAA15
         .          .
         .          .
 51    CAA17............
         .
         .
 54      .        SAF
         .          .
         .          .
 61      .          .         SM
         .          .          .
         .          .          .
 68      .          .          .         SN
         .          .          .          .
         .          .          .          .
 75    NUL  ................................
         .
         .
 78      .        SH2
         .          V
         .          V
 85      .        RH4
         .          .
         .          .
 91      .          .        SH6
         .          .          .
         .          .          .
 98      .        CH8............
         .          .
         .          .
100      .          .        SG2
         .          .          .
         .          .          .
107      .          .          .        SF2
         .          .          .          .
         .          .          .          .
114      .          .          .          .        SV2
         .          .          .          .          V
         .          .          .          .          V
122      .          .          .          .        RV3
         .          .          .          .          .
         .          .          .          .          .
         .          .          .          .          .        SV4
         .          .          .          .          .          .
         .          .          .          .          .          .
136      .          .          .          .        CV6............
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                                                V
138                                            RV8
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                                                .        SV10
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152                                            CV12.........
                                                V
                                                V
154                                            RV14
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160                                             .        SV16
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167                                            CV18.........
                                                V
                                                V
169                                            RV19
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175                                             .        SV20
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182                                             .          .        SV22
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189                                            CV24.......................
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191                 NUL ...............................
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194                 SS2
                     V
                     V
205                 RS4
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211                  .        SS6
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220                 CS8.........
                     V
                     V
222                 RS10
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228                  .        SS12
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                     .          .
236                  .          .        SS14
                     .          .          .
                     .          .          .
243                 CS16........................
                     V
                     V
245                 RS18
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                     .
                     .        SS20
                     .          .
                     .          .
258                 CS22.........
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(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

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*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*            FEBRUARY 1981              *
*          REVISED 02 AUG 88            *
*                                       *
*  RUN DATE  10/13/1992  TIME  14:25:34 *
*                                       *
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*****************************************
*                                       *
*    U.S. ARMY CORPS OF ENGINEERS       *
*  THE HYDROLOGIC ENGINEERING CENTER    *
*          609 SECOND STREET            *
*       DAVIS, CALIFORNIA 95616         *
*           (916) 551-1748              *
*                                       *
*****************************************
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                    WICKENBURG ADMS - CONTRACT FCD 89-79
                    WASHES AA(POWDER HOUSE), M, N
                    WASHES H, G, F, V(OX WASH), & S(LITTLE SAN DOMINGO)
                    SCS TYPE II STORM :100YR - 24 HR: PHOENIX MOUNTAIN S-GRAPH
                    AERIAL REDUCTION FACTORS PER NWS HYDRO-40
                    NMIN = 6 min
                    E1-50 ; 50-YEAR EVENT

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

   IT        HYDROGRAPH TIME DATA
                 NMIN          6  MINUTES IN COMPUTATION INTERVAL
                IDATE      1   0  STARTING DATE
                ITIME       0000  STARTING TIME
                   NQ        300  NUMBER OF HYDROGRAPH ORDINATES
               NDDATE      2   0  ENDING DATE
               NDTIME       0554  ENDING TIME
               ICENT          19  CENTURY MARK

            COMPUTATION INTERVAL     .10 HOURS
                 TOTAL TIME BASE   29.90 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        3.84  PRECIPITATION DEPTH
                TRDA         .01  TRANSPOSITION DRAINAGE AREA

12 PI          PRECIPITATION PATTERN
               .00     .00     .00     .00     .00     .00     .00     .00     .00     .00
               .00     .00     .00     .00     .00     .00     .00     .00     .00     .00
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               .01     .01     .01     .01     .01     .01     .01     .01     .01     .01
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17 JD INDEX STORM NO. 2

STRM 3.76 PRECIPITATION DEPTH

TRDA 3.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

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18 JD INDEX STORM NO. 3

STRM 3.69 PRECIPITATION DEPTH

TRDA 10.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

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19 JD INDEX STORM NO. 4

STRM 3.53 PRECIPITATION DEPTH

TRDA 20.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

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20 JD INDEX STORM NO. 5

STRM 3.46 PRECIPITATION DEPTH

TRDA 30.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

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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	SAA5	1286.	12.20	186.	51.	41.	1.33		
HYDROGRAPH AT	SAA10	507.	12.10	60.	16.	12.	.50		
2 COMBINED AT	CAA12	1768.	12.20	245.	66.	53.	1.83		
ROUTED TO	RAA14	1765.	12.20	245.	66.	53.	1.83	2.05	12.20
HYDROGRAPH AT	SAA15	169.	12.00	18.	5.	4.	.12		
2 COMBINED AT	CAA17	1839.	12.20	263.	71.	57.	1.95		
HYDROGRAPH AT	SAF	369.	12.10	46.	13.	10.	.30		
HYDROGRAPH AT	SM	343.	12.10	44.	12.	10.	.30		
HYDROGRAPH AT	SN	377.	12.10	50.	14.	11.	.33		
4 COMBINED AT	NUL	2864.	12.10	401.	109.	88.	2.88		
HYDROGRAPH AT	SH2	1521.	12.10	199.	57.	46.	1.34		
ROUTED TO	RH4	1237.	12.40	199.	57.	46.	1.34	12.33	12.40
HYDROGRAPH AT	SH6	403.	12.10	42.	11.	8.	.42		
2 COMBINED AT	CH8	1394.	12.30	240.	67.	54.	1.76		
HYDROGRAPH AT	SG2	453.	12.10	47.	12.	9.	.40		
HYDROGRAPH AT	SF2	298.	12.00	31.	8.	7.	.24		
HYDROGRAPH AT	SV2	2902.	12.20	453.	122.	98.	3.16		
ROUTED TO	RV3	2583.	12.50	453.	122.	98.	3.16	12.96	12.50

HYDROGRAPH AT	SV4	637.	12.20	86.	22.	18.	.74		
2 COMBINED AT	CV6	2917.	12.50	535.	143.	115.	3.90		
ROUTED TO	RV8	2874.	12.50	535.	143.	115.	3.90	13.39	12.50
HYDROGRAPH AT	SV10	1606.	12.20	221.	59.	47.	1.72		
2 COMBINED AT	CV12	3738.	12.40	747.	200.	161.	5.62		
ROUTED TO	RV14	3642.	12.50	747.	200.	161.	5.62	13.50	12.50
HYDROGRAPH AT	SV16	506.	12.10	52.	14.	11.	.48		
2 COMBINED AT	CV18	3734.	12.50	796.	213.	171.	6.10		
ROUTED TO	RV19	3675.	12.60	796.	213.	171.	6.10	14.90	12.60
HYDROGRAPH AT	SV20	372.	12.10	44.	12.	9.	.32		
HYDROGRAPH AT	SV22	252.	12.00	24.	6.	5.	.19		
3 COMBINED AT	CV24	3773.	12.60	859.	229.	184.	6.61		
4 COMBINED AT	NUL	5104.	12.50	1160.	312.	251.	9.01		
HYDROGRAPH AT	SS2	2467.	12.60	618.	167.	134.	4.60		
ROUTED TO	RS4	2323.	12.80	618.	167.	134.	4.60	13.84	12.90
HYDROGRAPH AT	SS6	1041.	12.30	164.	41.	33.	1.60		
2 COMBINED AT	CS8	2756.	12.80	773.	205.	165.	6.20		
ROUTED TO	RS10	2632.	12.90	772.	205.	165.	6.20	13.50	12.90
HYDROGRAPH AT	SS12	692.	12.20	87.	22.	17.	.86		
HYDROGRAPH AT	SS14	1127.	12.10	118.	30.	24.	1.31		
3 COMBINED AT									

+		CS16	2786.	12.90	964.	253.	204.	8.37		
	ROUTED TO									
+		RS18	2766.	12.90	963.	253.	204.	8.37		
									13.74	13.00
	HYDROGRAPH AT									
+		SS20	383.	12.10	37.	9.	7.	.41		
	2 COMBINED AT									
+		CS22	2847.	12.30	997.	262.	210.	8.78		

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

EAST TRIBUTARIES AREA
NMIN = 6
100-YEAR

```
****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
          FEBRUARY 1981                *
        REVISED 02 AUG 88              *
                                       *
* RUN DATE  10/13/1992  TIME  14:22:42 *
*                                      *
****************************************
```

```
****************************************
*                                      *
*   U.S. ARMY CORPS OF ENGINEERS       *
* THE 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       WICKENBURG ADMS - CONTRACT FCD 89-79
  2           ID       WASHES AA(POWDER HOUSE), M, N
  3           ID       WASHES H, G, F, V(OX WASH), & S(LITTLE SAN DOMINGO)
  4           ID       SCS TYPE II STORM :100YR - 24 HR: PHOENIX MOUNTAIN S-GRAPH
  5           ID       AERIAL REDUCTION FACTORS PER NWS HYDRO-40
  6           ID       NMIN = 6 min
  7           ID       E1-100 ; 100-YEAR EVENT
              *DIAGRAM
  8           IT       6                    300
  9           IO       5
 10           IN      30
 11           JD    4.25     .01
 12           PC    .000    .005    .011    .016    .022    .028    .035    .041    .048    .056
 13           PC    .068    .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           JD    4.17     3.0
 18           JD    4.08     10.
 19           JD    3.91    20.0

 20           KK    SAA5
 21           KM   SUB-BASIN AA5
 22           BA    1.33
 23           LG     .15     .32    3.70     .29   10.90
 24           UI    156.    526.   1018.   1438.   1385.    903.    735.    579.    422.    349.
 25           UI    254.    190.    154.    120.     80.     76.     46.     30.     30.     30.
 26           UI     30.     30.      0.      0.      0.      0.      0.      0.      0.      0.
 27           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 28           KK   SAA10
 29           KM   SUB-BASIN AA10
 30           BA     .50
 31           LG     .15     .33    3.93     .33    3.10
 32           UI     87.    331.    563.    690.    415.    321.    230.    168.    120.     85.
 33           UI     62.     44.     35.     20.     14.     14.     14.      0.      0.      0.
 34           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 35           KK   CAA12
 36           KM        COMBINE HYDROGRAPH SAA5 & SAA10
 37           HC       2

 38           KK   RAA14
 39           KM        ROUTE HYDROGRAPH CAA12 THROUGH SAA15
 40           RS       1    FLOW      -1
 41           RC   0.030   0.015   0.030    4000  0.0199
 42           RX       0       0      10      10      40      40      50      50
 43           RY       5       1      .5       0       0      .5       1       5

 44           KK   SAA15
 45           KM   SUB-BASIN AA15
 46           BA     .12
 47           LG     .12     .30    4.21     .40   23.50
 48           UI    137.    329.    164.     78.     37.     17.      8.      0.      0.      0.
 49           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
```

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

  50          KK   CAA17
  51          KM        COMBINE HYDROGRAPH RAA14 & SAA15
  52          HC       2

  53          KK     SAF
  54          KM   SUB-BASIN AF
  55          BA     .30
  56          LG     .15     .28    3.72     .26   14.50
  57          UI     71.    269.    476.    345.    241.    169.    117.     78.     56.     38.
  58          UI     24.     17.     10.     10.     10.      0.      0.      0.      0.      0.
  59          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  60          KK      SM
  61          KM   SUB-BASIN M
  62          BA     .30
  63          LG     .15     .30    3.51     .26   10.80
  64          UI     54.    206.    351.    411.    248.    191.    134.    100.     68.     51.
  65          UI     35.     25.     22.      9.      8.      8.      8.      0.      0.      0.
  66          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  67          KK      SN
  68          KM   SUB-BASIN N
  69          BA     .33
  70          LG     .15     .29    3.72     .25   12.30
  71          UI     58.    220.    375.    455.    274.    211.    151.    111.     78.     56.
  72          UI     41.     29.     23.     12.      9.      9.      9.      0.      0.      0.
  73          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  74          KK   NUL
  75          KM   COMBINING WASHES AA, AF, M, & N TO REDUCE THE NO. OF FREE HYDROGRAPHS
  76          HC   4.

  77          KK     SH2
  78          KM   SUB-BASIN SH2
  79          BA    1.34
  80          LG     .15     .30    3.88     .33   18.60
  81          UI    279.   1054.   1827.   1719.   1099.    812.    549.    410.    266.    195.
  82          UI    136.    103.     56.     40.     40.     40.      0.      0.      0.      0.
  83          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  84          KK     RH4
  85          KM        WASH "H"
  86          RS       3    FLOW      -1
  87          RC    .045    .030    .045    7400   .0216
  88          RX     365     373     483     485     515     517     627     635
  89          RY      16      12      12      10      10      12      12      16

  90          KK     SH6
  91          KM   SUB-BASIN SH6
  92          BA     .42
  93          LG     .15     .34    4.15     .48     .90
  94          UI    120.    449.    733.    454.    325.    210.    148.     91.     64.     40.
  95          UI     28.     15.     15.     15.      0.      0.      0.      0.      0.      0.
  96          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
```

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

 97           KK     CH8
 98           HC       2

 99           KK     SG2
100           KM   SUB-BASIN SG2
101           BA     .40
102           LG     .15     .34    3.97     .34    1.40
103           UI    130.    476.    721.    426.    296.    188.    123.     80.     51.     37.
104           UI     15.     15.     15.      0.      0.      0.      0.      0.      0.      0.
105           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

106           KK     SF2
107           KM   SUB-BASIN SF2
108           BA     .24
109           LG     .15     .33    3.98     .34    7.20
110           UI    122.    440.    414.    238.    139.     81.     50.     29.     14.     11.
111           UI     11.      0.      0.      0.      0.      0.      0.      0.      0.      0.
112           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

113           KK     SV2
114           KM   SUB-BASIN SV2
115           BA    3.16
116           LG     .15     .30    3.70     .25    9.10
117           UI    328.    895.   1882.   2539.   3544.   2250.   1806.   1501.   1215.    908.
118           UI    761.    607.    445.    371.    287.    247.    160.    160.    111.     63.
119           UI     63.     63.     63.     63.      0.      0.      0.      0.      0.      0.
120           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

121           KK     RV3
122           KM         OX WASH
123           RS       3    FLOW      -1
124           RC    .045     .03    .045   11720   .0162
125           RX    429     433     473     475     525     527     567     571
126           RY     16      12      12      10      10      12      12      16

127           KK     SV4
128           KM   SUB-BASIN SV4
129           BA     .74
130           LG     .15     .32    4.16     .38    3.50
131           UI     87.    296.    571.    811.    764.    502.    408.    320.    234.    194.
132           UI    139.    105.     84.     67.     43.     43.     24.     17.     17.     17.
133           UI     17.      0.      0.      0.      0.      0.      0.      0.      0.      0.
134           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

135           KK     CV6
136           HC       2

137           KK     RV8
138           KM        OX WASH U/S OF HWY 60
139           RS       1    FLOW      -1
140           RC    .045     .03    .045    2700    .011
141           RX    429     433     473     475     525     527     567     571
142           RY     16      12      12      10      10      12      12      16
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 143          KK   SV10
 144          KM   SUB-BASIN SV10
 145          BA    1.72
 146          LG    .15     .32    3.86     .33    7.50
 147          UI   208.    742.   1387.   2030.   1674.   1163.    937.    727.    524.    434.
 148          UI   303.    240.    179.    141.    102.     93.     40.     40.     40.     40.
 149          UI    40.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 150          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 151          KK   CV12
 152          HC      2

 153          KK   RV14
 154          KM       OX WASH U/S OF HWY 60
 155          RS      1    FLOW     -1
 156          RC   .045     .03    .045    5100   .0157
 157          RX   429     433     473     475     525     527     567     571
 158          RY    16      12      12      10      10      12      12      16

 159          KK   SV16
 160          KM   SUB-BASIN SV16
 161          BA    .48
 162          LG    .15     .33    4.20     .45    4.30
 163          UI   185.    668.    880.    503.    323.    208.    124.     82.     49.     27.
 164          UI    19.     19.      0.      0.      0.      0.      0.      0.      0.      0.
 165          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 166          KK   CV18
 167          HC      2

 168          KK   RV19
 169          KM       OX WASH D/S OF HWY 60
 170          RS      1    FLOW     -1
 171          RC   .045     .03    .045    5100   .0157
 172          RX   458     462     482     485     515     518     538     542
 173          RY    17      13      13      10      10      13      13      17

 174          KK   SV20
 175          KM   SUB-BASIN SV20
 176          BA    .32
 177          LG    .15     .29    3.64     .28    6.00
 178          UI    70.    264.    462.    395.    261.    190.    128.     93.     61.     44.
 179          UI    30.     25.     10.     10.     10.     10.      0.      0.      0.      0.
 180          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 181          KK   SV22
 182          KM   SUB-BASIN SV22
 183          BA    .19
 184          LG    .15     .32    3.79     .31    3.30
 185          UI   125.    431.    291.    170.     96.     52.     29.     15.      9.      0.
 186          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 187          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 188          KK    CV24
 189          HC       3

 190          KK   NUL
 191          KM   COMBINING WASHES H, G, F, & V TO REDUCE THE NO. OF FREE HYDROGRAPHS
 192          HC   4.

 193          KK     SS2
 194          KM   SUB-BASIN SS2
 195          BA    4.60
 196          LG     .15     .31    3.69     .29    8.80
 197          UI    237.    237.    454.    820.   1194.   1490.   1712.   1919.   2408.   2726.
 198          UI   1786.   1511.   1378.   1255.   1149.   1045.    942.    843.    726.    617.
 199          UI    573.    541.    495.    403.    360.    302.    286.    259.    253.    181.
 200          UI    181.    181.    128.    116.    116.    116.    116.     68.     45.     45.
 201          UI     45.     45.     45.     45.     45.     45.     45.     45.     45.     45.
 202          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 203          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 204          KK     RS4
 205          KM        LITTLE SAN DOMINGO WASH
 206          RS       2    FLOW      -1
 207          RC    .045     .03    .045    8400   .0131
 208          RX     439     443     488     490     510     512     557     561
 209          RY      16      12      12      10      10      12      12      16

 210          KK     SS6
 211          KM   SUB-BASIN SS6
 212          BA    1.60
 213          LG     .15     .30    4.18     .46     .00
 214          UI    142.    291.    674.    963.   1222.   1524.    953.    795.    681.    573.
 215          UI    462.    361.    320.    260.    197.    167.    145.    109.     96.     69.
 216          UI     69.     55.     27.     27.     27.     27.     27.     27.     27.      0.
 217          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 218          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 219          KK     CS8
 220          HC       2

 221          KK    RS10
 222          KM        LITTLE SAN DOMINGO WASH
 223          RS       1    FLOW      -1
 224          RC    .045     .03    .045    6400   .0172
 225          RX     429     435     475     480     520     525     565     571
 226          RY      17      13      13      10      10      13      13      17

 227          KK    SS12
 228          KM   SUB-BASIN SS12
 229          BA     .86
 230          LG     .15     .31    4.15     .47     .00
 231          UI    108.    411.    739.   1104.    773.    579.    461.    341.    259.    201.
 232          UI    140.    113.     83.     59.     53.     30.     21.     21.     21.     21.
 233          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 234          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  235         KK    SS14
  236         KM   SUB-BASIN SS14
  237         BA    1.31
  238         LG     .15     .30    3.81     .61     .00
  239         UI    330.   1257.   2181.   1453.   1040.    707.    498.    318.    221.    150.
  240         UI    110.     55.     43.     43.     43.      0.      0.      0.      0.      0.
  241         UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  242         KK    CS16
  243         HC       3

  244         KK    RS18
  245         KM        LITTLE SAN DOMINGO WASH
  246         RS       1    FLOW      -1
  247         RC    .045     .03    .045    3200   .0156
  248         RX     433     437     477     480     520     523     563     567
  249         RY      17      13      13      10      10      13      13      17

  250         KK    SS20
  251         KM   SUB-BASIN SS20
  252         BA     .41
  253         LG     .15     .34    3.86     .58     .00
  254         UI    193.    687.    732.    415.    249.    150.     90.     54.     32.     18.
  255         UI     18.      0.      0.      0.      0.      0.      0.      0.      0.      0.
  256         UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  257         KK    CS22
  258         HC       2
  259         ZZ
```

SCHEMATIC DIAGRAM OF STREAM NETWORK

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

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

 20       SAA5
           .
           .
 28        .       SAA10
           .          .
           .          .
 35      CAA12............
           V
           V
 38      RAA14
           .
           .
 44        .       SAA15
           .          .
           .          .
 50      CAA17............
           .
           .
 53        .        SAF
           .          .
           .          .
 60        .          .         SM
           .          .          .
           .          .          .
 67        .          .          .         SN
           .          .          .          .
           .          .          .          .
 74      NUL  ................................
           .
           .
 77        .        SH2
           .          V
           .          V
 84        .        RH4
           .          .
           .          .
 90        .          .        SH6
           .          .          .
           .          .          .
 97        .        CH8............
           .          .
           .          .
 99        .          .        SG2
           .          .          .
           .          .          .
106        .          .          .        SF2
           .          .          .          .
           .          .          .          .
113        .          .          .          .        SV2
           .          .          .          .         V
           .          .          .          .         V
121        .          .          .          .       RV3
           .          .          .          .         .
           .          .          .          .         .
 7         .          .          .          .         .        SV4
           .          .          .          .         .         .
           .          .          .          .         .         .
135        .          .          .          .       CV6............
           .          .          .          .         V
```

```
                                                  V
137                                              RV8
                                                   .
                                                   .
3                                                  .        SV10
                                                   .          .
                                                   .          .
151                                           CV12............
                                                  V
                                                  V
153                                           RV14
                                                   .
                                                   .
159                                                .        SV16
                                                   .          .
                                                   .          .
166                                           CV18............
                                                  V
                                                  V
168                                           RV19
                                                   .
                                                   .
174                                                .        SV20
                                                   .          .
                                                   .          .
181                                                .          .        SV22
                                                   .          .          .
                                                   .          .          .
188                                           CV24......................
                                                   .
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190                 NUL ...............................
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3                       .        SS2
                        .         V
                        .         V
204                     .        RS4
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210                     .         .        SS6
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219                     .        CS8............
                        .         V
                        .         V
221                     .       RS10
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227                     .         .       SS12
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235                     .         .          .       SS14
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242                     .       CS16......................
                        .         V
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244                     .       RS18
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1                       .         .       SS20
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257                     .       CS22............
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(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

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****************************************                    ****************************************
*                                      *                    *                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *                    *   U.S. ARMY CORPS OF ENGINEERS       *
          FEBRUARY 1981                *                    *  THE HYDROLOGIC ENGINEERING CENTER   *
        REVISED 02 AUG 88              *                    *         609 SECOND STREET            *
                                       *                    *      DAVIS, CALIFORNIA 95616         *
*  RUN DATE  10/13/1992  TIME  14:22:42 *                    *          (916) 551-1748              *
*                                      *                    *                                      *
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                         WICKENBURG ADMS - CONTRACT FCD 89-79
                         WASHES AA(POWDER HOUSE), M, N
                         WASHES H, G, F, V(OX WASH), & S(LITTLE SAN DOMINGO)
                         SCS TYPE II STORM :100YR - 24 HR: PHOENIX MOUNTAIN S-GRAPH
                         AERIAL REDUCTION FACTORS PER NWS HYDRO-40
                         NMIN = 6 min
                         E1-100 ; 100-YEAR EVENT

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

   IT          HYDROGRAPH TIME DATA
                      NMIN          6  MINUTES IN COMPUTATION INTERVAL
                     IDATE      1   0  STARTING DATE
                     ITIME       0000  STARTING TIME
                        NQ        300  NUMBER OF HYDROGRAPH ORDINATES
                    NDDATE      2   0  ENDING DATE
                    NDTIME       0554  ENDING TIME
                     ICENT         19  CENTURY MARK

               COMPUTATION INTERVAL     .10 HOURS
                    TOTAL TIME BASE   29.90 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       4.25  PRECIPITATION DEPTH
                      TRDA        .01  TRANSPOSITION DRAINAGE AREA

12 PI            PRECIPITATION PATTERN
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17 JD INDEX STORM NO. 2

STRM 4.17 PRECIPITATION DEPTH

TRDA 3.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

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18 JD INDEX STORM NO. 3

STRM 4.08 PRECIPITATION DEPTH

TRDA 10.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

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19 JD INDEX STORM NO. 4

STRM 3.91 PRECIPITATION DEPTH

TRDA 20.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

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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	SAA5	1476.	12.20	216.	59.	47.	1.33		
HYDROGRAPH AT	SAA10	587.	12.10	70.	18.	14.	.50		
2 COMBINED AT	CAA12	2034.	12.20	285.	77.	62.	1.83		
ROUTED TO	RAA14	2030.	12.20	285.	77.	62.	1.83	2.26	12.20
HYDROGRAPH AT	SAA15	194.	12.00	21.	6.	5.	.12		
2 COMBINED AT	CAA17	2114.	12.20	306.	83.	66.	1.95		
HYDROGRAPH AT	SAF	420.	12.10	53.	15.	12.	.30		
HYDROGRAPH AT	SM	390.	12.10	51.	14.	11.	.30		
HYDROGRAPH AT	SN	429.	12.10	57.	16.	13.	.33		
4 COMBINED AT	NUL	3291.	12.10	465.	126.	101.	2.88		
HYDROGRAPH AT	SH2	1742.	12.10	228.	65.	52.	1.34		
ROUTED TO	RH4	1432.	12.40	228.	65.	52.	1.34	12.46	12.40
HYDROGRAPH AT	SH6	480.	12.10	50.	13.	10.	.42		
2 COMBINED AT	CH8	1631.	12.30	277.	77.	62.	1.76		
HYDROGRAPH AT	SG2	526.	12.10	54.	14.	11.	.40		
HYDROGRAPH AT	SF2	345.	12.00	35.	9.	8.	.24		
HYDROGRAPH AT	SV2	3315.	12.20	526.	141.	113.	3.16		
ROUTED TO	RV3	3001.	12.50	525.	141.	113.	3.16	13.23	12.50

HYDROGRAPH AT									
+	SV4	744.	12.20	100.	26.	21.	.74		
2 COMBINED AT									
	CV6	3390.	12.40	621.	165.	133.	3.90		
ROUTED TO									
+	RV8	3375.	12.50	621.	165.	133.	3.90		
+								13.73	12.50
HYDROGRAPH AT									
+	SV10	1853.	12.20	255.	68.	55.	1.72		
2 COMBINED AT									
+	CV12	4406.	12.40	865.	231.	185.	5.62		
ROUTED TO									
+	RV14	4295.	12.50	864.	231.	185.	5.62		
+								13.85	12.50
HYDROGRAPH AT									
+	SV16	597.	12.10	62.	16.	13.	.48		
2 COMBINED AT									
+	CV18	4402.	12.50	922.	246.	198.	6.10		
ROUTED TO									
+	RV19	4323.	12.60	922.	246.	198.	6.10		
+								15.39	12.60
HYDROGRAPH AT									
+	SV20	426.	12.10	51.	13.	11.	.32		
HYDROGRAPH AT									
+	SV22	289.	12.00	28.	7.	6.	.19		
3 COMBINED AT									
+	CV24	4447.	12.60	996.	265.	213.	6.61		
4 COMBINED AT									
+	NUL	5998.	12.50	1341.	360.	290.	9.01		
HYDROGRAPH AT									
+	SS2	2849.	12.60	722.	194.	156.	4.60		
ROUTED TO									
+	RS4	2714.	12.80	721.	194.	156.	4.60		
+								14.13	12.80
HYDROGRAPH AT									
+	SS6	1234.	12.30	194.	48.	39.	1.60		
2 COMBINED AT									
+	CS8	3224.	12.80	905.	239.	193.	6.20		
ROUTED TO									
+	RS10	3107.	12.90	903.	239.	193.	6.20		
+								13.82	12.90
HYDROGRAPH AT									
	SS12	821.	12.20	103.	26.	21.	.86		
HYDROGRAPH AT									
+	SS14	1362.	12.10	143.	36.	29.	1.31		
3 COMBINED AT									

+	CS16	3299.	12.20	1133.	297.	239.	8.37		
ROUTED TO	RS18	3287.	12.90	1133.	297.	239.	8.37	14.09	12.90
HYDROGRAPH AT	SS20	464.	12.00	45.	11.	9.	.41		
2 COMBINED AT	CS22	3403.	12.30	1173.	307.	247.	8.78		

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