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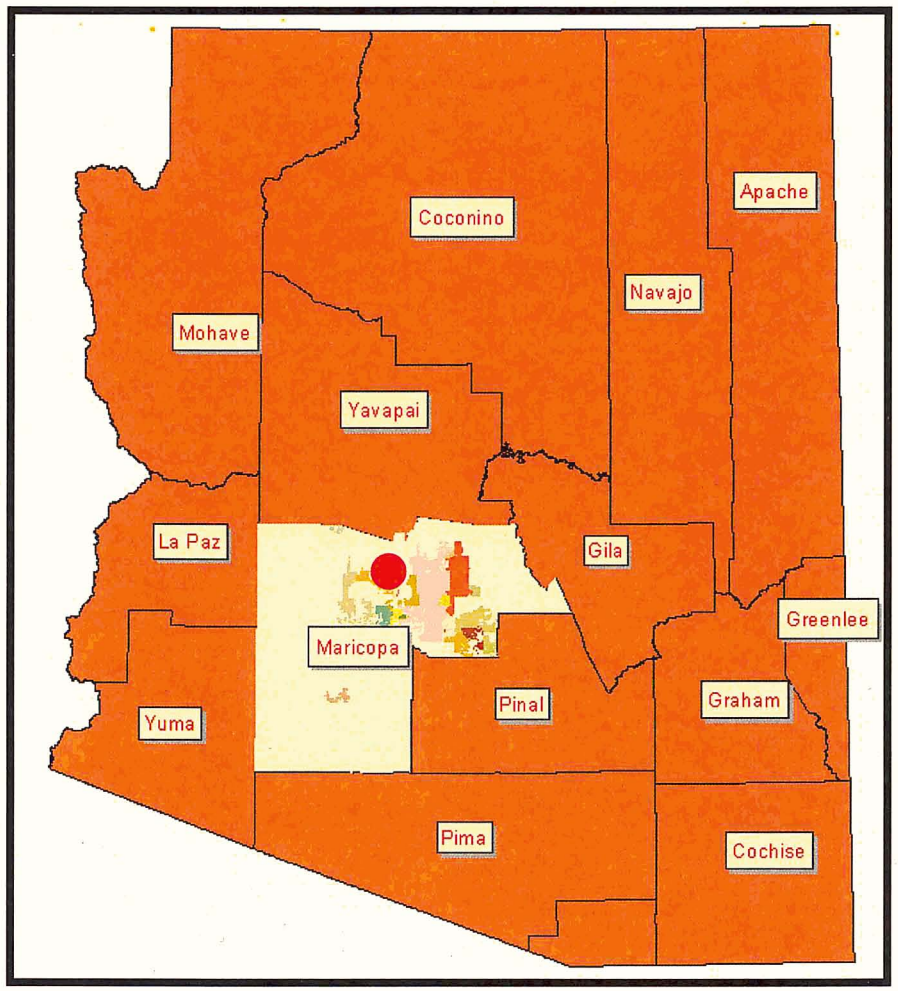
Hydrologic Study for Bonita Dam
Maricopa County, Arizona



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February 20, 2003

ACKNOWLEDGMENT

Mr. Michael Ellegood (P.E., Chief Engineer and General Manager, Flood Control District of Maricopa County) and Mr. Ed Raleigh (P.E., Division Manager, Engineering Division, Flood Control District of Maricopa County) provided guidance during the course of this study. Ms. Julie Lemmon provided advice on legal issues and other suggestions. Mr. Tom Renckly (P.E., Branch Manager, Structure Management Branch, Project Planning and Management Division, Flood Control District of Maricopa County) provided suggestions and comments. Mr. Bill Haas (P.E., Civil Engineer, Hydrology and Hydraulics Branch, Engineering Division, Flood Control District of Maricopa County) provided assistance in routing reach cross-sections and merging of an old HEC-1 model and the new HEC-1 model during the early stage of this study. Mr. Mike Duncan (P.E., Senior Civil Engineer, Floodplain Delineation Branch, Engineering Division, Flood Control District of Maricopa County) provided the report and models for the FEMA-approved Padelford Wash Floodplain Delineation Study for the drainage area above CAP canal.

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1. Method Description

1.1. Introduction

The purpose of this study is to develop hydrologic models (HEC-1 models) for the 100-year 24-hour and 100-year 6-hour storms for Bonita Dam (Lake Bonita), which will be included into an on-going Wittmann Area Drainage Master Study (ADMS) HEC-1 models. The on-going Wittmann ADMS project is to update an old Wittmann ADMS performed by WLB (1989).

Bonita Dam is located on the natural path of Padelford Wash. It is in the unincorporated area of Maricopa County, Arizona, and its drainage area is about 26 square miles. The drainage area covers portions of Maricopa County's unincorporated area, the City of Peoria, and the Town of Surprise. Figure 1 and 2 show the location of the dam and the drainage area, respectively. Figure 3 shows an aerial photo of Bonita Dam and the existing FEMA 100-year floodplains.

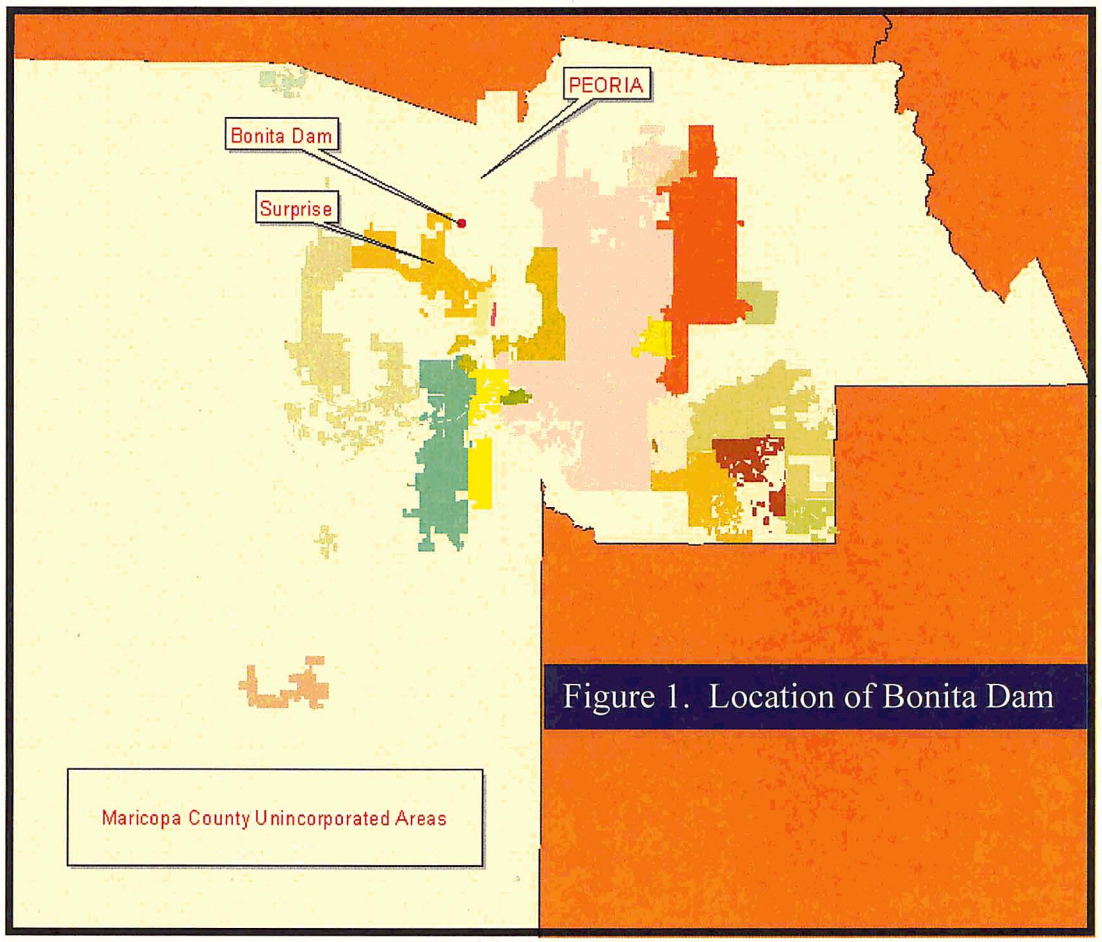


Figure 1. Location of Bonita Dam

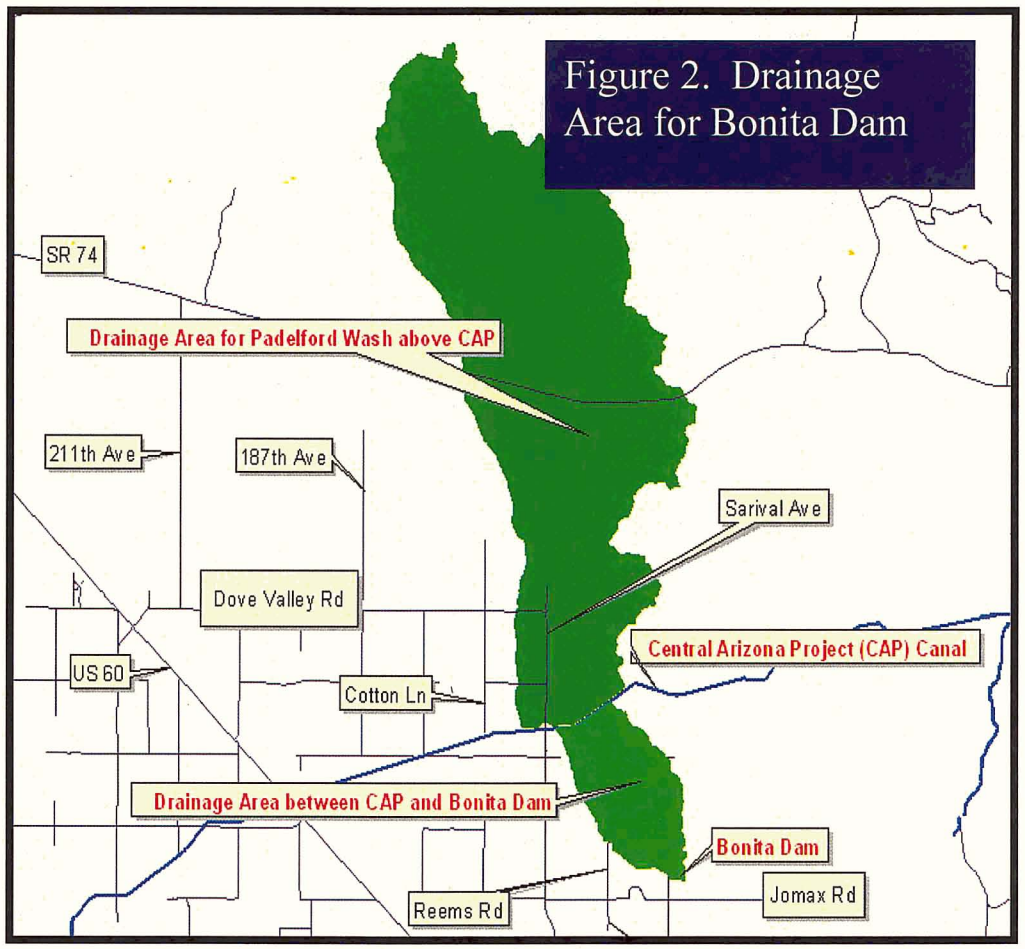


Figure 2. Drainage Area for Bonita Dam

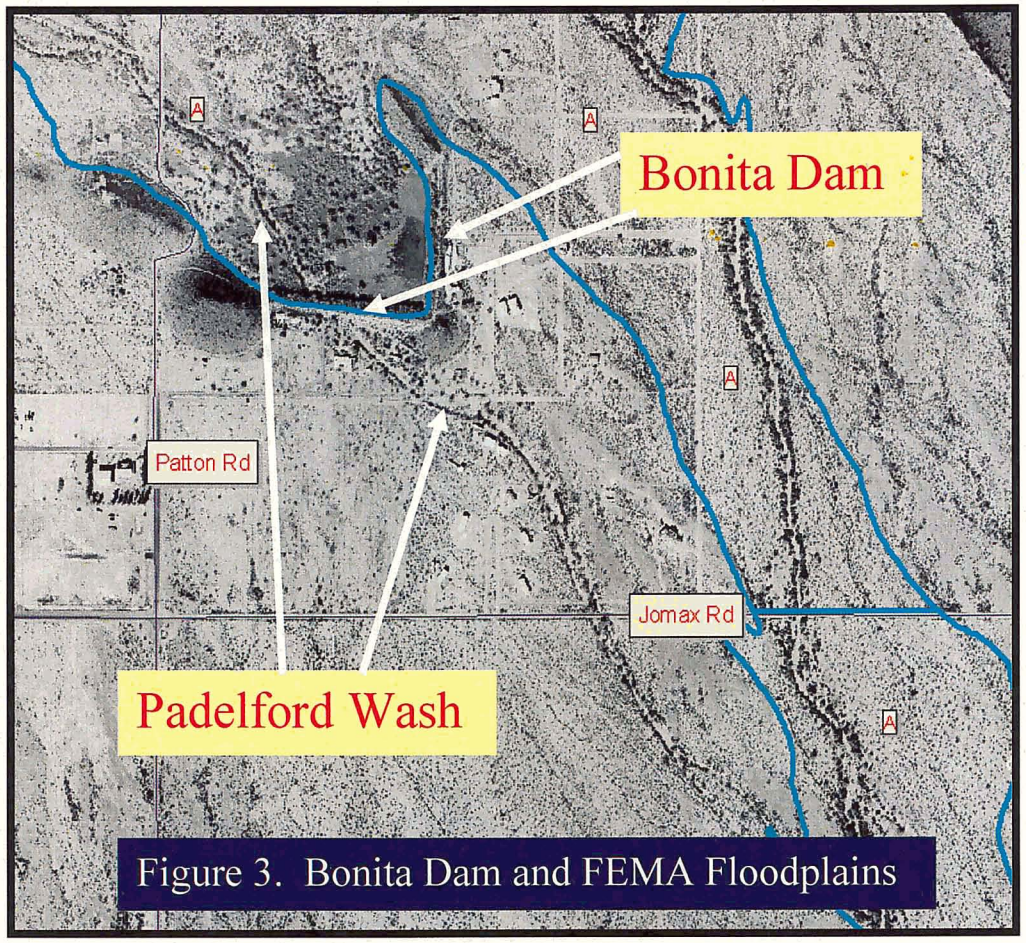


Figure 3. Bonita Dam and FEMA Floodplains

The drainage area for Bonita Dam has two parts. One is above Central Arizona Project (CAP) canal, another is below CAP canal (see Figure 2). The hydrology for the drainage area above CAP canal is available from Padelford Wash Floodplain Delineation Study (A-N West Inc., April 3rd, 2002) which has been recently approved by Federal Emergency Management Agency (FEMA). However, the hydrology for the drainage area between CAP canal and Bonita Dam is not available. In this study, the hydrologic models for both 100-year 24-hour and 100-year 6-hour storms for the drainage area between CAP and Bonita Dam will be developed, then merged with the hydrologic models from Padelford Wash Floodplain Delineation Study. The format of this report is prepared based on Maricopa County's Technical Data Notebook format, which can be easily incorporated into future FEMA submittals with minor modifications.

1.2. Method Description

The existing HEC-1 model for Padelford Wash Floodplain Delineation Study (A-N West Inc., April 3rd, 2002) is based on Drainage Design Manual for Maricopa County, Arizona, Volume I, Hydrology, Revision II (Sabol et al., 1995). A-N West Inc. (April 3rd, 2002) used Flood Control District of Maricopa County's Drainage Design Management System for Windows (DDMSW 1.5) to prepare the Green-Ampt parameters and S-graph unit hydrograph parameters in the HEC-1 input file. More detail information can be found in A-N West Inc (April 3rd, 2002).

The HEC-1 model for the drainage area between CAP canal and Bonita Dam is also based on Drainage Design Manual for Maricopa County, Arizona, Volume I, Hydrology, Revision II (Sabol et al., 1995). The watershed boundary delineation is based on Flood Control District of Maricopa County's 10-ft grid data derived from 50-ft mass points and breaklines, which are much more accurate than the USGS 7.5 DEM. The watershed boundary delineation and parameter estimation for the Green-Ampt rainfall loss method and S-graph unit hydrograph method are prepared by using Watershed Modeling System (WMS 6.1, December 2002 version).

The most recent GIS land use data (Maricopa Association of Governments, 2000) and GIS soil data (Flood Control District of Maricopa County, 2002) are used in preparation of the Green-Ampt rainfall loss parameters.

As discussed earlier, the objective of this study is to develop HEC-1 models (both 100-year 24-hour and 100-year 6-hour storms) for the drainage area between CAP canal and Bonita Dam, and then combine it with the HEC-1 model for the drainage area above CAP canal (Padelford Wash Floodplain Delineation Study). The point precipitation values for the combined model are obtained from isopluvial maps in Sabol et al. (1995) based on the watershed centroid for the entire drainage area (including area above and below CAP canal). These point precipitation values are adjusted by using the depth-area reduction curves in Sabol et al. (1995). Since the objective of this study is to develop hydrology for Bonita Dam and the intermediate concentration points are not the concern, PB record instead of JD record is used to avoid diversion drainage area issue. The 6-hour rainfall distribution is based on Sabol et al. (1995), and is generated by using DDMSW 2.1.0. The 24-hour rainfall distribution is Soil Conservation Services (SCS) Type II distribution. Channel routing is based on normal depth routing. Peak discharges for the 100-year 6-hour and 100-year 24-hour storms are computed by running HEC-1 Version 4.1 (June 1998 version).

2. Parameter Estimation

2.1. Drainage Area Boundaries

The drainage area boundary for the area above CAP canal is from Padelford Wash Floodplain Delineation Study (A-N West Inc., April 3rd, 2002). The drainage area boundary for the drainage area between CAP canal and Bonita Dam is determined by using WMS 6.1 based on Flood Control District of Maricopa County's 10-feet ArcInfo ASCII grid data. The total drainage area for Bonita Dam is about 26 square miles. Figure 2 shows the drainage area

boundaries.

2.2. Watershed Work Maps

The watershed work maps include (1) the drainage basin map showing sub-basin boundaries and concentration points; (2) the HEC-1 schematic map; (3) the drainage basin map with lag time paths; (4) the drainage basin map with hydrograph routing paths; (5) soils map; and (6) land use map. All the watershed work maps for the drainage area above CAP canal can be found in Padelford Wash Floodplain Delineation Study (A-N West Inc., April 3rd, 2002), which are included in the appendix of this report (Appendix 4). Figures 4-9 shows the watershed work maps for the drainage area between CAP canal and Bonita Dam.

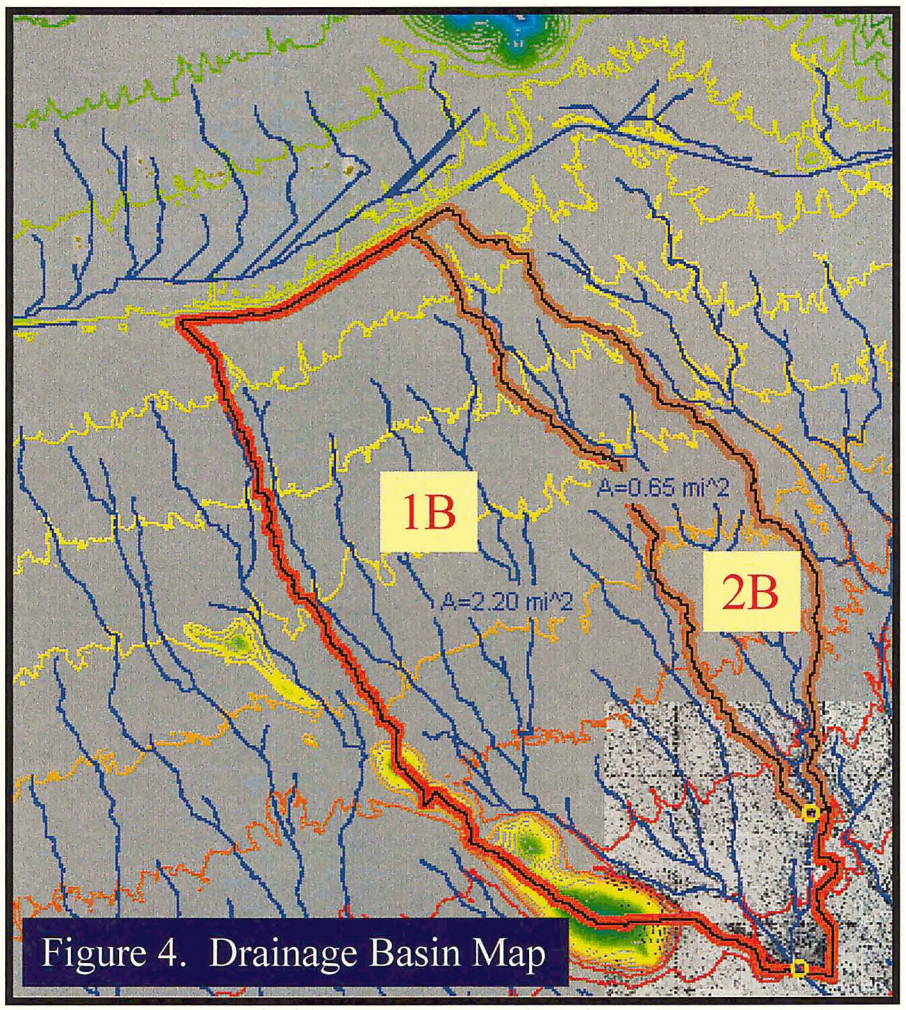


Figure 4. Drainage Basin Map

```
  .<-------     DV5
DV5
  V
  V
R2b
  .
  .
  .          2B
  .           .
  .           .
cp2B............
  V
  V
 5R
  .
  .
  .           .<-------     DV3
  .         DV3
  .           V
  .           V
  .        R1b1
  .           .
  .           .
  .           .           .<-------     DV4
  .           .         DV4
  .           .           V
  .           .           V
  .           .        R1b2
  .           .           .
  .           .           .
  .       comDV............
  .           V
  .           V
  .        R1b3
  .           .
  .           .
  .           .          1B
  .           .           .
  .           .           .
 3C........................
```

DV3, DV4, and DV5 are from Padelford

Figure 5. HEC-1 Schematic Map

Figure 6. Lagtime Reaches (between CAP canal and Bonita Dam)

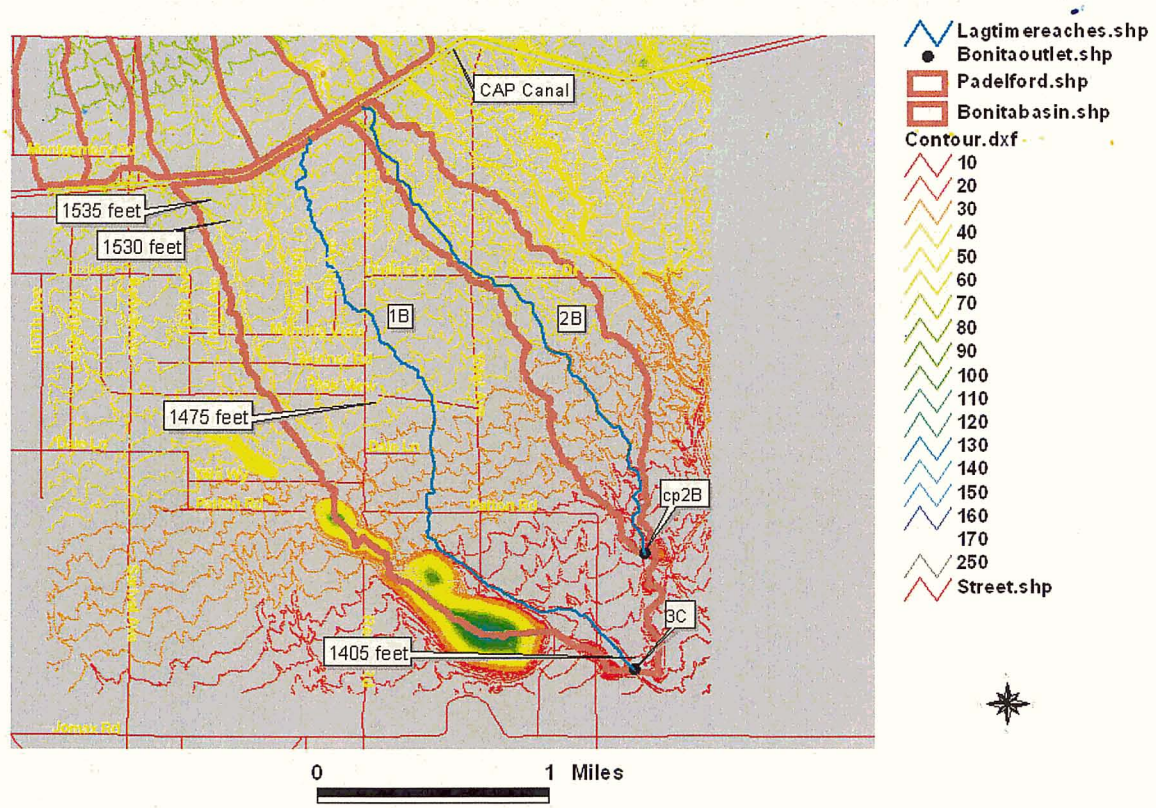
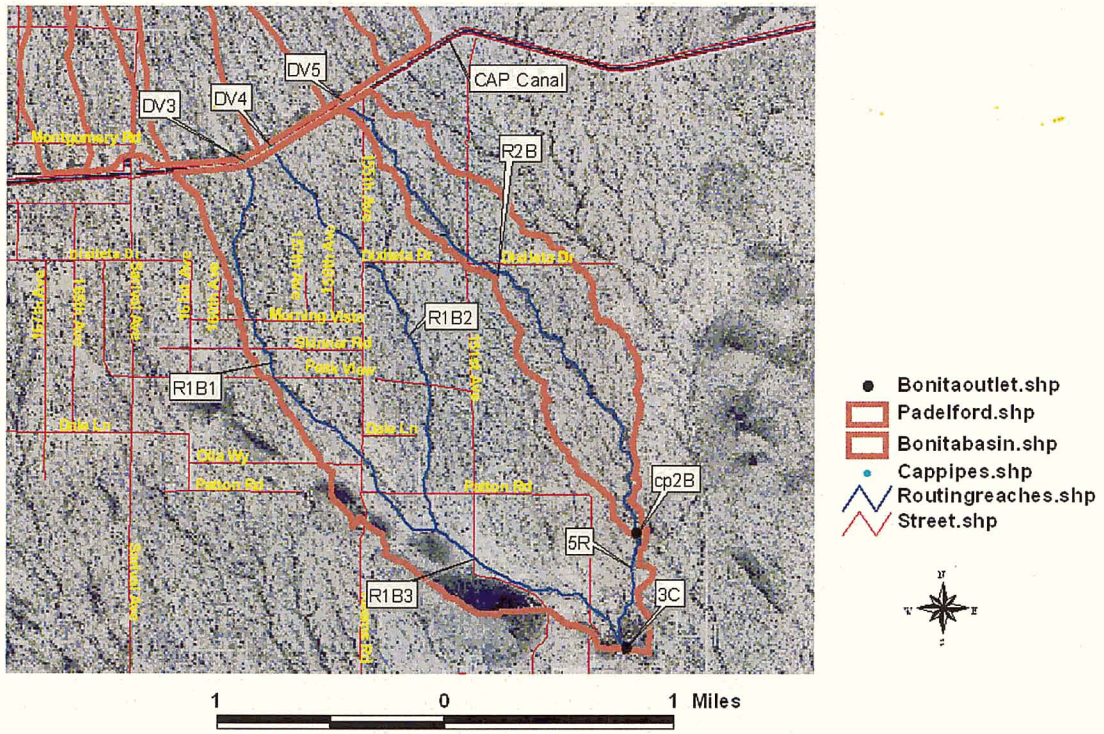


Figure 7. Routing Reaches (between CAP canal and Bonita Dam)



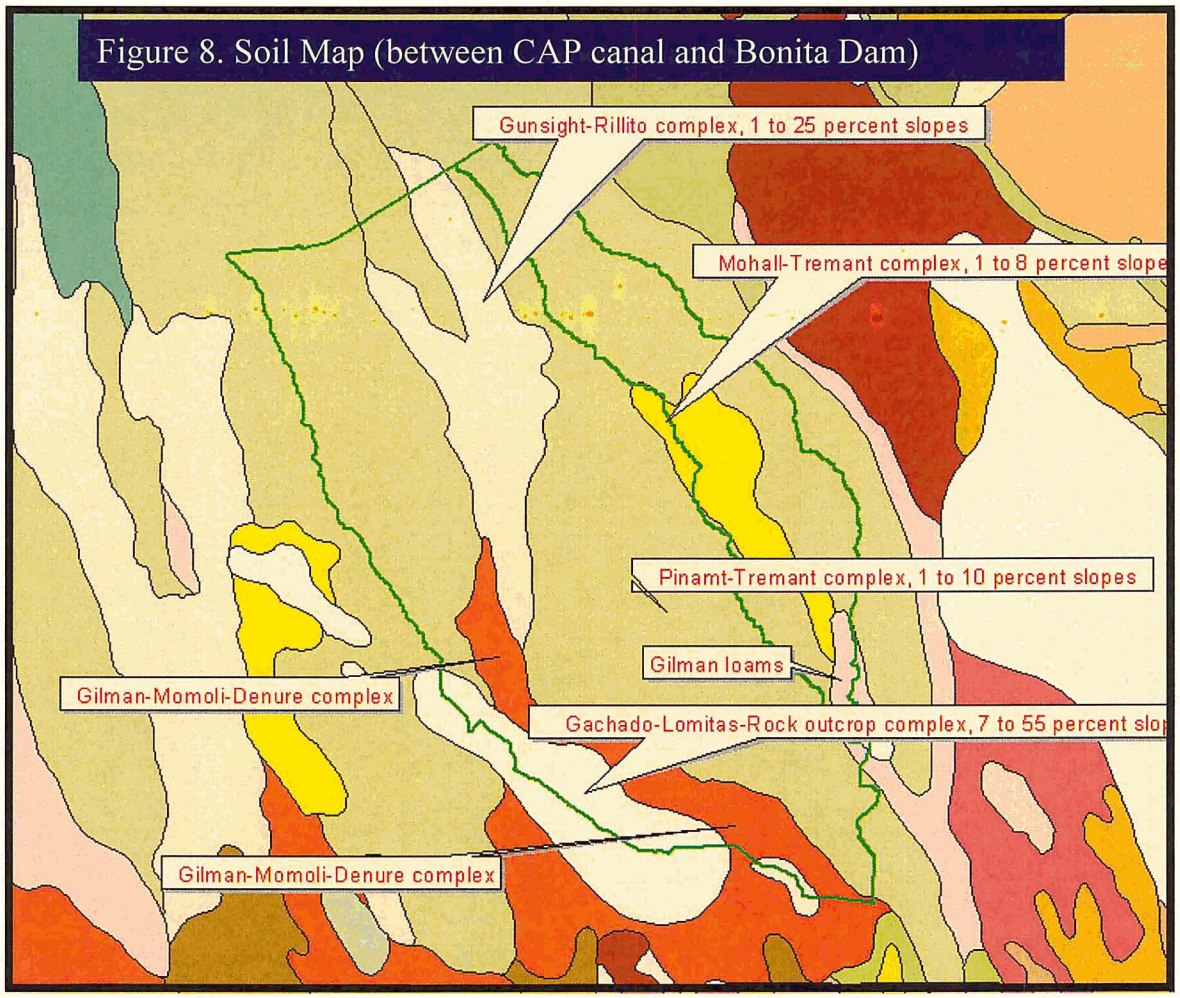


Figure 8. Soil Map (between CAP canal and Bonita Dam)

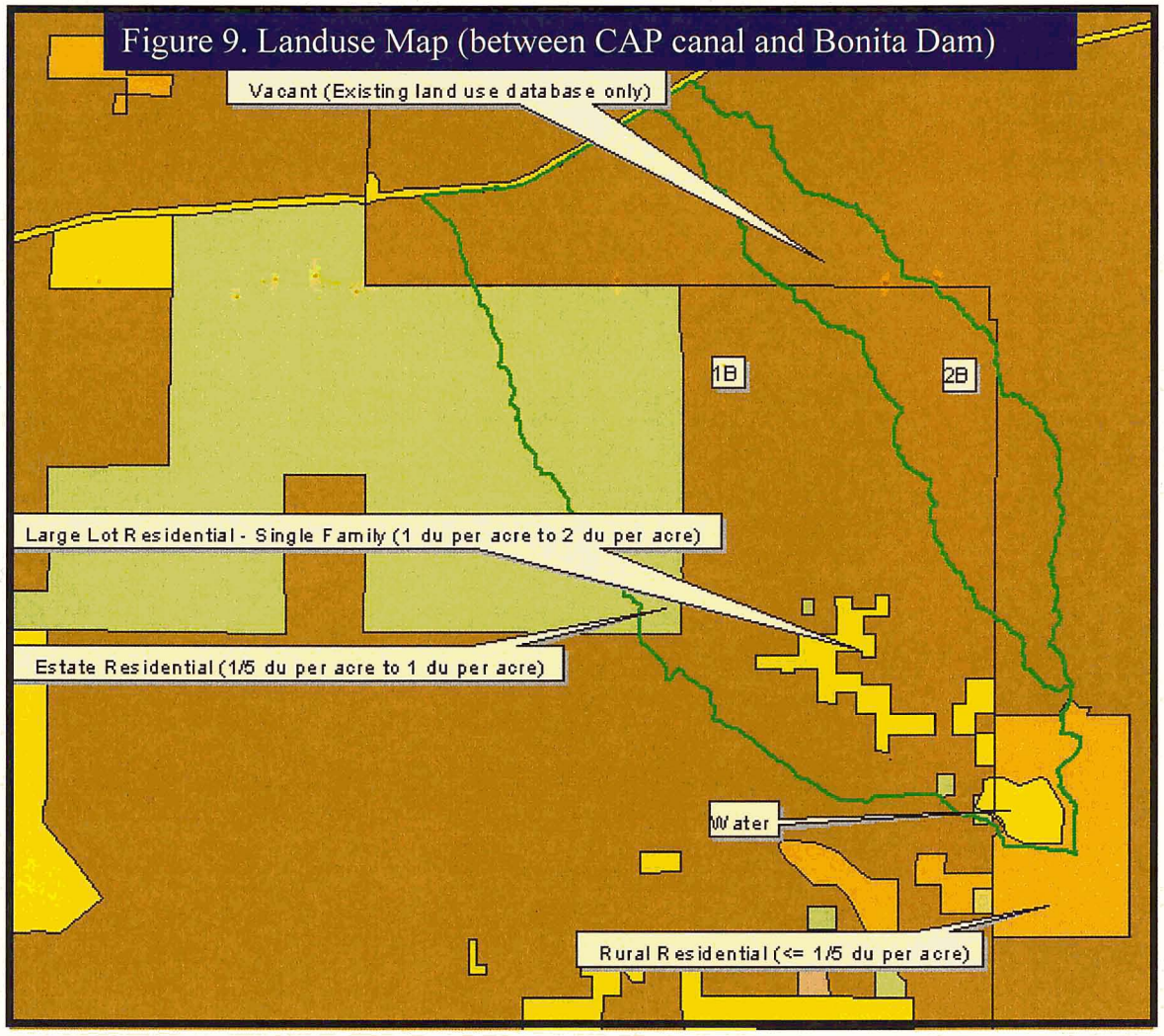


Figure 9. Landuse Map (between CAP canal and Bonita Dam)

Note: "du" = dwelling

2.3. Gage Data

There are no precipitation gage station and stream gage station within the watershed. The nearest precipitation gage is about 5 miles west of the watershed. Since there is no stream gage station within the study watershed, the frequency analysis of Water Resources Council Bulletin 17B is not applicable to the study watershed.

2.4. Statistical Parameters

The statistical parameters such as rainfall depths and rainfall distributions for both 100-year 24-hour and 100-year 6-hour storms used for this study are based on the data provided in Sabol et al. (1995).

2.5. Precipitation

2.5.1. Rainfall depths

The point rainfall depths are obtained from the isopluvial maps in Sabol et al. (1995). The point rainfall depths of the 100-year 24-hour storm and 100-year 6-hour storm for the watershed centroid are estimated from the isopluvial maps as 4.18 inches and 3.35 inches, respectively. Figure 10 shows the NOAA isopluvial maps.

The point rainfall depths are adjusted by aerial reduction factors to develop the rainfall depths to be entered into the combined HEC-1 model by using the PB card. The aerial reduction factors for the 100-year 24-hour storm and the 100-year 6-hour storm are based on Sabol et al. (1995). Since the total drainage area is about 26 square miles, the adjusted values (PB cards) are 3.78 inches and 3.02 inches for the 100-year 24-hour storm and the 100-year 6-hour storm, respectively. PB cards instead of JD cards are used to avoid diversion drainage area issues since the hydrograph at Bonita Dam is the main objective of this study and the flows at the intermediate concentration points are not important to this study. It should be pointed out that if

this final combined HEC-1 model is to be incorporated into the on-going Wittmann ADMS where JD cards are used, the drainage area in HC cards must be adjusted accordingly.

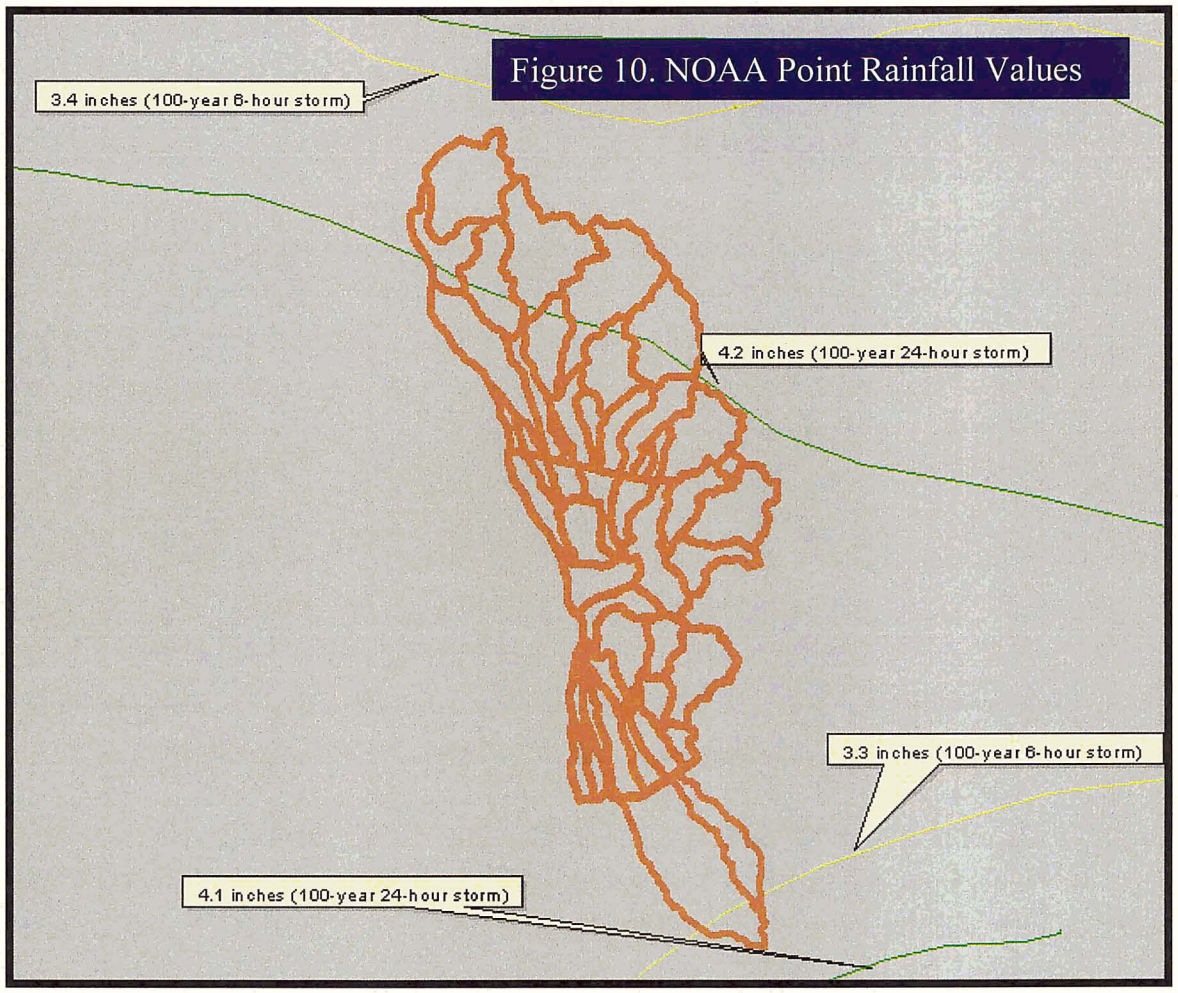


Figure 10. NOAA Point Rainfall Values

2.5.2. Rainfall distributions

Both the 100-year 24-hour and 100-year 6-hour rainfall distributions are based on Sabol et al. (1995). The 100-year 24-hour rainfall distribution is the SCS Type II distribution. The 100-year 6-hour rainfall distribution is estimated by running DDMSW 2.1.0. The values of rainfall distributions can be found in the final HEC-1 models (Appendix 1 and Appendix 2).

2.6. Physical Parameters

This section describes the methods used for estimation of the physical hydrologic parameters such as rainfall losses, the unit hydrograph, and lag time for the drainage area between CAP canal and Bonita Dam. The estimation for the physical parameters for the drainage area above CAP canal can be found in Padelford Floodplain Delineation Study (A-N West Inc., April 3rd, 2002).

2.6.1. Rainfall losses

The Green-Ampt procedure is used to compute rainfall losses in accordance with Sabol et al. (1995). The digital soil file and land uses file (both in GIS shape file format) for the watershed area are available from the Flood Control District of Maricopa County. The digital soil file corresponds to SCS soil maps (Camp, 1986). The GIS land use shape file is based on MAG (2000), the most current land use information. Figures 8 and 9 describe the soil and land use, respectively. The GIS land use shapefile and soil file can be imported into WMS 6.1. Two additional attribute tables (one for soil and another for land use) must be imported into WMS 6.1 for the Green-Ampt rainfall loss parameter estimation. The attribute table for the landuse types can be found in Appendix 3. Since the soil attribute table is too big, it is ignored here. But it can

be found in the digital media (Appendix 5). The Green-Ampt rainfall loss parameters can be found in LG cards for sub-basin 1B and sub-basin 2B in Appendices 1 or Appendix 2.

Five major land uses are identified for the watershed, which are vacant, estate residential (1/5 dwelling per acre to 1 dwelling per acre), rural residential (<=1/5 dwelling per acre), large lot residential/single family (1 dwelling per acre to 2 dwelling per acre), and water (MAG, 2000). The surface retention losses, percent impervious, and vegetation cover for each land use type are estimated based on Sabol et al. (1995) and MAG (2000). The values used for surface retention loss values, percent impervious, and vegetation cover are shown in Table 1 which is a subset of the land use attribute table in Appendix 3.

Table 1. Surface Retention Losses, Percent Impervious, and Vegetation Cover

Land Uses	Surface Retention Losses: IA (inch)	Percent Impervious RTIMP (%)	Vegetation Cover (%)
Vacant	0.35	0.0	25.0
Estate Residential	0.30	5.0	30.0
Rural Residential	0.30	5.0	30.0
Large Lot Residential/Single Family	0.30	15.0	50.0
Water	0.0	0.0	0.0

2.6.2. Unit hydrographs

The S-Graph method is used to compute unit hydrographs in accordance with Sabol et al. (1995). The Desert S-Graphs are used to compute the unit hydrographs. The unit hydrographs are computed by using WMS 6.1. The unit hydrographs can be found in UI cards in HEC-1 out files (see Appendices 1 and 2).

2.6.3. Lag time

Lag time must be estimated before S-Graph unit hydrographs can be computed. Four parameters must be computed to estimate the lag time for each sub-basin. These four parameters

are the longest watercourse length measured from the concentration point to a most hydraulically upstream point, the slope for the longest watercourse, the length from the concentration point along the longest watercourse to a point opposite the centroid, and basin roughness.

The first three parameters are automatically computed in WMS 6.1. The basin roughness is a composite Manning's n value for all channels in the sub-basin. An appropriate basin roughness value is selected as 0.059 based on field observations, aerial photographs, soils map, and land use maps. The parameters for lag time in sub-basin 1B and sub-basin 2B can be found in Table 2.

Table 2. Parameters for Lag Time Estimation

Sub-basin	Area (mi2)	L mile	Lca (mile)	S (ft/mi)	Kn	C	Lag Time (hr)
1B	2.2	3.393	1.664	42.240	0.059	1.42	1.34
2B	0.65	2.765	1.346	46.274	0.059	1.42	1.12

2.6.4. Channel routing path parameters

The normal depth channel routing in HEC-1 is used to route runoff hydrographs through sub-basins. The routing paths for the drainage area above CAP canal can be found in Appendix 4. The detailed information for the area above CAP canal can be found in Padelford Wash Floodplain Delineation Study (A-N West Inc., April 3rd, 2002). The routing paths for the drainage area between CAP canal and Bonita Dam are shown in Figure 7.

The channel routing parameters include NSTEPS (the number of sub-reaches to be divided for the routing reach by HEC-1), initial outflow, left bank Manning's n, right bank Manning's n, main channel Manning's n, reach length, bed slope for the routing reach, and eight-point cross section X-Y data. The initial outflow is set at the initial inflow which is usually 0.0 cfs, implying empty channel when routing starts. The eight-point cross section data are obtained by using WMS 6.1's cross-section cutting function based on Flood Control District of Maricopa County's 10-ft ArcInfo Grid ASCII data. The reach length and channel bed slope for

5R are automatically computed by WMS 6.1 and saved to the HEC-1 input file. The reach length and channel bed slope for R1B1, R1B2, R1B3, and R2B are manually measured in ArcView GIS environment. The estimation of Manning's n is based on field trips, aerial photo, land use map, and soil map using the procedures documented in Chow (1959) and Flood Control District of Maricopa County's Manning's estimation procedure (Thomsen and Hjalmarson, 1991). The routing length, slope and Manning's n values are shown in Table 3. Figure 11 shows the locations for the representative cross-sections in the routing reaches. Figures 12-16 show the photos at the representative cross-sections. The size of the green folder shown in the photos is about 11"x17".

Table 3. Parameters for Routing Reaches

Routing Reach	Reach Length (ft)	Slope (ft/ft)	Manning n (Left Overbank)	Manning n (Main Channel)	Manning n (Right Overbank)
5R	2931	0.009	0.065	0.05	0.065
R1B1	10678	0.0094	0.08	0.05	0.08
R1B2	10260	0.0098	0.08	0.05	0.08
R1B3	5458	0.0064	0.07	0.04	0.07
R2B	13624	0.009	0.07	0.055	0.07

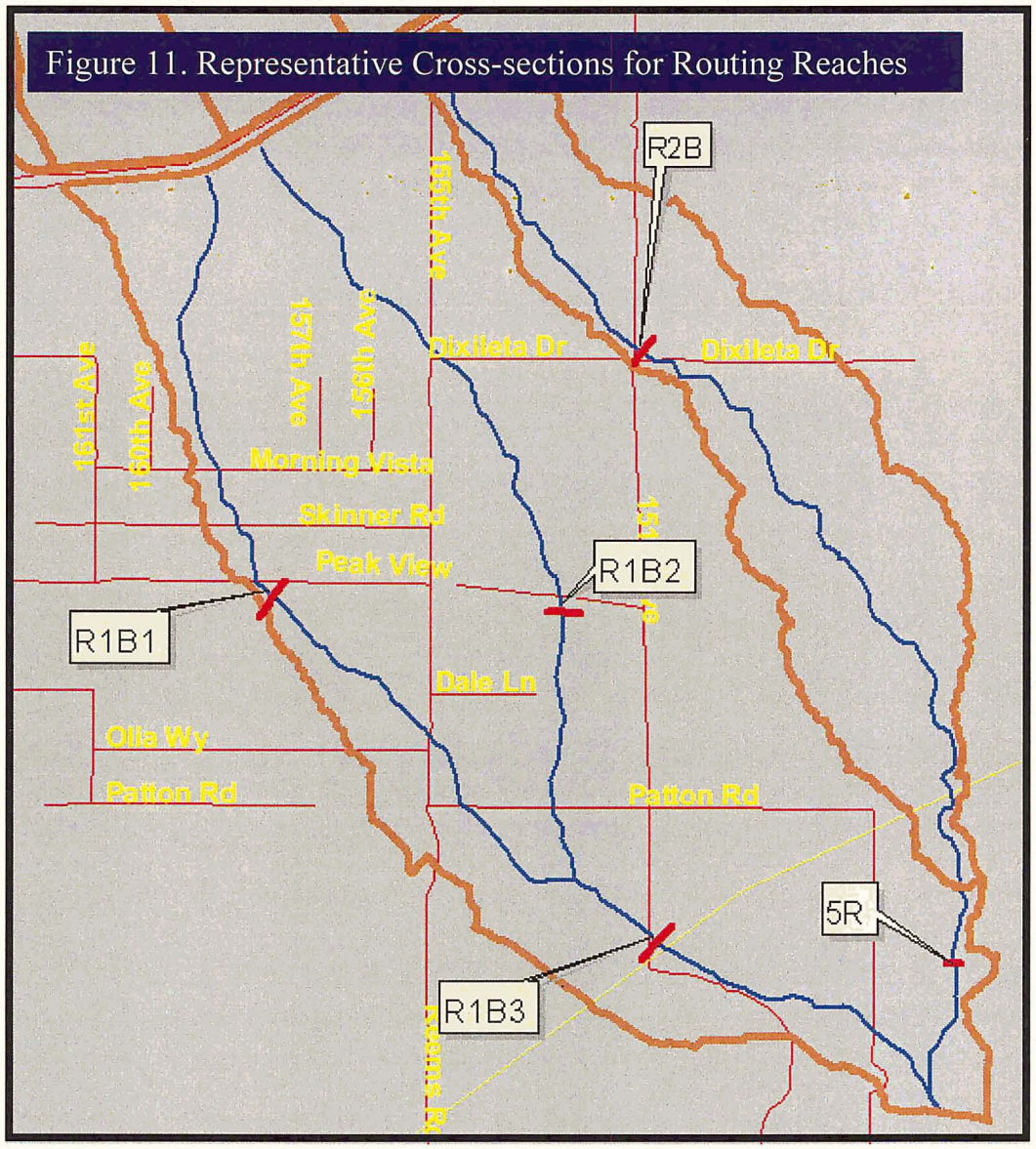


Figure 11. Representative Cross-sections for Routing Reaches

Figure 12. Representative Cross-section at Routing Reach 5R (looking downstream)

Figure 13. Representative Cross-section at Routing Reach R1B1 (looking downstream)

Figure 14. Representative Cross-section at Routing Reach R1B2 (looking downstream)

Figure 15. Representative Cross-section at Routing Reach R1B3 (looking downstream)

Figure 16. Representative Cross-section at Routing Reach R2B (looking downstream)

2.6.5. NSTEPS estimation

NSTEPS values for routing reaches R1B1, R1B2, R1B3, R2B and 5R are estimated by an iterative process for each of the 100-year 24-hour HEC-1 model and the 100-year 6-hour HEC-1 model. The final NSTEPS for R1B1, R1B2, R1B3, R2B and 5R in the 100-year 24-hour HEC-1 model are 12, 22, 7, 29 and 6, respectively. The final NSTEPS for R1B1, R1B2, R1B3, R2B and 5R in the 100-year 6-hour HEC-1 model are 13, 23, 7, 28 and 6, respectively. The iterative process is as following.

The estimation of NSTEPS is usually performed as the last step in HEC-1 model development. Estimation of NSTEPS for each routing reach must proceed from upstream to downstream. The criterion for estimating NSTEPS is that the final estimated NSTEPS satisfies

$$NSTEPS = \Delta TP/NMIN \qquad (1)$$

where ΔTP is the difference in time-to-peak (minutes) between the inflow and outflow hydrographs for the routing reach and NMIN is the computation time step specified in IT card in HEC-1 models. One may start with any initial guess for NSTEPS. The initial guess may be obtained by using L/(V*NMIN*60) where the velocity (V in ft/s) is assumed and L is the reach length (feet). After the initial guess is obtained, it is entered into the HEC-1 model. Then, the HEC-1 model is run. The difference in time-to-peak between the inflow and outflow hydrographs is found from the HEC-1 output file. Then, the next NSTEPS is estimated by using Eq. (1). Check if the two consecutive NSTEPS are the same or close enough. If yes, the NSTEPS for this routing reach is found. If not, the found NSTEPS is entered into the HEC-1 model, and the HEC-1 model is run. Equation(1) is used again. Comparison between the current NSTEPS and the previous NSTEPS is made. This iterative process is continued until two consecutive NSTEPS are the same or close enough. The aforementioned iterative process is

performed for each routing reach from upstream to downstream (when the iterative process is processed for one reach, the NSTEPS for other reaches are fixed).

2.6.6. Reservoir routing parameters

There are reservoir routings in the drainage area above the CAP canal. More information can be found in Padelford Wash Floodplain Delineation Study (A-N West Inc., April 3rd, 2002). There is no reservoir routing in the drainage area between CAP canal and Bonita Dam since the objective of this study is to determine the peak flows that enter into Bonita Dam.

2.6.7. Split flows

There are split flows in the drainage area above the CAP canal. Diversion cards were used for split flow modeling in the HEC-1 model. More information can be found in Padelford Wash Floodplain Delineation Study (A-N West Inc., April 3rd, 2002). There is no split flow in the drainage area between CAP canal and Bonita Dam. However, diversion cards are used to combine the HEC-1 model for the drainage area above CAP canal with the HEC-1 model between CAP canal and Bonita Dam. Diversion cards (DV3, DV4, and DV5) are used in the HEC-1 models.

3. Calibration

No calibration is performed because there is no gage station within the watershed. However, verification is performed in "4.2 Verification of Results".

4. Final Results

4.1. Hydrologic Analysis Results

The results for Bonita Dam hydrology (both 100-year 24-hour storm and 100-year 6-hour storm) are obtained by running the 1998 version of HEC-1 (version 4.1). This version of HEC-1

can be found in the Flood Control District of Maricopa County's DDMSW 2.1.0 package. The results for peak discharges and time-to-peak at the concentration points between CAP canal and Bonita Dam are shown in Table 4. DV3, DV4, and DV5 are the "bridges" between the HEC-1 model for the drainage area above CAP canal and the HEC-1 model between CAP canal and Bonita Dam. The results for the drainage area above CAP canal can be found in A-N West Inc. (2002).

The higher peak discharge of the 24-hour and 6-hour storms is considered as the critical peak discharge, and should be used for floodplain delineation studies. As can be seen in Table 4, the peak flow for the 100-year 24-hour storm (1850 cfs) at the most downstream outlet ("3C") is larger than that for the 100-year 6-hour storm (1681 cfs). Therefore, the 100-year 24-hour results (1850 cfs) should be used for floodplain delineation studies.

The detailed results can be found in the HEC-1 output files in Appendices 1 and 2. It should be pointed out that although the final HEC-1 model developed in this study contains the information for the drainage area above CAP canal, one should use the Padelford Wash hydrology results (A-N West Inc., 2002) for the peak discharges above the CAP canal since the Padelford Wash study was based on JD cards and this study is based on PB cards.

Table 4. Summary of 100-year Peak Flows and Times-to-peak

Basin Outlets	*100-year 24-hour Peak Flows (cfs)*	*100-year 24-hour Time-to-peak (hrs)*	*100-year 6-hour Peak Flows (cfs)*	*100-year 6-hour Time-to-peak (hrs)*
DV5	359	14.37	332	6.47
R2b	357	15.33	330	7.4
2B	308	12.87	234	4.93
cp2B	366	14.93	338	7.3
5R	365	15.13	338	7.5
DV3	1044	14.4	955	6.47
R1b1	1042	14.8	953	6.9
DV4	356	14.37	332	6.47
R1b2	355	15.1	331	7.23
comDV	1394	14.87	1281	7
R1b3	1392	15.1	1279	7.23
1B	855	13.07	631	5.1

Basin Outlets	*100-year 24-hour Peak Flows (cfs)*	*100-year 24-hour Time-to-peak (hrs)*	*100-year 6-hour Peak Flows (cfs)*	*100-year 6-hour Time-to-peak (hrs)*
3C	1850	15	1681	7.07

4.2. Verification of Results

The verification of results for the drainage area above CAP canal can be found in (A-N West Inc., April 3rd, 2002). The verification for the drainage area between CAP canal and Bonita Dam is based on Table 5. Table 5 shows the USGS envelope curve data, 100-year region data, and 100-year low-to-middle elevation data (Thomas et al., 1995). Table 4 shows that the peak discharges for sub-basin 1B (2.2 square miles) and sub-basin 2B (0.65 square miles) are 855 cfs and 308 cfs, respectively. Table 5 indicates that the results for these two sub-basins are relatively low compared with the 100-year discharges for the region, but they are above the Low-To-Middle-Elevation values.

Table 5. USGS Regression Data (digitized from Figure 41 in Thomas et al., 1995)

Drainage Area (square miles)	Envelope (cfs)	Region (cfs)	Low-To-Middle Elevation (cfs)
0.1	300	182	110
0.2	700	308	156
0.3	1162	419	192
0.4	1600	522	222
0.5	**2028**	**618**	**249**
0.6	**2500**	**710**	**273**
0.7	3000	798	296
0.8	3500	884	317
0.9	3887	967	336
1	4403	1047	355
2	**7878**	**1678**	**505**
3	10676	2210	621
4	13809	2688	720
5	16047	3128	806

5. Conclusions

The purpose of this study is to develop hydrologic models (HEC-1 models) for the 100-year 24-hour and 100-year 6-hour storms for Bonita Dam (Lake Bonita), which will be included into an on-going Wittmann Area Drainage Master Study (ADMS) HEC-1 models. The computed peak discharges for the 100-year 24-hour storm and 100-year 6-hour storm are 1850 cfs and 1681 cfs, respectively. The 100-year 24-hour peak discharge (1850 cfs) should be used for floodplain delineation studies.

6. References

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Appendix 1. HEC-1 Output File for 100-year 24-hour Storm

```
1****************************************                                    ****************************************
 *                                      *                                    *                                      *
 *   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *                                    *   U.S. ARMY CORPS OF ENGINEERS       *
 *              JUN  1998               *                                    *   HYDROLOGIC ENGINEERING CENTER      *
 *            VERSION 4.1               *                                    *         609 SECOND STREET            *
 *                                      *                                    *      DAVIS, CALIFORNIA 95616         *
 *  RUN DATE   10FEB03  TIME  18:32:24  *                                    *          (916) 756-1104              *
 *                                      *                                    *                                      *
 ****************************************                                    ****************************************


                                        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

1                                                HEC-1 INPUT                                                          PAGE  1

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

        1           ID         Project ID: Bonita Dam Hydrology
        2           ID         FCDMC
        3           ID         July 2002, January 2003
        4           ID         100-YR. 24. HR. STORM  2 minute Time Step
        5           ID
                    *DIAGRAM*
        6           IT       2                    2000
        7           IO       5
        8           IN      15

        9           KK     180   BASIN
       10           PB    3.78
       11           PC   0.000   0.002   0.005   0.008   0.011   0.014   0.017   0.020   0.023   0.026
       12           PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056   0.060
       13           PC   0.064   0.068   0.072   0.076   0.080   0.085   0.090   0.095   0.100   0.105
       14           PC   0.110   0.115   0.120   0.126   0.133   0.140   0.147   0.155   0.163   0.172
       15           PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
       16           PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
       17           PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
       18           PC   0.913   0.918   0.922   0.926   0.930   0.934   0.938   0.942   0.946   0.950
       19           PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977   0.980
       20           PC   0.983   0.986   0.989   0.992   0.995   0.998   1.000
       21           BA   0.959
       22           LG    0.25    0.35    4.60    0.36      17
       23           UI      96     100      96     130     287     360     450     585     619     684
       24           UI     748     805     924    1134    1122     793     682     615     572     564
       25           UI     516     482     467     425     399     388     338     309     287     254
       26           UI     236     237     223     207     209     159     160     138     124     123
       27           UI     114     106     105     100      74      75      76      74      66      49
       28           UI      48       0       0       0       0       0       0       0       0       0
       29           UI       0       0       0       0       0       0       0       0       0       0
       30           UI       0       0       0       0       0       0       0       0       0       0
       31           UI       0       0       0       0       0       0       0       0       0       0

       32           KK     168   BASIN
       33           BA   0.504
       34           LG    0.25    0.37    5.30    0.26      11
       35           UI      88      91     232     370     550     620     716     976     904     625
       36           UI     547     484     432     401     349     299     259     221     203     197
       37           UI     149     127     116     101      97      75      68      68      45      43
       38           UI      44      44      30      17      17      17      17      17      17      17
       39           UI      18      17      17       0       0       0       0       0       0       0
       40           UI       0       0       0       0       0       0       0       0       0       0

       41           KK   CO169
       42           KM        COMBINE S180 AND S168
       43           HC       2

       44           KK    R171   ROUTE   REACH
       45           KM        ROUTE CO169 TO CO173
       46           RS       1    STOR      -1
       47           RC   0.065   0.037   0.065    1750  0.0067    0.00
       48           RX     0.0    10.0    37.5    45.0    70.0    77.5   105.0   115.0
       49           RY     7.0     5.0     3.0     0.0     0.0     3.0     5.0     7.0
1                                                HEC-1 INPUT                                                          PAGE  2

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

       50           KK      92   BASIN
       51           BA   0.088
       52           LG    0.25    0.35    4.25    0.46      21
       53           UI      41     170     277     364     221     171     125      93      69      46
       54           UI      36      27      18      14       7       7       8       7       0       0
       55           UI       0       0       0       0       0       0       0       0       0       0

       56           KK    DR92
       57           KM        ROUTE S92 THRU THE 60 IN. I.D. X 114 FT. RCP CULVERT UNDER S.R.74
       58           KM        AND THE ASSOC. STORAGE AT THE RD.
       59           RS       1    STOR       0
       60           SV     0.0   0.209   0.617   1.241   2.080   3.134   4.404   5.890
       61           SQ     0.0    47.2   106.8   178.3   229.1   268.1   302.8   332.7
       62           SE  1935.2  1938.0  1940.0  1942.0  1944.0  1946.0  1948.0  1950.0

       63           KK    R161   ROUTE   REACH
       64           KM        RO161; ROUTE S92 TO CO173
       65           RS       8    STOR      -1
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 66          RC   0.065   0.037   0.065    7950  0.0190    0.00
 67          RX     0.0     4.0    10.0    27.5    42.5    60.0    66.0    70.0
 68          RY     8.0     7.0     6.0     0.0     0.0     6.0     7.0     8.0

 69          KK     160   BASIN
 70          BA   0.549
 71          LG    0.25    0.39    5.70    0.22      10
 72          UI      76      79     111     239     334     450     510     592     632     803
 73          UI     909     579     496     461     419     381     369     324     296     266
 74          UI     227     201     190     176     161     144     126     100     101      87
 75          UI      84      80      59      58      60      46      37      39      37      37
 76          UI      39      15      15      15      15      14      15      15      15      15
 77          UI      14       0       0       0       0       0       0       0       0       0
 78          UI       0       0       0       0       0       0       0       0       0       0

 79          KK   CO173
 80          KM        COMBINE RO169, RO161, AND S160
 81          HC       3

 82          KK    R175   ROUTE   REACH
 83          KM        ROUTE CO173 TO CO155
 84          RS       2    STOR      -1
 85          RC   0.065   0.037   0.065    3200  0.0075    0.00
 86          RX     0.0     9.0    15.0    23.0    54.0    62.0    92.0   100.0
 87          RY     6.0     3.0     3.0     0.0     0.0     3.0     4.0     7.0

 88          KK     150   BASIN
 89          BA   0.877
 90          LG    0.25    0.37    5.20    0.27      14
 91          UI     139     142     289     509     775     894    1049    1221    1547    1400
 92          UI     994     863     769     721     645     573     536     452     371     352
 93          UI     322     298     253     215     178     173     151     145     110     106
 94          UI     107      70      69      68      71      64      27      28      26      27
 95          UI      28      26      27      28      26      27      28      26       0       0
 96          UI       0       0       0       0       0       0       0       0       0       0
1                                                HEC-1 INPUT                                          PAGE  3

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

 97          KK      76   BASIN
 98          BA   0.938
 99          LG    0.25    0.35    4.55    0.38      17
100          UI     115     119     115     306     435     585     708     808     882     951
101          UI    1231    1372    1012     847     704     686     637     576     544     512
102          UI     454     420     388     326     293     284     267     247     231     191
103          UI     170     152     147     126     130     118      89      91      89      84
104          UI      58      57      57      58      57      57      29      22      22      23
105          UI      23       0       0       0       0       0       0       0       0       0
106          UI       0       0       0       0       0       0       0       0       0       0
107          UI       0       0       0       0       0       0       0       0       0       0

108          KK    DR76
109          KM        ROUTE S76 THRU 2-10 FT.(SPAN) X 8 FT. X 150 FT. (LONG) RCB'S UNDER S.R.7
110          KM        AND ASSOC. STOARGE AT RD.
111          RS       1    STOR       0
112          SV     0.0   0.453   1.145   2.152   3.474   5.575   8.917   13.50  19.324  26.389
113          SQ     0.0   324.7   642.2  1029.8  1473.8  1967.1  2390.8  2721.3  3017.8  3285.9
114          SE  1850.6  1854.0  1856.0  1858.0  1860.0  1862.0  1864.0  1866.0  1868.0  1870.0

115          KK    R153   ROUTE   REACH
116          KM        R153; ROUTE S76 TO CO155
117          RS       4    STOR      -1
118          RC   0.065   0.037   0.065    5200  0.0140    0.00
119          RX     0.0     6.0    12.0    18.0    43.0    46.0    76.0    82.0
120          RY    12.0     9.0     6.0     0.0     0.0     1.5     2.0     6.0

121          KK   CO155
122          KM         COMBINE R175, R153, AND S150
123          HC       3

124          KK      72   BASIN
125          BA   0.143
126          LG    0.25    0.35    4.70    0.34      14
127          UI      39      95     198     286     393     373     250     212     175     145
128          UI     116      94      78      61      48      42      32      27      19      20
129          UI      14       7       8       8       7       8       8       0       0       0
130          UI       0       0       0       0       0       0       0       0       0       0

131          KK    DR72
132          KM        ROUTE S72 THRU (1) 8 FT. (SPAN) X 5 FT. X 147 FT RCB UNDER S.R.74
133          KM        AND ASSOC. STORAGE AT RD.
134          RS       1    STOR       0
135          SV     0.0   0.024   0.259   0.736   1.455   2.416   3.619
136          SQ     0.0    26.0   103.4   225.3   374.6   503.5   600.0
137          SE  1839.1  1840.0  1842.0  1844.0  1846.0  1848.0  1850.0

138          KK      70   BASIN
139          BA   0.090
140          LG    0.25    0.35    4.80    0.33      14
141          UI      42     174     284     371     227     174     128      95      71      47
142          UI      37      27      18      15       7       7       8       7       0       0
143          UI       0       0       0       0       0       0       0       0       0       0
1                                                HEC-1 INPUT                                          PAGE  4

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

144          KK    DR70
145          KM        ROUTE S70 THRU (1) 54 IN. I.D. RCP X 118 FT. LONG AND (1) 42 IN. I.D.
146          KM        RCP X 162 FT. LONG CULVERTS UNDER S.R. 74 AND ASSOC. STORAGE AR RD.
147          RS       1    STOR       0
148          SV     0.0   0.317   0.904   1.792   2.980   3.687
149          SQ     0.0    25.6    99.0   142.4   192.9   226.0
150          SE  1831.1  1834.0  1836.0  1838.0  1840.0  1841.0

151          KK      68   BASIN
152          BA   0.601
153          LG    0.25    0.35    4.25    0.46      21
154          UI      77      79      77     225     314     406     482     559     592     680
155          UI     872     873     582     509     462     425     407     376     340     318
156          UI     284     253     226     197     186     183     163     146     132     109
157          UI      99      97      84      85      72      59      59      61      45      38
158          UI      39      37      38      39      25      15      15      15      14      16
159          UI      14       0       0       0       0       0       0       0       0       0
160          UI       0       0       0       0       0       0       0       0       0       0
161          UI       0       0       0       0       0       0       0       0       0       0

162          KK    DR68
163          KM        ROUTE S68 THRU (2) 8 FT.(SPAN) X 6 FT. X 72 FT LONG RCB'S UNDER
164          KM         S.R.74 AND ASSOC. STORAGE AT RD.
165          RS       1    STOR       0
166          SV     0.0   0.052   0.310   0.784   1.474   2.326
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 167          SQ     0.0    67.9   254.7   511.4   821.7   993.1
 168          SE  1832.6  1834.0  1836.0  1838.0  1840.0  1841.0

 169          KK   CO141
 170          KM        COMBINE S72, S70, AND S68
 171          HC       3

 172          KK    R145   ROUTE   REACH
 173          KM        R145; ROUTE CO141 TO CO147
 174          RS       5    STOR     -1
 175          RC   0.065   0.037   0.065    4910  0.0150    0.00
 176          RX     0.0    20.0    28.0    31.0    56.0    59.0    89.0   101.0
 177          RY     7.0     1.5     1.0     0.0     0.0     1.0     2.0     6.0

 178          KK     144   BASIN
 179          BA   0.343
 180          LG    0.25    0.39    5.70    0.22       9
 181          UI      52      54      98     176     266     328     378     428     516     609
 182          UI     415     342     303     285     258     231     217     187     164     142
 183          UI     129     119     114      91      82      69      65      57      58      43
 184          UI      40      41      32      25      27      25      26      20      10      10
 185          UI      10      10      10      10      10      10      10      10      10      10
 186          UI       0       0       0       0       0       0       0       0       0       0
 187          UI       0       0       0       0       0       0       0       0       0       0
1                                                HEC-1 INPUT                                                    PAGE  5

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


 188          KK   CO147
 189          KM        COMBINE S144, R145, AND CO155
 190          HC       3

 191          KK    R149   ROUTE   REACH
 192          KM        R149; ROUTE CO147 TO CO133
 193          RS       2    STOR     -1
 194          RC   0.065   0.037   0.065    2300  0.0110    0.00
 195          RX     0.0    10.0    50.0    57.5    97.5   105.0   125.0   131.0
 196          RY     6.5     3.5     3.0     0.0     0.0     3.0     7.0     9.0

 197          KK      54   BASIN
 198          BA   1.171
 199          LG    0.25    0.35    4.30    0.44      21
 200          UI     149     155     149     441     610     790     940    1091    1154    1322
 201          UI    1701    1700    1133     992     902     827     793     732     663     619
 202          UI     554     493     441     383     362     359     316     285     256     213
 203          UI     192     190     164     164     141     116     115     119      87      73
 204          UI      76      73      73      76      49      28      30      29      29      29
 205          UI      29       0       0       0       0       0       0       0       0       0
 206          UI       0       0       0       0       0       0       0       0       0       0
 207          UI       0       0       0       0       0       0       0       0       0       0

 208          KK     R55   ROUTE   REACH
 209          KM        R55; ROUTE S54 TO CO57
 210          RS       2    STOR     -1
 211          RC   0.065   0.037   0.065    3800  0.0170    0.00
 212          RX     0.0     9.0    18.0    27.0    57.0    63.0    69.0    75.0
 213          RY     9.0     6.0     3.0     0.0     0.0     4.0     8.0    12.0

 214          KK      56   BASIN
 215          BA   0.750
 216          LG    0.25    0.35    4.30    0.44      21
 217          UI     104     107     152     327     457     614     696     810     863    1097
 218          UI    1241     792     678     629     572     521     504     442     405     363
 219          UI     310     276     259     239     221     197     171     138     137     119
 220          UI     114     111      80      79      83      62      51      53      51      51
 221          UI      52      21      20      21      20      20      20      20      20      21
 222          UI      20       0       0       0       0       0       0       0       0       0
 223          UI       0       0       0       0       0       0       0       0       0       0

 224          KK    CO57
 225          KM        COMBINE S56 AND R55
 226          HC       2

 227          KK     R59   ROUTE   REACH
 228          KM        R59; ROUTE CO57 TO CO61
 229          RS       3    STOR     -1
 230          RC   0.065   0.037   0.065    4500  0.0150    0.00
 231          RX     0.0    12.0    24.0    36.0    69.0    75.0    81.0    87.0
 232          RY     9.0     6.0     3.0     0.0     0.0     4.0     8.0    12.0
1                                                HEC-1 INPUT                                                    PAGE  6

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


 233          KK      50   BASIN
 234          BA   0.235
 235          LG    0.25    0.35    4.25    0.46      21
 236          UI      44      44     129     200     284     320     383     520     351     281
 237          UI     251     222     202     182     148     128     114     101      92      75
 238          UI      61      55      50      45      33      35      28      21      22      21
 239          UI      19       8       9       8       9       8       8       9       8       9
 240          UI       8       0       0       0       0       0       0       0       0       0
 241          UI       0       0       0       0       0       0       0       0       0       0

 242          KK    CO61
 243          KM        COMBINE S50 AND R59
 244          HC       2

 245          KK    DR61
 246          KM        ROUTE CO61 THRU (2) 12 FT. (SPAN) X 10 FT. X 84.5 FT. RCB'S UNDER
 247          KM        S.R.74 AND ASSOC. STORAGE AT RD.
 248          RS       1    STOR      0
 249          SV     0.0   0.045   0.294   1.041   2.521   4.826   8.212
 250          SQ     0.0   190.2   517.0   938.6  1437.8  2003.0  2629.5
 251          SE  1835.9  1838.0  1840.0  1842.0  1844.0  1846.0  1848.0

 252          KK      46   BASIN
 253          BA   1.629
 254          LG    0.25    0.35    4.35    0.43      21
 255          UI     126     130     126     127     144     365     404     505     578     719
 256          UI     803     835     901     974     990    1103    1262    1441    1578    1238
 257          UI     954     886     841     766     735     728     681     646     625     585
 258          UI     562     549     504     484     454     417     393     356     336     306
 259          UI     315     291     289     280     267     241     213     206     188     167
 260          UI     161       0       0       0       0       0       0       0       0       0
 261          UI       0       0       0       0       0       0       0       0       0       0
 262          UI       0       0       0       0       0       0       0       0       0       0
 263          UI       0       0       0       0       0       0       0       0       0       0
 264          UI       0       0       0       0       0       0       0       0       0       0
 265          UI       0       0       0       0       0       0       0       0       0       0
 266          UI       0       0       0       0       0       0       0       0       0       0
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 267          KK      42   BASIN
 268          BA   0.632
 269          LG    0.25    0.35    4.45    0.40      21
 270          UI      78      80      78     206     292     395     477     544     595     640
 271          UI     829     925     682     570     475     461     431     387     367     345
 272          UI     306     283     261     219     198     192     179     167     156     128
 273          UI     114     103      99      85      87      80      60      61      60      57
 274          UI      39      39      38      39      39      38      20      15      14      16
 275          UI      15       0       0       0       0       0       0       0       0       0
 276          UI       0       0       0       0       0       0       0       0       0       0
 277          UI       0       0       0       0       0       0       0       0       0       0
1                                                HEC-1 INPUT                                          PAGE  7

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


 278          KK    CO47
 279          KM        COMBINE S46 AND S42
 280          HC       2

 281          KK     R49   ROUTE   REACH
 282          KM        R49; ROUTE CO47 TO CO63
 283          RS       4    STOR      -1
 284          RC   0.065   0.041   0.065    6200  0.0125    0.00
 285          RX     0.0    12.0    24.0    36.0    79.5    85.5    91.5    97.5
 286          RY     9.0     6.0     3.0     0.0     0.0     3.0     6.0     9.0

 287          KK      48   BASIN
 288          BA   0.422
 289          LG    0.25    0.35    7.00    0.13      11
 290          UI      64      66     120     218     327     403     466     526     635     750
 291          UI     510     420     374     350     317     285     267     229     203     174
 292          UI     159     145     140     114     101      84      80      70      72      52
 293          UI      49      51      39      31      33      31      31      25      12      12
 294          UI      13      12      13      12      13      12      13      12      12      13
 295          UI       0       0       0       0       0       0       0       0       0       0
 296          UI       0       0       0       0       0       0       0       0       0       0

 297          KK    CO63
 298          KM        COMBINE S48 AND R49.  THIS IS TRIBUTARY 'C' TO PADELFORD WASH AT S.R.74
 299          HC       2

 300          KK    DR63
 301          KM        ROUTE CO63 THRU (3) 10 FT. (SPAN) X 10 FT. X 122.5 FT. LONG RCB'S
 302          KM        UNDER S.R.74 AND ASSOC. STORAGE AT RD.
 303          RS       1    STOR       0
 304          SV     0.0   0.027   0.355   1.210   3.189   6.826  12.377
 305          SQ     0.0   156.9   391.5   842.8  1403.6  2048.6  2773.1
 306          SE  1837.1  1838.0  1840.0  1842.0  1844.0  1846.0  1848.0

 307          KK    CO65
 308          KM        COMBINE CO61 AND CO63
 309          HC       2

 310          KK    R123   ROUTE   REACH
 311          KM       R123; ROUTE CO65 TO CO127
 312          RS       1    STOR      -1
 313          RC   0.065   0.040   0.065    1400  0.0150    0.00
 314          RX     0.0     6.0    26.0    46.0    78.0    84.0    90.0    96.0
 315          RY     9.0     5.0     3.0     0.0     0.0     2.0     4.0     6.0

 316          KK      64   BASIN
 317          BA   0.437
 318          LG    0.25    0.35    4.30    0.44      20
 319          UI      69      71     144     254     386     445     523     608     771     698
 320          UI     495     430     383     360     321     286     267     225     185     176
 321          UI     160     148     126     107      89      86      76      72      55      53
 322          UI      53      35      34      34      35      32      13      14      13      14
 323          UI      13      14      13      14      13      13      14      13       0       0
 324          UI       0       0       0       0       0       0       0       0       0       0
1                                                HEC-1 INPUT                                          PAGE  8

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


 325          KK    DR64
 326          KM        ROUTE S64 THRU (1) 10 FT. (SPAN) X 6 FT. X 118.5 FT. RCB AND
 327          KM        (1) 10 FT. (SPAN) X 6 FT. X 118.5 FT. RCB AND (1) 6 FT. (SPAN)
 328          KM        X 5 FT. X 122 FT. RCB. UNDER S.R.74 AND ASSOC. STORAGE AT THE RD.
 329          RS       1    STOR       0
 330          SV     0.0   0.065   0.384   0.853   1.621   3.088   5.495   9.367  15.915
 331          SQ     0.0   103.9   215.9   459.4   759.8  1064.2  1297.2  1489.7  1660.8
 332          SE  1830.8  1832.0  1834.0  1836.0  1838.0  1840.0  1842.0  1844.0  1846.0

 333          KK    R121   ROUTE   REACH
 334          KM       R121; ROUTE S64 TO CO127
 335          RS       1    STOR      -1
 336          RC   0.065   0.040   0.065     700  0.0230    0.00
 337          RX     0.0    11.0    22.0    33.0    39.0    50.0    61.0    72.0
 338          RY     6.0     4.0     2.0     0.0     0.0     2.0     4.0     6.0

 339          KK   CO127
 340          KM        COMBINE R121 AND R123
 341          HC       2

 342          KK    R129   ROUTE   REACH
 343          KM       R129; ROUTE CO127 TO CO132
 344          RS       3    STOR      -1
 345          RC   0.065   0.038   0.065    5600  0.0120    0.00
 346          RX     0.0    10.0    50.0    56.0    97.0   111.0   116.5   123.5
 347          RY     6.0     3.0     3.0     0.0     0.0     3.5     5.0     7.0

 348          KK     132   BASIN
 349          BA   0.352
 350          LG    0.25    0.36    6.80    0.14       6
 351          UI      47      48      58     142     198     257     301     357     376     448
 352          UI     579     426     325     297     270     253     232     216     190     183
 353          UI     158     139     123     114     108     104      87      76      67      60
 354          UI      56      53      52      38      37      35      35      23      23      23
 355          UI      24      23      19      10       9       9       9       9       9       9
 356          UI       9       0       0       0       0       0       0       0       0       0
 357          UI       0       0       0       0       0       0       0       0       0       0

 358          KK   CO132
 359          KM        COMBINE S132 AND R129.   THIS IS TRIBUTARY 'C' JUST U/S OF PADELFORD
 360          KM        WASH
 361          HC       2

 362          KK   CO133
 363          KM        COMBINE CO132 AND R149. THIS IS PADELFORD WASH D/S OF TRIB. 'C' CONFLUEN
 364          HC       2

 365          KK    R137   ROUTE   REACH
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 366          KM        R137; ROUTE CO133 TO CO125
 367          RS       2    STOR      -1
 368          RC   0.065   0.037   0.065    1920  0.0089    0.00
 369          RX     0.0     4.0    24.0    40.0   100.0   112.0   192.0   202.0
 370          RY     8.0     5.0     4.0     0.0     0.0     3.5     3.5     8.0
1                                          HEC-1 INPUT                                                          PAGE  9

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

 371          KK      10   BASIN
 372          BA   1.291
 373          LG    0.25    0.35    4.55    0.38      20
 374          UI     143     148     144     290     475     599     779     921    1000    1071
 375          UI    1236    1392    1737    1491    1071     944     880     818     766     737
 376          UI     674     624     605     538     480     455     384     359     354     330
 377          UI     304     295     236     231     189     183     173     162     157     146
 378          UI     113     110     110     113      80      70      73      70      70      73
 379          UI      70       0       0       0       0       0       0       0       0       0
 380          UI       0       0       0       0       0       0       0       0       0       0
 381          UI       0       0       0       0       0       0       0       0       0       0
 382          UI       0       0       0       0       0       0       0       0       0       0

 383          KK     R11   ROUTE   REACH
 384          KM        R11; ROUTE S10 TO CO17
 385          RS       2    STOR      -1
 386          RC   0.065   0.040   0.065    4600  0.0170    0.00
 387          RX     0.0     6.0    12.0    18.0    38.0    43.0    49.0    55.0
 388          RY     7.0     5.0     3.0     0.0     0.0     3.0     5.0     7.0

 389          KK      16   BASIN
 390          BA   0.653
 391          LG    0.25    0.40    6.00    0.20      15
 392          UI      99     103     186     337     505     624     720     814     982    1161
 393          UI     790     651     577     542     491     440     414     354     315     268
 394          UI     246     226     217     175     156     131     123     108     112      80
 395          UI      76      79      60      49      50      49      48      38      19      19
 396          UI      20      19      19      19      19      19      20      19      19      19
 397          UI       0       0       0       0       0       0       0       0       0       0
 398          UI       0       0       0       0       0       0       0       0       0       0

 399          KK    CO17
 400          KM        COMBINE R11 AND S16
 401          HC       2

 402          KK     R19   ROUTE   REACH
 403          KM        R19; ROUTE CO17 TO CO25
 404          RS       3    STOR      -1
 405          RC   0.065   0.040   0.065    6200  0.0190    0.00
 406          RX     0.0     6.0    12.0    18.0    43.0    48.0    54.0    60.0
 407          RY     7.0     5.0     3.0     0.0     0.0     3.0     5.0     7.0

 408          KK      20   BASIN
 409          BA   1.499
 410          LG    0.25    0.35    4.35    0.43      21
 411          UI     172     178     173     385     593     748     989    1132    1241    1315
 412          UI    1569    1836    2069    1491    1200    1068    1050     950     869     851
 413          UI     770     702     685     600     532     477     436     415     403     365
 414          UI     343     295     269     221     227     199     188     193     156     132
 415          UI     137     132     122      87      84      84      87      85      84      65
 416          UI      33       0       0       0       0       0       0       0       0       0
 417          UI       0       0       0       0       0       0       0       0       0       0
 418          UI       0       0       0       0       0       0       0       0       0       0
1                                          HEC-1 INPUT                                                          PAGE 10

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

 419          KK      24   BASIN
 420          BA   0.853
 421          LG    0.25    0.35    4.50    0.39      20
 422          UI      98     101      98     220     337     426     563     644     706     748
 423          UI     893    1045    1177     849     682     609     597     540     494     486
 424          UI     437     399     391     341     303     271     248     236     229     208
 425          UI     196     167     154     126     128     114     107     110      88      75
 426          UI      78      75      69      50      48      48      50      48      48      37
 427          UI      19       0       0       0       0       0       0       0       0       0
 428          UI       0       0       0       0       0       0       0       0       0       0
 429          UI       0       0       0       0       0       0       0       0       0       0

 430          KK    CO25
 431          KM        COMBINE S24, S20, AND R19
 432          HC       3

 433          KK     R27   ROUTE   REACH
 434          KM        R27; ROUTE CO25 TO CO31
 435          RS       6    STOR      -1
 436          RC   0.065   0.037   0.065   11200  0.0160    0.00
 437          RX     0.0    14.0    28.0    38.0    70.5    79.5    93.5   107.5
 438          RY     7.5     5.5     3.5     0.0     0.0     4.0     6.0     8.0

 439          KK      30   BASIN
 440          BA   0.396
 441          LG    0.25    0.32    7.60    0.10       7
 442          UI      39      40      39      45     114     138     171     225     240     270
 443          UI     294     311     350     428     474     358     297     261     234     232
 444          UI     218     200     191     182     164     163     149     133     126     110
 445          UI     103      98      91      89      86      82      63      65      56      49
 446          UI      51      46      43      44      42      31      31      29      30      31
 447          UI      20       0       0       0       0       0       0       0       0       0
 448          UI       0       0       0       0       0       0       0       0       0       0
 449          UI       0       0       0       0       0       0       0       0       0       0
 450          UI       0       0       0       0       0       0       0       0       0       0

 451          KK    CO31
 452          KM        COMBINE S30 AND R27. THIS IS TRIBUTARY 'B' AT S.R.74.
 453          HC       2

 454          KK    DR31
 455          KM        ROUTE CO31 THRU (4) 10 FT. (SPAN) X 10 FT. X 102.5 FT. RCB'S UNDER
 456          KM        S.R.74 AND ASSOC. STORAGE AT RD.
 457          RS       1    STOR       0
 458          SV     0.0   0.150   0.719   2.099   4.504   7.849  12.219  14.863
 459          SQ     0.0   435.5   934.9  1642.9  2470.1  3411.8  4441.5  4994.4
 460          SE  1857.7  1860.0  1862.0  1864.0  1866.0  1868.0  1870.0  1971.0

 461          KK    R113   ROUTE   REACH
 462          KM        R113; ROUTE CO31 TO CO115
 463          RS       1    STOR      -1
 464          RC   0.065   0.040   0.065    3300  0.0150    0.00
 465          RX     0.0     7.0    14.0    19.0    53.0    59.0    65.0    71.0
 466          RY     9.0     7.0     5.0     0.0     0.0     4.0     8.0    12.0
1                                          HEC-1 INPUT                                                          PAGE 11
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 467          KK      32   BASIN
 468          BA   0.081
 469          LG    0.25    0.30    8.00    0.09       7
 470          UI      17      23      56      92     122     138     190     146     109      94
 471          UI      84      75      63      54      43      39      37      27      22      21
 472          UI      18      14      13      11       9       8       9       5       3       4
 473          UI       3       3       3       3       4       3       0       0       0       0
 474          UI       0       0       0       0       0       0       0       0       0       0

 475          KK    DR32
 476          KM         ROUTE S32 THRU (1) 6 FT. X 5 FT X 110.5 FT. RCB UNDER S.R.74 AND
 477          KM         ASSOC. STORAGE AT RD.
 478          RS       1    STOR       0
 479          SV     0.0   0.105   0.147   0.218   0.346   0.673   1.555   3.049
 480          SQ     0.0    36.4   100.5   200.0   314.2   398.4   466.9   498.2
 481          SE  1856.5  1858.0  1860.0  1862.0  1864.0  1866.0  1868.0  1869.0

 482          KK    R111   ROUTE   REACH
 483          KM         ** R111; ROUTE S32 TO CO115
 484          RS       3    STOR      -1
 485          RC   0.065   0.040   0.065    3100  0.0170    0.00
 486          RX     0.0     7.0    14.0    21.0    26.0    33.0    40.0    47.0
 487          RY     6.0     4.0     2.0     0.0     0.0     2.0     4.0     6.0

 488          KK   CO115
 489          KM         COMBINE S32 AND R113
 490          HC       2

 491          KK    R117   ROUTE   REACH
 492          KM         *** R117; ROUTE CO115 TO CO119
 493          RS       1    STOR      -1
 494          RC   0.065   0.040   0.065    1000  0.0150    0.00
 495          RX     0.0     7.0    14.0    19.0    53.0    59.0    65.0    71.0
 496          RY     9.0     7.0     5.0     0.0     0.0     4.0     8.0    12.0

 497          KK      34   BASIN
 498          KM         ***  SUBAREA 34. ALSO. TRIBUTARY 'A' TO PADELFORD WASH AT S.R. 74.
 499          BA   1.125
 500          LG    0.25    0.25    9.70    0.05       2
 501          UI      83      86      83      83      86     211     239     329     366     438
 502          UI     505     524     579     630     629     667     778     844     961    1053
 503          UI     762     645     594     538     514     507     470     445     444     415
 504          UI     394     388     359     336     335     311     287     272     254     221
 505          UI     226     202     202     198     191     180     180     164     137     141
 506          UI     132       0       0       0       0       0       0       0       0       0
 507          UI       0       0       0       0       0       0       0       0       0       0
 508          UI       0       0       0       0       0       0       0       0       0       0
 509          UI       0       0       0       0       0       0       0       0       0       0
 510          UI       0       0       0       0       0       0       0       0       0       0
 511          UI       0       0       0       0       0       0       0       0       0       0
 512          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

 513          KK    DR34
 514          KM         ROUTE S34 THRU (3) 10 FT. X 8 FT. X 70 FT. LONG RCB'S UNDER S.R.74.
 515          KM         AND ASSOC. STORAGE AT RD.
 516          RS       1    STOR       0
 517          SV     0.0   0.054   0.425   1.622   4.256
 518          SQ     0.0    52.1   412.9   877.9  1443.8
 519          SE  1872.9  1874.0  1876.0  1878.0  1880.0

 520          KK    R107   ROUTE   REACH
 521          KM         *** R107; ROUTE S34 TO CO105
 522          RS       1    STOR      -1
 523          RC   0.065   0.040   0.065    1700  0.0160    0.00
 524          RX     0.0     6.0    12.0    18.0    45.0    49.0    81.0    85.0
 525          RY    12.0     8.0     4.0     0.0     0.0     2.0     3.0     5.0

 526          KK      38   BASIN
 527          BA   0.102
 528          LG    0.25    0.22   10.10    0.04       0
 529          UI      28      67     142     204     280     266     178     151     126     103
 530          UI      82      67      57      43      34      30      23      19      14      14
 531          UI      10       5       6       5       6       6       5       0       0       0
 532          UI       0       0       0       0       0       0       0       0       0       0

 533          KK    DR38
 534          KM         ROUTE S38 THRU (1) 6 FT. X 5 FT. X 127 FT. RCB UNDER S.R. 74
 535          KM         AND ASSOC. STORAGE AT RD.
 536          RS       1    STOR       0
 537          SV     0.0    0.09   0.319   0.733   1.502   2.768   4.887
 538          SQ     0.0    45.1   114.4   214.8   327.5   445.4   477.2
 539          SE  1874.2  1876.0  1878.0  1880.0  1882.0  1884.0  1886.0

 540          KK    R103   ROUTE   REACH
 541          KM         *** R103; ROUTE S38 TO CO105
 542          RS       2    STOR      -1
 543          RC   0.065   0.040   0.065    2560  0.0180    0.00
 544          RX     0.0    12.0    24.0    36.0    40.0    52.0    64.0    76.0
 545          RY     6.0     4.0     2.0     0.0     0.0     2.0     4.0     6.0

 546          KK   CO105
 547          KM         COMBINE R103 AND R107
 548          HC       2

 549          KK    R109   ROUTE   REACH
 550          KM         **** R109; ROUTE CO105 TO CO119
 551          RS       2    STOR      -1
 552          RC   0.065   0.040   0.065    3200  0.0160    0.00
 553          RX     0.0     6.0    12.0    18.0    45.0    49.0    81.0    85.0
 554          RY    12.0     8.0     4.0     0.0     0.0     2.0     3.0     5.0
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 555          KK     102   BASIN
 556          BA   0.133
 557          LG    0.25    0.22   10.10    0.04       0
 558          UI      21      21      44      77     118     136     158     186     234     213
 559          UI     151     130     117     109      98      87      81      69      56      54
 560          UI      48      46      38      32      28      26      23      21      17      17
 561          UI      16      11      10      10      11       9       4       5       4       4
 562          UI       4       4       4       4       5       4       4       4       0       0
 563          UI       0       0       0       0       0       0       0       0       0       0
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564          KK     112   BASIN
565          BA   0.217
566          LG    0.25    0.29    8.40    0.08       0
567          UI      51      94     210     317     408     537     484     327     284     243
568          UI     214     177     133     127     104      83      68      57      49      41
569          UI      34      25      26      25      10      10      10      10      10      10
570          UI      10      10       0       0       0       0       0       0       0       0
571          UI       0       0       0       0       0       0       0       0       0       0

572          KK   CO119
573          KM        COMBINE S102, S112, R109, AND R117
574          HC       4

575          KK    R118   ROUTE   REACH
576          KM         *** R118; ROUTE CO119 TO CO125
577          RS       3    STOR      -1
578          RC   0.065   0.037   0.065    5400  0.0110    0.00
579          RX     0.0     6.0    12.0    18.0    58.0    68.0   108.0   116.0
580          RY     9.0     6.0     3.0     0.0     0.0     3.0     4.0     8.0

581          KK     122   BASIN
582          BA   0.493
583          LG    0.25    0.32    7.60    0.10       2
584          UI      86      89     227     362     537     608     700     954     884     612
585          UI     536     472     423     393     341     293     253     215     199     193
586          UI     145     125     114      98      96      73      67      66      44      43
587          UI      42      43      30      16      17      17      16      17      17      16
588          UI      17      17      16       0       0       0       0       0       0       0
589          UI       0       0       0       0       0       0       0       0       0       0

590          KK   CO124
591          KM        COMBINE S122 AND R118. THIS IS TRIB. 'C' JUST UPSTREAM OF PADELFORD
592          KM        WASH
593          HC       2

594          KK   CO125
595          KM        COMBINE CO124 AND R137. THIS IS PADELFORD WASH JUST DOWNSTREAM OF
596          KM        TRIB. 'A' CONFLUENCE.
597          HC       2
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

598          KK     106   BASIN
599          BA   0.452
600          LG    0.25    0.27    8.80    0.07       0
601          UI      41      42      40      41     100     129     160     203     241     261
602          UI     291     302     321     371     419     503     447     314     282     270
603          UI     246     233     226     211     198     193     178     167     164     145
604          UI     134     131     107     104     103      95      93      91      86      70
605          UI      69      63      52      54      52      46      46      45      45      32
606          UI      31       0       0       0       0       0       0       0       0       0
607          UI       0       0       0       0       0       0       0       0       0       0
608          UI       0       0       0       0       0       0       0       0       0       0
609          UI       0       0       0       0       0       0       0       0       0       0
610          UI       0       0       0       0       0       0       0       0       0       0

611          KK      36   BASIN
612          BA   0.135
613          LG    0.25    0.25    9.70    0.05       0
614          UI      25      25      75     114     163     185     219     299     202     161
615          UI     144     128     116     104      86      73      65      59      52      43
616          UI      36      32      28      26      19      20      16      12      12      12
617          UI      11       5       5       5       5       5       4       5       5       5
618          UI       5       0       0       0       0       0       0       0       0       0
619          UI       0       0       0       0       0       0       0       0       0       0

620          KK    DR36
621          KM        ROUTE S36 THRU (1) 6 FT. (SPAN) X 7 FT. X 110 FT. LONG RCB UNDER
622          KM         S.R.74 AND ASSOC. STORAGE AT RD.
623          RS       1    STOR       0
624          SV     0.0   0.051   0.293   0.890   2.040
625          SQ     0.0    43.0   133.0   246.0   373.0
626          SE  1900.2  1902.0  1904.0  1906.0  1908.0

627          KK    R101   ROUTE   REACH
628          KM         *** R101; ROUTE S36 TO R101A
629          KM         *** S36 OCCURS AT ADOT STA.620+35 (6'X7' RCB) ON S.R.74
630          KM         *** END OF R101 IS AT S. EDGE SEC.36,T6N,R2W AND BEGINNING
631          KM         *** OF R101A
632          RS      12    STOR      -1
633          RC   0.065   0.042   0.065    8460  0.0130    0.00
634          RX     0.0     8.0    15.0    17.0    28.0    30.0    38.0    68.0
635          RY     4.0     2.0     1.0     0.0     0.0     1.0     2.0     4.0

636          KK   R101A   ROUTE   REACH
637          KM         *** R101A; ROUTE R101 TO CO191
638          KM  M      *** THIS ROUTE STEP COMPLETES ROUTING OF S36 TO CO191
639          RS       7    STOR      -1
640          RC   0.065   0.040   0.065    4300  0.0130    0.00
641          RX     0.0     2.0     4.0    16.0    33.0    40.0    64.0    80.0
642          RY     6.0     5.0     4.0     0.0     0.0     1.0     1.5     8.0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

643          KK   CO191
644          KM        COMBINE S106, R101A, AND CO125
645          HC       3

646          KK    R193   ROUTE   REACH
647          KM         *** R193; ROUTE CO191 TO CO195
648          RS       2    STOR      -1
649          RC   0.065   0.037   0.065    2500  0.0100    0.00
650          RX     0.0    40.0   153.0   331.0   405.0   445.0   485.0   525.0
651          RY     5.5     3.0     2.0     0.0     0.0     2.0     3.0     5.5

652          KK     192   BASIN
653          BA   0.525
654          LG    0.25    0.37    5.20    0.27       9
655          UI     116     179     433     672     887    1047    1283     849     693     600
656          UI     545     457     379     305     272     244     196     149     133     126
657          UI      89      89      65      57      58      46      22      23      23      22
658          UI      22      23      23      22       0       0       0       0       0       0
659          UI       0       0       0       0       0       0       0       0       0       0

660          KK   CO195
661          KM        COMBINE S192 AND R193
662          HC       2

663          KK    R197   ROUTE   REACH
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 664          KM        *** R197; ROUTE CO195 TO CO199
 665          RS       7    STOR      -1
 666          RC   0.065   0.037   0.065    4700  0.0110    0.00
 667          RX     0.0   148.0   297.0   365.0   482.0   550.0   699.0   847.0
 668          RY     5.5     3.0     2.0     0.0     0.0     2.0     3.0     5.5

 669          KK     198   BASIN
 670          BA   0.416
 671          LG    0.25    0.35    3.92    0.53      12
 672          UI      58      59      84     181     254     341     386     449     479     608
 673          UI     689     439     376     349     317     289     280     245     225     201
 674          UI     172     153     143     133     122     110      95      76      76      66
 675          UI      63      61      45      45      45      35      28      30      28      28
 676          UI      29      12      11      11      11      11      12      11      11      11
 677          UI      11       0       0       0       0       0       0       0       0       0
 678          UI       0       0       0       0       0       0       0       0       0       0

 679          KK   CO199
 680          KM        COMBINE S198 AND R197
 681          HC       2

 682          KK  SPLIT3
 683          KM        DIVERT AS 'MAIN3' THE FLOW TO PADELFORD WASH AND AS 'SPLIT3' THE
 684          KM        FLOW TO SPLIT3. FLOW SPLIT BASED ON A RATING CURVE OF ENERGY GRADE
 685          KM        VERSUS DISCHARGE FROM HEC-RAS MODEL ANALYSIS AT SEC. 32.443 OF
 686          KM        SPLIT3 AND SEC. 3.584 OF MAIN PADELFORD WASH.
 687          DT   MAIN3
 688          DI     0.0   164.0   380.0   597.0   952.0  1475.0  2215.0  3195.0  4384.0  5958.0
 689          DI   8608. 11401.0 14118.0
1                                          HEC-1 INPUT                                          PAGE 16

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

 690          DQ     0.0    34.0   167.0   300.0   431.0   669.0  1031.0  1568.0  2310.0  3318.0
 691          DQ  5233.0  7455.0  9318.0

 692          KK    R301   ROUTE   REACH
 693          KM        *** R301 ; ROUTE SPLIT3 TO CO215
 694          RS      10    STOR      -1
 695          RC   0.065   0.037   0.065    8920  0.0110    0.00
 696          RX     0.0    80.0   160.0   195.0   255.0   290.0   370.0   450.0
 697          RY     4.5     3.0     2.0     0.0     0.0     2.0     3.0     4.5

 698          KK     216   BASIN
 699          BA   0.198
 700          LG    0.25    0.35    3.85    0.56       0
 701          UI      28      28      40      86     121     162     184     213     228     290
 702          UI     328     209     179     166     151     137     133     117     107      96
 703          UI      82      72      69      63      58      52      46      36      36      32
 704          UI      30      28      22      21      22      16      14      14      13      14
 705          UI      14       5       5       6       5       5       6       5       5       5
 706          UI       6       0       0       0       0       0       0       0       0       0
 707          UI       0       0       0       0       0       0       0       0       0       0

 708          KK   CO215
 709          KM        COMBINE S216 AND R301 NEAR WHITE WING RD.
 710          HC       2

 711          KK   SPLT3
 712          KM        DIVERT AS 'SPLT3' FLOW TO SPLIT3 WASH AND AS 'SPLIT4'FLOW TO SPLIT4 WASH
 713          KM        FLOW SPLIT BASED ON RATING CURVE ANALYSIS BY HEC-RAS MODEL AT SEC. 30.71
 714          KM        OF SPLIT3 WASH AND SEC. 30.841 OF SPLIT4 WASH.
 715          DT  SPLIT4
 716          DI     0.0   448.0   780.0  1283.0  1892.0  2764.0  4240.0  5844.0
 717          DQ     0.0     0.0    51.0   131.0   212.0   380.0   663.0   931.0

 718          KK    R323   ROUTE   REACH
 719          KM        R323; ROUTE 'SPLIT3' TO CO219.
 720          RS       6    STOR      -1
 721          RC   0.065   0.037   0.065    3800  0.0110    0.00
 722          RX     0.0    40.0   160.0   188.0   228.0   256.0   376.0   416.0
 723          RY     4.2     3.0     2.0     0.0     0.0     2.0     3.0     4.2

 724          KK     218   BASIN
 725          BA   0.174
 726          LG    0.25    0.35    4.10    0.49       0
 727          UI      29      29      69     114     169     196     225     276     346     231
 728          UI     191     165     154     143     124     111      98      80      72      69
 729          UI      60      51      46      36      34      33      27      23      22      18
 730          UI      14      15      14      14       8       5       6       6       5       6
 731          UI       6       5       6       6       5       6       0       0       0       0
 732          UI       0       0       0       0       0       0       0       0       0       0
1                                          HEC-1 INPUT                                          PAGE 17

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

 733          KK   CO219
 734          KM        COMBINE 'SPLT3' FLOW AT CAP CANAL, S218 AND R323.
 735          HC       2

 736          KK  SPLIT4
 737          KM        RETRIEVE 'SPLIT4' FLOW FROM NEAR WHITE WING RD.
 738          DR  SPLIT4

 739          KK    R321   ROUTE   REACH
 740          KM        R321; ROUTE'SPLIT4' TO CO217.
 741          RS       5    STOR      -1
 742          RC   0.065   0.037   0.065    3400  0.0100    0.00
 743          RX     0.0    57.0   115.0   160.0   190.0   235.0   293.0   350.0
 744          RY     4.0     3.0     2.0     0.0     0.0     2.0     3.0     4.0

 745          KK     214   BASIN
 746          BA   0.201
 747          LG    0.25    0.35    4.00    0.51       0
 748          UI      29      30      49      95     139     175     203     230     269     338
 749          UI     283     205     176     173     148     141     130     114     105      90
 750          UI      78      71      68      61      53      50      37      38      33      32
 751          UI      27      23      22      22      15      14      14      15      14       9
 752          UI       5       6       5       6       6       5       6       5       6       6
 753          UI       5       0       0       0       0       0       0       0       0       0
 754          UI       0       0       0       0       0       0       0       0       0       0

 755          KK   CO217
 756          KM        COMBINE S214 AND R321 AT CAP CANAL FOR 'SPLIT4' WASH AT CAP CANAL.
 757          HC       2

 758          KK   CO400
 759          KM        COMBINE 'SPLIT3' AND 'SPLIT4' WASHES AT CAP CANAL.
 760          HC       2      23

 761          KK   DR400
 762          KM        ROUTE CO400 THRU THE (1) CAP CANAL OVERCHUTE STRUCTURE AND ASSOC.
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 763          KM         STORAGE TO WEST OF 163RD. AVE .
 764          KM         OVERFLOW TO EAST ACROSS THE 163RD AVE. WAS MODELED, STARTING AT EL.1553
 765          KM         IN THE FOLLOWING DIVERT ROUTINE.
 766          KM         NO OVERFLOW TO WEST WAS ASSUMED AT THIS TIME, ALTHOUGH POTENTIAL EXISTS
 767          KM         AT EL. 1549.0
 768          RS       1    STOR       0
 769          SV     0.0    0.10     1.7   10.87   20.82   35.22   78.92  108.77  144.27   223.4
 770          SV   244.0   250.0
 771          SQ     0.0    51.1   130.6   227.5   276.7   314.4   373.1   399.0   623.5  2618.5
 772          SQ  3529.1  5500.0
 773          SE  1541.1  1544.0  1546.0  1548.0  1549.0  1550.0  1552.0  1553.0  1554.0  1556.0
 774          SE  1556.5  1557.0
1                                          HEC-1 INPUT                                          PAGE 18

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


 775          KK   DV400
 776          KM        DIVERT AS"DV400" FLOW REMAINING ON WEST SIDE OF 163RD AVE. AND AS
 777          KM        "DV501" , FLOW WEIRING TO EAST OVER 163RD AVE.
 778          DT   DV501
 779          DI     0.0    51.1   130.6   227.5   276.7   314.4   373.1   399.0   623.5  2618.5
 780          DI  3529.1  5500.0
 781          DQ     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   200.0  2150.0
 782          DQ  3050.0  4050.0

 783          KK   MAIN3
 784          KM         RETRIEVE'MAIN3' FLOW
 785          DR   MAIN3

 786          KK  SPLIT2
 787          KM         DIVERT AS 'MAIN2' THE FLOW TO MAIN PADELFORD WASH AND AS 'SPLIT2'
 788          KM         THE FLOW TO SPLIT2 WASH.
 789          KM         THE FLOW SPLIT IS BASED ON A RATING CURVE ANALYSIS BY HEC-RAS MODEL
 790          KM         OF ENERGY GRADE EL. VERSUS DISCHARGE AT MAIN SEC.3.300 AND
 791          KM         SPLIT2 WASH SEC. 22.114
 792          DT   MAIN2
 793          DI     0.0   261.0   380.0   668.0  1015.0  1464.0  2108.0  2884.0  3789.0  4803.0
 794          DI  5926.0  7158.0  8365.0  9380.0
 795          DQ     0.0   261.0   348.0   570.0   850.0  1233.0  1718.0  2253.0  2825.0  3450.0
 796          DQ  4130.0  4887.0  5572.0  6028.0

 797          KK    R318   ROUTE   REACH
 798          KM         *** R318; ROUTE SPLIT2 TO CO410
 799          RS      15    STOR      -1
 800          RC   0.065   0.037   0.065   11200  0.0110    0.00
 801          RX     0.0    60.0   180.0   255.0   295.0   370.0   490.0   550.0
 802          RY     3.5     3.0     2.0     0.0     0.0     2.0     3.0     3.5

 803          KK     220   BASIN
 804          BA   0.242
 805          LG    0.25    0.35    4.00    0.51       0
 806          UI      21      22      21      22      47      64      82     100     125     132
 807          UI     147     154     166     186     204     241     267     184     158     142
 808          UI     131     126     123     113     108     103      99      88      88      82
 809          UI      75      71      65      56      55      52      49      51      45      45
 810          UI      39      35      35      27      27      27      26      23      23      24
 811          UI      19       0       0       0       0       0       0       0       0       0
 812          UI       0       0       0       0       0       0       0       0       0       0
 813          UI       0       0       0       0       0       0       0       0       0       0
 814          UI       0       0       0       0       0       0       0       0       0       0
 815          UI       0       0       0       0       0       0       0       0       0       0

 816          KK   CO410
 817          KM        COMBINE R318 AND S220 AS SPLIT2 AT CAP CANAL
 818          HC       2
1                                          HEC-1 INPUT                                          PAGE 19

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


 819          KK   MAIN2
 820          KM        RETRIEVE 'MAIN2' FLOW
 821          DR   MAIN2

 822          KK  SPLIT1
 823          KM         DIVERT AS 'MAIN1' THE FLOW TO MAIN PADELFORD WASH AND AS 'SPLIT1'
 824          KM         THE FLOW TO SPLIT1 WASH.
 825          KM         FLOW SPLIT BASED ON RATING CURVE ANALYSIS BY HEC-RAS MODEL OF ENERGY
 826          KM         GRADE VERSUS DISCHARGE AT SEC. 3.108 (MAIN) AND SEC. 12.019 (SPLIT1).
 827          DT   MAIN1
 828          DI     0.0   134.0   320.0   639.0  1031.0  1570.0  2329.0  3345.0  4905.0  6445.0
 829          DQ     0.0     0.0    55.0   113.0   171.0   300.0   516.0   826.0  1280.0  1695.0

 830          KK    R316   ROUTE   REACH
 831          KM         *** R316; ROUTE SPLIT1 TO CO208
 832          RS       7    STOR      -1
 833          RC   0.065   0.037   0.065    4520  0.0110    0.00
 834          RX     0.0   125.0   159.0   175.0   204.0   221.0   256.0   381.0
 835          RY     5.3     3.0     2.0     0.0     0.0     2.0     3.0     5.3

 836          KK     212   BASIN
 837          BA   0.218
 838          LG    0.25    0.35    4.00    0.51       4
 839          UI      34      35      73     126     193     222     261     303     385     348
 840          UI     247     214     192     179     160     143     133     112      93      87
 841          UI      80      74      63      53      45      43      37      36      28      26
 842          UI      27      17      17      17      18      16       6       7       7       6
 843          UI       7       7       6       7       7       6       7       7       0       0
 844          UI       0       0       0       0       0       0       0       0       0       0

 845          KK   CO208
 846          KM        COMBINE S212 AND R316
 847          HC       2

 848          KK   SPLT1
 849          KM        DIVERT AS "SPLT1" FLOW CONTINUING ALONG SPLIT1 WASH AND DIVERT
 850          KM        AS "MN1" FLOW WEIRING OVER BANK NEAR SPLIT1 SEC.11.523 AND RETURNING
 851          KM        TO PADELFORD WASH "MAIN1" WASH AT CO207.
 852          KM        THE SPLIT FLOW RELASHIONSHIP IS BASED ON DISCHARGE VS. Q AT SEC. 11.523,
 853          KM        AND WEIR FLOW FROM NORMAL DEPTH RECTANGULAR CHANN. WITH BOTT. WIDTH
 854          KM        OF 800 FT. N=0.055, S=0.02 FT./FT.
 855          DT     MN1
 856          DI     0.0   250.0   500.0   750.0  1000.0  1250.0  1500.0  1750.0  2021.0  2477.0
 857          DI  3163.0  3947.0  4725.0  5533.0  6450.0  8115.0  9279.0
 858          DQ     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    21.0   227.0
 859          DQ   663.0  1197.0  1725.0  2283.0  2950.0  4365.0  5279.0

 860          KK     210   BASIN
 861          BA   0.637
 862          LG    0.25    0.36    5.10    0.29       6
 863          UI      82      83      82     239     333     429     512     592     629     719
 864          UI     925     925     616     539     491     450     432     398     360     338
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865        UI    301    268    240    207    198    195    172    155    140    116
866        UI    104    103     89     89     77     63     63     64     48     40
1                                        HEC-1 INPUT                                                    PAGE 20
LINE       ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

867        UI     41     40     40     41     27     15     16     16     15     17
868        UI     15      0      0      0      0      0      0      0      0      0
869        UI      0      0      0      0      0      0      0      0      0      0
870        UI      0      0      0      0      0      0      0      0      0      0

871        KK   CO209
872        KM        COMBINE S210, AND CO208
873        HC       2

874        KK   SPLT1
875        KM        DIVERT AS "SPLT1" , FLOW TO SPLIT1 WASH AND AS "SPLIT5" TO SPLIT5
876        KM        WASH. FLOW SPLITS WERE DERIVED BY DETAIL HEC-RAS MODEL ANALYSIS
877        KM        TO DEVELOP FLOW SPLIT BASED ON E.G. ELEV. VS Q'S AT SEC. 11.093
878        KM        OF SPLIT1 AND SEC. 51.088 OF SPLIT5.
879        DT  SPLIT5
880        DI    0.0  383.0  685.0 1100.0 1712.0 2853.0 4288.0 6240.0
881        DQ    0.0  147.0  263.0  379.0  495.0 1000.0 1694.0 2548.0

882        KK    R211   ROUTE   REACH
883        KM        *** R211; ROUTE SPLT1  TO CO430
884        RS       9    STOR      -1
885        RC   0.065   0.037   0.065    6480  0.0100    0.00
886        RX     0.0    81.0   162.0   184.5   204.5   227.0   308.0   389.0
887        RY     4.8     3.0     2.0     0.0     0.0     2.0     3.0     4.8

888        KK     226   BASIN
889        BA   0.239
890        LG    0.25    0.35    4.10    0.49       0
891        UI      28      28      28      61      95     119     157     181     197     210
892        UI     251     292     330     238     191     170     168     151     139     135
893        UI     123     112     110      95      85      76      69      67      64      58
894        UI      55      47      43      35      36      32      30      30      25      21
895        UI      22      21      20      14      13      13      14      14      13      10
896        UI       6       0       0       0       0       0       0       0       0       0
897        UI       0       0       0       0       0       0       0       0       0       0
898        UI       0       0       0       0       0       0       0       0       0       0

899        KK   CO430
900        KM        COMBINE R211 AND S226
901        HC       2

902        KK     230   BASIN
903        BA   0.364
904        LG    0.25    0.37    5.30    0.26      12
905        UI      72      81     229     361     478     551     695     793     503     427
906        UI     385     348     292     267     212     182     169     151     121     100
907        UI      87      78      69      54      55      38      35      35      36      15
908        UI      14      14      13      14      14      14      13      15      13       0
909        UI       0       0       0       0       0       0       0       0       0       0
910        UI       0       0       0       0       0       0       0       0       0       0
1                                        HEC-1 INPUT                                                    PAGE 21
LINE       ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

911        KK    R231   ROUTE   REACH
912        KM        *** R231; ROUTE S230 TO CO235
913        RS       6    STOR      -1
914        RC   0.065   0.040   0.065    4800  0.0130    0.00
915        RX     0.0     4.0    40.0    44.0    52.0    56.0    91.0    96.0
916        RY     5.0     4.0     2.0     0.0     0.0     2.0     4.0     5.0

917        KK     240   BASIN
918        BA   0.842
919        LG    0.25    0.36    5.00    0.30      10
920        UI     108     110     108     316     440     567     676     785     829     951
921        UI    1223    1222     816     713     649     594     571     526     476     446
922        UI     398     354     317     275     261     258     227     205     185     153
923        UI     138     136     118     118     102      82      83      85      63      53
924        UI      54      53      53      54      35      21      21      21      21      21
925        UI      21       0       0       0       0       0       0       0       0       0
926        UI       0       0       0       0       0       0       0       0       0       0
927        UI       0       0       0       0       0       0       0       0       0       0

928        KK     232   BASIN
929        BA   0.257
930        LG    0.25    0.36    6.80    0.14       0
931        UI      57      88     212     329     434     512     628     416     339     294
932        UI     266     224     186     149     133     120      95      73      65      62
933        UI      44      43      32      28      28      23      11      11      11      11
934        UI      11      11      11      11       0       0       0       0       0       0
935        UI       0       0       0       0       0       0       0       0       0       0

936        KK   CO235
937        KM        COMBINE S240, S230, AND R231
938        HC       3

939        KK    R237   ROUTE   REACH
940        KM        *** R237; ROUTE CO235 TO CO247
941        RS       3    STOR      -1
942        RC   0.065   0.040   0.065    3760  0.0081    0.00
943        RX     0.0     2.0    22.0    72.0   112.0   142.0   162.0   167.0
944        RY    16.0    16.0    10.0     0.0     0.0    14.0    15.0    16.0

945        KK     244   BASIN
946        BA   0.185
947        LG    0.25    0.35    4.20    0.47       4
948        UI      57     151     317     424     627     399     317     265     219     161
949        UI     136     110      81      68      53      43      32      27      25      11
950        UI      11      11      11      11      10       0       0       0       0       0
951        UI       0       0       0       0       0       0       0       0       0       0

952        KK   CO247
953        KM        COMBINE S244 AND R237
954        HC       2
1                                        HEC-1 INPUT                                                    PAGE 22
LINE       ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

955        KK     238   BASIN
956        BA   0.360
957        LG    0.25    0.35    4.15    0.48       0
958        UI      46      47      46     136     188     242     290     335     355     406
959        UI     522     524     348     305     277     254     244     225     204     190
960        UI     171     151     136     117     111     111      97      88      79      65
961        UI      59      58      51      50      43      36      36      36      27      22
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1057                KK     DV5
1058                DR     DV5

1059                KK     R2b   Route   Reach
1060                KM        Routing flows from above CAP through Basin 2b
1061                RS      29    FLOW     0.0     0.0
1062                RC    0.07   0.055    0.07   13406.  0.0098
1063                RX     0.0    30.4    59.5    99.1   168.5   237.8   247.7   396.4
1064                RY      92      91    90.6    87.9      87      91    91.9    91.7

1065                KK      2B
1066                BA  0.6549
1067                LG    0.35    0.35   4.685   0.307   0.067
                    * 2BUHDesert2min
1068                UI     0.0   32.55   32.55   32.55   32.55   32.55   32.55   32.55   45.36   93.58
1069                UI   93.58  110.24  126.89  141.49  155.97  175.49  186.77  199.83  213.91  233.58
1070                UI   227.6  258.44  267.39  276.13  287.61  290.34  295.32  299.46  311.95  311.95
1071                UI  311.95  311.95  311.95  311.95  299.77  296.22  292.59  287.15  277.29   263.4
1072                UI  245.77  231.35  226.87  215.62  200.21  191.97  179.84  172.77  166.37  153.64
1073                UI  149.58  141.26  134.32  126.89  121.22  115.18  110.83   99.82   99.82   91.88
1074                UI   89.13   89.13   74.37   72.69   72.69   68.06   61.37   61.37   61.37    58.2
1075                UI   49.91   49.91   49.91   49.91   46.89    34.5    34.5    34.5    34.5    34.5
1076                UI    34.5    34.5   24.16   22.28   22.28   22.28   22.28   22.28   22.28   22.28
1077                UI   22.28   22.28   22.28   15.59    7.92    7.92    7.92    7.92    7.92    7.92
1078                UI    7.92    7.92    7.92    7.92    7.92    7.92    7.92    7.92    7.92    7.92
1079                UI    7.92    7.92    7.92    7.92    7.92    7.92    7.92    7.92    7.92    7.92
1080                UI    7.92    7.92    7.92    7.92    7.92     0.0

1081                KK    cp2B
1082                HC       2

1083                KK      5R   Route   Reach
1084                RS       6    FLOW     0.0     0.0
1085                RC   0.065    0.05   0.065 2930.75   0.009     0.0
                    * 5R(fromDiketoDam)
1086                RX     0.0    16.0    43.0    71.0    90.0   108.0   127.0   167.0
1087                RY  1415.3 1415.46 1413.64 1411.74 1410.62 1410.82 1412.39 1416.24
1                                                HEC-1 INPUT                                                    PAGE 25

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


1088                KK     DV3
1089                DR     DV3

1090                KK    R1b1   Route   Reach
1091                KM        Routing flows from above CAP overchute DV3 through half of Basin 1b
1092                RS      12    FLOW     0.0     0.0
1093                RC    0.08    0.05    0.08   10621  0.0094
1094                RX     0.0      95     171     211     231     281     302     523
1095                RY      86      86      86      81    79.5    86.9    86.5    85.6

1096                KK     DV4
1097                DR     DV4

1098                KK    R1b2   Route   Reach
1099                KM        Routing flows from above CAP overchute DV4 through half of Basin 1b
1100                RS      22    FLOW     0.0     0.0
1101                RC    0.08    0.05    0.08   10202  0.0098
1102                RX     101     121     131     191     204     302     322     403
1103                RY   69.21   69.09   68.86   66.06   66.12   69.13   69.72   70.01

1104                KK   comDV
1105                KM   Combine R1b1 and R1b2 at half of basin 1B
1106                HC       2

1107                KK    R1b3   Route   Reach
1108                KM        Routing combined flow from R1b1 and R1b2 through lower half of Basin 1b
1109                RS       7    FLOW     0.0     0.0
1110                RC    0.07    0.04    0.07    5458  0.0064
1111                RX     129     179     204     264     299     339     364     514
1112                RY   31.19   30.39   29.75   25.74   25.93   29.06   29.76   30.12

1113                KK      1B
1114                BA  2.2039
1115                LG   0.329   0.314   4.285   0.406   3.063
                    * 1BUHDesert2min
1116                UI     0.0   92.24   92.24   92.24   92.24   92.24   92.24   92.24   92.24   92.24
1117                UI   221.6  265.18  265.18   315.2  359.57  372.47  441.97  456.23  505.11  533.62
1118                UI  558.65  606.13  640.21  656.68  642.87  755.95  757.66  778.22  805.26  815.95
1119                UI  834.05  830.67  850.15  883.94  883.94  883.94  883.94  883.94  883.94  883.94
1120                UI  856.38  848.58  823.51  839.53  803.53  785.73  756.21  713.69  678.91  642.87
1121                UI  642.87  609.78  573.37  544.32  527.69  505.11  480.55  471.44  436.06  432.95
1122                UI  401.97  400.28  367.05  359.57  344.87  326.38  326.38  290.34  282.86  282.86
1123                UI  258.27  252.55  252.55  232.42  205.97  205.97  205.97   196.7  173.89  173.89
1124                UI  173.89  173.89  161.51  141.43  141.43  141.43  141.43  141.43  126.25   97.76
1125                UI   97.76   97.76   97.76   97.76   97.76   97.76   97.76   76.35   63.14   63.14
1126                UI   63.14   63.14   63.14   63.14   63.14   63.14   63.14   63.14   63.14   63.14
1127                UI   58.97   22.45   22.45   22.45   22.45   22.45   22.45   22.45   22.45   22.45
1128                UI   22.45   22.45   22.45   22.45   22.45   22.45   22.45   22.45   22.45   22.45
1129                UI   22.45   22.45   22.45   22.45   22.45   22.45   22.45   22.45   22.45   22.45
1130                UI   22.45   22.45   22.45   22.45   22.45   22.45   22.45   22.45     0.0
1                                                HEC-1 INPUT                                                    PAGE 26

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


1131                KK      3C
1132                KO       1
1133                HC       3
1134                ZZ
1
            SCHEMATIC DIAGRAM OF STREAM NETWORK
 INPUT
  LINE      (V) ROUTING          (--->) DIVERSION OR PUMP FLOW

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

     9        180
               .
               .
    32          .         168
                .           .
                .           .
    41      CO169............
               V
               V
    44       R171
               .
               .
    50         .          92
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                .          V
                .          V
 56             .       DR92
                .          V
                .          V
 63             .       R161
                .          .
                .          .
 69             .          .        160
                .          .          .
                .          .          .
 79         CO173.......................
                V
                V
 82         R175
                .
                .
 88             .       150
                .          .
                .          .
 97             .          .         76
                .          .          V
                .          .          V
108             .          .       DR76
                .          .          V
                .          .          V
115             .          .       R153
                .          .          .
                .          .          .
121         CO155.......................
                .
                .
124             .        72
                .         V
                .         V
131             .      DR72
                .          .
                .          .
138             .          .         70
                .          .          V
                .          .          V
144             .          .       DR70
                .          .          .
                .          .          .
151             .          .          .         68
                .          .          .          V
                .          .          .          V
162             .          .          .       DR68
                .          .          .          .
                .          .          .          .
169             .     CO141.......................
                .         V
                .         V
172             .      R145
                .          .
                .          .
178             .          .        144
                .          .          .
                .          .          .
188         CO147.......................
                V
                V
191         R149
                .
                .
197             .        54
                .         V
                .         V
208             .       R55
                .          .
                .          .
214             .          .         56
                .          .          .
                .          .          .
224             .     CO57............
                .         V
                .         V
227             .       R59
                .          .
                .          .
233             .          .         50
                .          .          .
                .          .          .
242             .     CO61............
                .         V
                .         V
245             .      DR61
                .          .
                .          .
252             .          .         46
                .          .          .
                .          .          .
267             .          .          .         42
                .          .          .          .
                .          .          .          .
278             .          .       CO47............
                .          .          V
                .          .          V
281             .          .       R49
                .          .          .
                .          .          .
287             .          .          .         48
                .          .          .          .
                .          .          .          .
297             .          .       CO63............
                .          .          V
                .          .          V
300             .          .       DR63
                .          .          .
                .          .          .
307             .     CO65............
                .         V
                .         V
310             .      R123
                .          .
                .          .
316             .          .         64
                .          .          V
                .          .          V
325             .          .       DR64
                .          .          V
                .          .          V
333             .          .       R121
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339          CO127............
                V
                V
342           R129
                .
                .
348                   132
                        .
                        .
358          CO132............
                .
                .
362     CO133............
           V
           V
365      R137
           .
           .
371            10
                V
                V
383           R11
                .
                .
389                    16
                        .
                        .
399          CO17............
                V
                V
402           R19
                .
                .
408                    20
                        .
                        .
419                                  24
                                      .
                                      .
430          CO25........................
                V
                V
433           R27
                .
                .
439                    30
                        .
                        .
451          CO31............
                V
                V
454          DR31
                V
                V
461          R113
                .
                .
467                    32
                        V
                        V
475                  DR32
                        V
                        V
482                  R111
                        .
                        .
488          CO115...........
                V
                V
491           R117
                .
                .
497                    34
                        V
                        V
513                  DR34
                        V
                        V
520                  R107
                        .
                        .
526                                  38
                                      V
                                      V
533                                 DR38
                                      V
                                      V
540                                 R103
                                      .
                                      .
546                CO105............
                        V
                        V
549                  R109
                        .
                        .
555                                 102
                                      .
                                      .
564                                                 112
                                                      .
                                                      .
572          CO119.................................
                V
                V
575           R118
                .
                .
581                   122
                        .
                        .
590          CO124............
                .
                .
594     CO125............
           .
           .
598            106
                .
                .
611                    36
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879                                  .------->  SPLIT5
874                            SPLT1
                                  V
                                  V
882                            R211

888                                     226

899                            CO430............

902                                     230
                                          V
                                          V
911                                    R231

917                                              240

928                                                        232

936                                    CO235........................
                                          V
                                          V
939                                    R237

945                                              244

952                                    CO247............

955                                              238

968                                                        .<-------  SPLIT5
966                                                   SPLIT5
                                                          V
                                                          V
969                                                    R251

975                                              CO255............

980                                                        .<-------   MAIN1
978                                                   MAIN1
                                                          V
                                                          V
981                                                    R203

989                                                                    .<-------     MN1
987                                                                 MN1

990                                                   CO207............
                                                          V
                                                          V
993                                                    R205

999                                                                 222

1012                                                  CO420............

1015                       CO500.............................................

1020                                  .<-------   DV501
1018                           DV501

1021                       CO501............
                                V
                                V
1024                       DR501

1034                            .------->     DV2
1031                       DV3-6

1042                            .------->     DV3
1039                       DV4-6

1048                            .------->     DV4
1045                       DV5-6

1054                            .------->     DV5
1051                         DV6

1058                                  .<-------     DV5
1057                           DV5
                                  V
                                  V
1059                           R2b

1065                                     2B

1081                           cp2B............
                                  V
                                  V
1083                           5R

1089                                                  .<-------     DV3
1088                                             DV3
                                                    V
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                .          .          .          V
 1090           .          .          .       R1b1
                .          .          .          .
                .          .          .          .
 1097           .          .          .          .          .<-------     DV4
 1096           .          .          .          .        DV4
                .          .          .          .          V
                .          .          .          .          V
 1098           .          .          .          .       R1b2
                .          .          .          .          .
                .          .          .          .          .
 1104           .          .          .      comDV...........
                .          .          .          V
                .          .          .          V
 1107           .          .          .       R1b3
                .          .          .          .
                .          .          .          .
 1113           .          .          .          .          1B
                .          .          .          .          .
                .          .          .          .          .
 1131           .          .         3C.......................
```

```
(***) RUNOFF ALSO COMPUTED AT THIS LOCATION
1****************************************                                    ****************************************
*                                        *                                    *                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)    *                                    *   U.S. ARMY CORPS OF ENGINEERS       *
*              JUN  1998                 *                                    *   HYDROLOGIC ENGINEERING CENTER      *
*           VERSION 4.1                  *                                    *         609 SECOND STREET            *
*                                        *                                    *      DAVIS, CALIFORNIA 95616         *
*  RUN DATE   10FEB03  TIME  18:32:24    *                                    *          (916) 756-1104              *
*                                        *                                    *                                      *
****************************************                                    ****************************************
```

```
                                Project ID: Bonita Dam Hydrology
                                FCDMC
                                July 2002, January 2003
                                100-YR. 24. HR. STORM  2 minute Time Step

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

     IT          HYDROGRAPH TIME DATA
                        NMIN          2  MINUTES IN COMPUTATION INTERVAL
                       IDATE      1   0  STARTING DATE
                       ITIME       0000  STARTING TIME
                          NQ       2000  NUMBER OF HYDROGRAPH ORDINATES
                      NDDATE      3   0  ENDING DATE
                      NDTIME       1838  ENDING TIME
                       ICENT         19  CENTURY MARK

                 COMPUTATION INTERVAL    0.03 HOURS
                      TOTAL TIME BASE   66.63 HOURS

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


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


            **************
            *            *
1131 KK     *        3C  *
            *            *
            **************

1132 KO          OUTPUT CONTROL VARIABLES
                       IPRNT          1  PRINT CONTROL
                       IPLOT          0  PLOT CONTROL
                       QSCAL         0.  HYDROGRAPH PLOT SCALE

1133 HC          HYDROGRAPH COMBINATION
                       ICOMP          3  NUMBER OF HYDROGRAPHS TO COMBINE

                                                                  ***

*****************************************************************************************************************************
                                                  HYDROGRAPH AT STATION       3C
                                                     SUM OF  3 HYDROGRAPHS
*****************************************************************************************************************************
```

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW
1		0000	1	0.	*	1		1640	501	1523.	*	2		0920	1001	6.	*	3		0200	1501	0.
1		0002	2	0.	*	1		1642	502	1512.	*	2		0922	1002	6.	*	3		0202	1502	0.
1		0004	3	0.	*	1		1644	503	1500.	*	2		0924	1003	6.	*	3		0204	1503	0.
1		0006	4	0.	*	1		1646	504	1488.	*	2		0926	1004	6.	*	3		0206	1504	0.
1		0008	5	0.	*	1		1648	505	1476.	*	2		0928	1005	6.	*	3		0208	1505	0.
1		0010	6	0.	*	1		1650	506	1463.	*	2		0930	1006	6.	*	3		0210	1506	0.
1		0012	7	0.	*	1		1652	507	1451.	*	2		0932	1007	6.	*	3		0212	1507	0.
1		0014	8	0.	*	1		1654	508	1438.	*	2		0934	1008	6.	*	3		0214	1508	0.
1		0016	9	0.	*	1		1656	509	1426.	*	2		0936	1009	6.	*	3		0216	1509	0.
1		0018	10	0.	*	1		1658	510	1416.	*	2		0938	1010	6.	*	3		0218	1510	0.
1		0020	11	0.	*	1		1700	511	1406.	*	2		0940	1011	6.	*	3		0220	1511	0.
1		0022	12	0.	*	1		1702	512	1394.	*	2		0942	1012	6.	*	3		0222	1512	0.
1		0024	13	0.	*	1		1704	513	1382.	*	2		0944	1013	6.	*	3		0224	1513	0.
1		0026	14	0.	*	1		1706	514	1370.	*	2		0946	1014	6.	*	3		0226	1514	0.
1		0028	15	0.	*	1		1708	515	1357.	*	2		0948	1015	6.	*	3		0228	1515	0.
1		0030	16	0.	*	1		1710	516	1345.	*	2		0950	1016	6.	*	3		0230	1516	0.
1		0032	17	0.	*	1		1712	517	1332.	*	2		0952	1017	6.	*	3		0232	1517	0.
1		0034	18	0.	*	1		1714	518	1319.	*	2		0954	1018	6.	*	3		0234	1518	0.
1		0036	19	0.	*	1		1716	519	1306.	*	2		0956	1019	6.	*	3		0236	1519	0.
1		0038	20	0.	*	1		1718	520	1292.	*	2		0958	1020	5.	*	3		0238	1520	0.
1		0040	21	0.	*	1		1720	521	1279.	*	2		1000	1021	5.	*	3		0240	1521	0.
1		0042	22	0.	*	1		1722	522	1266.	*	2		1002	1022	5.	*	3		0242	1522	0.
1		0044	23	0.	*	1		1724	523	1253.	*	2		1004	1023	5.	*	3		0244	1523	0.
1		0046	24	0.	*	1		1726	524	1240.	*	2		1006	1024	5.	*	3		0246	1524	0.

1	0048	25	0.	*	1	1728	525	1228.	*	2	1008	1025	5.	*	3	0248	1525	0.
1	0050	26	0.	*	1	1730	526	1216.	*	2	1010	1026	5.	*	3	0250	1526	0.
1	0052	27	0.	*	1	1732	527	1204.	*	2	1012	1027	5.	*	3	0252	1527	0.
1	0054	28	0.	*	1	1734	528	1193.	*	2	1014	1028	5.	*	3	0254	1528	0.
1	0056	29	0.	*	1	1736	529	1182.	*	2	1016	1029	5.	*	3	0256	1529	0.
1	0058	30	0.	*	1	1738	530	1172.	*	2	1018	1030	5.	*	3	0258	1530	0.
1	0100	31	0.	*	1	1740	531	1161.	*	2	1020	1031	5.	*	3	0300	1531	0.
1	0102	32	0.	*	1	1742	532	1150.	*	2	1022	1032	5.	*	3	0302	1532	0.
1	0104	33	1.	*	1	1744	533	1139.	*	2	1024	1033	5.	*	3	0304	1533	0.
1	0106	34	1.	*	1	1746	534	1128.	*	2	1026	1034	5.	*	3	0306	1534	0.
1	0108	35	1.	*	1	1748	535	1116.	*	2	1028	1035	5.	*	3	0308	1535	0.
1	0110	36	1.	*	1	1750	536	1104.	*	2	1030	1036	5.	*	3	0310	1536	0.
1	0112	37	1.	*	1	1752	537	1092.	*	2	1032	1037	5.	*	3	0312	1537	0.
1	0114	38	1.	*	1	1754	538	1080.	*	2	1034	1038	5.	*	3	0314	1538	0.
1	0116	39	1.	*	1	1756	539	1068.	*	2	1036	1039	5.	*	3	0316	1539	0.
1	0118	40	1.	*	1	1758	540	1055.	*	2	1038	1040	5.	*	3	0318	1540	0.
1	0120	41	1.	*	1	1800	541	1043.	*	2	1040	1041	4.	*	3	0320	1541	0.
1	0122	42	1.	*	1	1802	542	1030.	*	2	1042	1042	4.	*	3	0322	1542	0.
1	0124	43	1.	*	1	1804	543	1018.	*	2	1044	1043	4.	*	3	0324	1543	0.
1	0126	44	1.	*	1	1806	544	1005.	*	2	1046	1044	4.	*	3	0326	1544	0.
1	0128	45	1.	*	1	1808	545	992.	*	2	1048	1045	4.	*	3	0328	1545	0.
1	0130	46	1.	*	1	1810	546	980.	*	2	1050	1046	4.	*	3	0330	1546	0.
1	0132	47	1.	*	1	1812	547	968.	*	2	1052	1047	4.	*	3	0332	1547	0.
1	0134	48	1.	*	1	1814	548	956.	*	2	1054	1048	4.	*	3	0334	1548	0.
1	0136	49	1.	*	1	1816	549	945.	*	2	1056	1049	4.	*	3	0336	1549	0.
1	0138	50	1.	*	1	1818	550	934.	*	2	1058	1050	4.	*	3	0338	1550	0.
1	0140	51	1.	*	1	1820	551	923.	*	2	1100	1051	4.	*	3	0340	1551	0.
1	0142	52	1.	*	1	1822	552	911.	*	2	1102	1052	4.	*	3	0342	1552	0.
1	0144	53	1.	*	1	1824	553	900.	*	2	1104	1053	4.	*	3	0344	1553	0.
1	0146	54	1.	*	1	1826	554	888.	*	2	1106	1054	4.	*	3	0346	1554	0.
1	0148	55	1.	*	1	1828	555	877.	*	2	1108	1055	4.	*	3	0348	1555	0.
1	0150	56	1.	*	1	1830	556	865.	*	2	1110	1056	4.	*	3	0350	1556	0.
1	0152	57	1.	*	1	1832	557	854.	*	2	1112	1057	4.	*	3	0352	1557	0.
1	0154	58	1.	*	1	1834	558	843.	*	2	1114	1058	3.	*	3	0354	1558	0.
1	0156	59	1.	*	1	1836	559	832.	*	2	1116	1059	3.	*	3	0356	1559	0.
1	0158	60	1.	*	1	1838	560	820.	*	2	1118	1060	3.	*	3	0358	1560	0.
1	0200	61	1.	*	1	1840	561	809.	*	2	1120	1061	3.	*	3	0400	1561	0.
1	0202	62	2.	*	1	1842	562	797.	*	2	1122	1062	3.	*	3	0402	1562	0.
1	0204	63	2.	*	1	1844	563	786.	*	2	1124	1063	3.	*	3	0404	1563	0.
1	0206	64	2.	*	1	1846	564	775.	*	2	1126	1064	3.	*	3	0406	1564	0.
1	0208	65	2.	*	1	1848	565	765.	*	2	1128	1065	3.	*	3	0408	1565	0.
1	0210	66	2.	*	1	1850	566	754.	*	2	1130	1066	3.	*	3	0410	1566	0.
1	0212	67	2.	*	1	1852	567	745.	*	2	1132	1067	3.	*	3	0412	1567	0.
1	0214	68	2.	*	1	1854	568	736.	*	2	1134	1068	3.	*	3	0414	1568	0.
1	0216	69	2.	*	1	1856	569	726.	*	2	1136	1069	3.	*	3	0416	1569	0.
1	0218	70	2.	*	1	1858	570	717.	*	2	1138	1070	3.	*	3	0418	1570	0.
1	0220	71	2.	*	1	1900	571	708.	*	2	1140	1071	3.	*	3	0420	1571	0.
1	0222	72	2.	*	1	1902	572	699.	*	2	1142	1072	3.	*	3	0422	1572	0.
1	0224	73	2.	*	1	1904	573	690.	*	2	1144	1073	3.	*	3	0424	1573	0.
1	0226	74	2.	*	1	1906	574	681.	*	2	1146	1074	3.	*	3	0426	1574	0.
1	0228	75	2.	*	1	1908	575	672.	*	2	1148	1075	3.	*	3	0428	1575	0.
1	0230	76	2.	*	1	1910	576	663.	*	2	1150	1076	2.	*	3	0430	1576	0.
1	0232	77	2.	*	1	1912	577	654.	*	2	1152	1077	2.	*	3	0432	1577	0.
1	0234	78	2.	*	1	1914	578	645.	*	2	1154	1078	2.	*	3	0434	1578	0.
1	0236	79	2.	*	1	1916	579	637.	*	2	1156	1079	2.	*	3	0436	1579	0.
1	0238	80	2.	*	1	1918	580	628.	*	2	1158	1080	2.	*	3	0438	1580	0.
1	0240	81	2.	*	1	1920	581	619.	*	2	1200	1081	2.	*	3	0440	1581	0.
1	0242	82	2.	*	1	1922	582	610.	*	2	1202	1082	2.	*	3	0442	1582	0.
1	0244	83	2.	*	1	1924	583	601.	*	2	1204	1083	2.	*	3	0444	1583	0.
1	0246	84	2.	*	1	1926	584	593.	*	2	1206	1084	2.	*	3	0446	1584	0.
1	0248	85	2.	*	1	1928	585	584.	*	2	1208	1085	2.	*	3	0448	1585	0.
1	0250	86	2.	*	1	1930	586	577.	*	2	1210	1086	2.	*	3	0450	1586	0.
1	0252	87	2.	*	1	1932	587	569.	*	2	1212	1087	2.	*	3	0452	1587	0.
1	0254	88	2.	*	1	1934	588	561.	*	2	1214	1088	2.	*	3	0454	1588	0.
1	0256	89	2.	*	1	1936	589	553.	*	2	1216	1089	2.	*	3	0456	1589	0.
1	0258	90	2.	*	1	1938	590	546.	*	2	1218	1090	2.	*	3	0458	1590	0.
1	0300	91	2.	*	1	1940	591	538.	*	2	1220	1091	2.	*	3	0500	1591	0.
1	0302	92	2.	*	1	1942	592	530.	*	2	1222	1092	2.	*	3	0502	1592	0.
1	0304	93	2.	*	1	1944	593	523.	*	2	1224	1093	2.	*	3	0504	1593	0.
1	0306	94	2.	*	1	1946	594	515.	*	2	1226	1094	2.	*	3	0506	1594	0.
1	0308	95	2.	*	1	1948	595	507.	*	2	1228	1095	2.	*	3	0508	1595	0.
1	0310	96	2.	*	1	1950	596	499.	*	2	1230	1096	2.	*	3	0510	1596	0.
1	0312	97	2.	*	1	1952	597	491.	*	2	1232	1097	2.	*	3	0512	1597	0.
1	0314	98	2.	*	1	1954	598	483.	*	2	1234	1098	1.	*	3	0514	1598	0.
1	0316	99	2.	*	1	1956	599	475.	*	2	1236	1099	1.	*	3	0516	1599	0.
1	0318	100	2.	*	1	1958	600	468.	*	2	1238	1100	1.	*	3	0518	1600	0.
1	0320	101	2.	*	1	2000	601	460.	*	2	1240	1101	1.	*	3	0520	1601	0.
1	0322	102	2.	*	1	2002	602	452.	*	2	1242	1102	1.	*	3	0522	1602	0.
1	0324	103	2.	*	1	2004	603	444.	*	2	1244	1103	1.	*	3	0524	1603	0.
1	0326	104	2.	*	1	2006	604	437.	*	2	1246	1104	1.	*	3	0526	1604	0.
1	0328	105	2.	*	1	2008	605	430.	*	2	1248	1105	1.	*	3	0528	1605	0.
1	0330	106	2.	*	1	2010	606	423.	*	2	1250	1106	1.	*	3	0530	1606	0.
1	0332	107	2.	*	1	2012	607	417.	*	2	1252	1107	1.	*	3	0532	1607	0.
1	0334	108	2.	*	1	2014	608	410.	*	2	1254	1108	1.	*	3	0534	1608	0.
1	0336	109	2.	*	1	2016	609	404.	*	2	1256	1109	1.	*	3	0536	1609	0.
1	0338	110	2.	*	1	2018	610	397.	*	2	1258	1110	1.	*	3	0538	1610	0.
1	0340	111	2.	*	1	2020	611	391.	*	2	1300	1111	1.	*	3	0540	1611	0.
1	0342	112	2.	*	1	2022	612	385.	*	2	1302	1112	1.	*	3	0542	1612	0.
1	0344	113	2.	*	1	2024	613	379.	*	2	1304	1113	1.	*	3	0544	1613	0.
1	0346	114	2.	*	1	2026	614	373.	*	2	1306	1114	1.	*	3	0546	1614	0.
1	0348	115	2.	*	1	2028	615	368.	*	2	1308	1115	1.	*	3	0548	1615	0.
1	0350	116	2.	*	1	2030	616	363.	*	2	1310	1116	1.	*	3	0550	1616	0.
1	0352	117	2.	*	1	2032	617	358.	*	2	1312	1117	1.	*	3	0552	1617	0.
1	0354	118	2.	*	1	2034	618	353.	*	2	1314	1118	1.	*	3	0554	1618	0.
1	0356	119	2.	*	1	2036	619	348.	*	2	1316	1119	1.	*	3	0556	1619	0.
1	0358	120	2.	*	1	2038	620	343.	*	2	1318	1120	1.	*	3	0558	1620	0.
1	0400	121	2.	*	1	2040	621	338.	*	2	1320	1121	1.	*	3	0600	1621	0.
1	0402	122	2.	*	1	2042	622	334.	*	2	1322	1122	1.	*	3	0602	1622	0.
1	0404	123	2.	*	1	2044	623	329.	*	2	1324	1123	1.	*	3	0604	1623	0.
1	0406	124	2.	*	1	2046	624	324.	*	2	1326	1124	1.	*	3	0606	1624	0.
1	0408	125	2.	*	1	2048	625	319.	*	2	1328	1125	1.	*	3	0608	1625	0.
1	0410	126	2.	*	1	2050	626	315.	*	2	1330	1126	1.	*	3	0610	1626	0.
1	0412	127	2.	*	1	2052	627	310.	*	2	1332	1127	1.	*	3	0612	1627	0.
1	0414	128	2.	*	1	2054	628	306.	*	2	1334	1128	1.	*	3	0614	1628	0.
1	0416	129	2.	*	1	2056	629	302.	*	2	1336	1129	1.	*	3	0616	1629	0.
1	0418	130	2.	*	1	2058	630	298.	*	2	1338	1130	1.	*	3	0618	1630	0.
1	0420	131	2.	*	1	2100	631	293.	*	2	1340	1131	1.	*	3	0620	1631	0.
1	0422	132	2.	*	1	2102	632	289.	*	2	1342	1132	1.	*	3	0622	1632	0.
1	0424	133	2.	*	1	2104	633	285.	*	2	1344	1133	1.	*	3	0624	1633	0.
1	0426	134	2.	*	1	2106	634	280.	*	2	1346	1134	0.	*	3	0626	1634	0.
1	0428	135	2.	*	1	2108	635	276.	*	2	1348	1135	0.	*	3	0628	1635	0.
1	0430	136	2.	*	1	2110	636	272.	*	2	1350	1136	0.	*	3	0630	1636	0.
1	0432	137	2.	*	1	2112	637	268.	*	2	1352	1137	0.	*	3	0632	1637	0.
1	0434	138	2.	*	1	2114	638	263.	*	2	1354	1138	0.	*	3	0634	1638	0.
1	0436	139	2.	*	1	2116	639	259.	*	2	1356	1139	0.	*	3	0636	1639	0.
1	0438	140	2.	*	1	2118	640	255.	*	2	1358	1140	0.	*	3	0638	1640	0.
1	0440	141	2.	*	1	2120	641	251.	*	2	1400	1141	0.	*	3	0640	1641	0.
1	0442	142	2.	*	1	2122	642	247.	*	2	1402	1142	0.	*	3	0642	1642	0.
1	0444	143	2.	*	1	2124	643	243.	*	2	1404	1143	0.	*	3	0644	1643	0.
1	0446	144	2.	*	1	2126	644	239.	*	2	1406	1144	0.	*	3	0646	1644	0.
1	0448	145	2.	*	1	2128	645	235.	*	2	1408	1145	0.	*	3	0648	1645	0.
1	0450	146	2.	*	1	2130	646	232.	*	2	1410	1146	0.	*	3	0650	1646	0.
1	0452	147	2.	*	1	2132	647	228.	*	2	1412	1147	0.	*	3	0652	1647	0.

1	0454	148	2.	*	1	2134	648	224.	*	2	1414	1148	0.	*	3	0654	1648	0.
1	0456	149	3.	*	1	2136	649	221.	*	2	1416	1149	0.	*	3	0656	1649	0.
1	0458	150	3.	*	1	2138	650	217.	*	2	1418	1150	0.	*	3	0658	1650	0.
1	0500	151	3.	*	1	2140	651	214.	*	2	1420	1151	0.	*	3	0700	1651	0.
1	0502	152	3.	*	1	2142	652	211.	*	2	1422	1152	0.	*	3	0702	1652	0.
1	0504	153	3.	*	1	2144	653	208.	*	2	1424	1153	0.	*	3	0704	1653	0.
1	0506	154	3.	*	1	2146	654	205.	*	2	1426	1154	0.	*	3	0706	1654	0.
1	0508	155	3.	*	1	2148	655	202.	*	2	1428	1155	0.	*	3	0708	1655	0.
1	0510	156	3.	*	1	2150	656	200.	*	2	1430	1156	0.	*	3	0710	1656	0.
1	0512	157	3.	*	1	2152	657	197.	*	2	1432	1157	0.	*	3	0712	1657	0.
1	0514	158	3.	*	1	2154	658	194.	*	2	1434	1158	0.	*	3	0714	1658	0.
1	0516	159	3.	*	1	2156	659	192.	*	2	1436	1159	0.	*	3	0716	1659	0.
1	0518	160	3.	*	1	2158	660	189.	*	2	1438	1160	0.	*	3	0718	1660	0.
1	0520	161	3.	*	1	2200	661	187.	*	2	1440	1161	0.	*	3	0720	1661	0.
1	0522	162	3.	*	1	2202	662	184.	*	2	1442	1162	0.	*	3	0722	1662	0.
1	0524	163	3.	*	1	2204	663	181.	*	2	1444	1163	0.	*	3	0724	1663	0.
1	0526	164	3.	*	1	2206	664	179.	*	2	1446	1164	0.	*	3	0726	1664	0.
1	0528	165	3.	*	1	2208	665	176.	*	2	1448	1165	0.	*	3	0728	1665	0.
1	0530	166	3.	*	1	2210	666	174.	*	2	1450	1166	0.	*	3	0730	1666	0.
1	0532	167	3.	*	1	2212	667	172.	*	2	1452	1167	0.	*	3	0732	1667	0.
1	0534	168	3.	*	1	2214	668	169.	*	2	1454	1168	0.	*	3	0734	1668	0.
1	0536	169	3.	*	1	2216	669	167.	*	2	1456	1169	0.	*	3	0736	1669	0.
1	0538	170	3.	*	1	2218	670	165.	*	2	1458	1170	0.	*	3	0738	1670	0.
1	0540	171	3.	*	1	2220	671	163.	*	2	1500	1171	0.	*	3	0740	1671	0.
1	0542	172	3.	*	1	2222	672	161.	*	2	1502	1172	0.	*	3	0742	1672	0.
1	0544	173	3.	*	1	2224	673	159.	*	2	1504	1173	0.	*	3	0744	1673	0.
1	0546	174	3.	*	1	2226	674	157.	*	2	1506	1174	0.	*	3	0746	1674	0.
1	0548	175	3.	*	1	2228	675	155.	*	2	1508	1175	0.	*	3	0748	1675	0.
1	0550	176	3.	*	1	2230	676	154.	*	2	1510	1176	0.	*	3	0750	1676	0.
1	0552	177	3.	*	1	2232	677	152.	*	2	1512	1177	0.	*	3	0752	1677	0.
1	0554	178	3.	*	1	2234	678	150.	*	2	1514	1178	0.	*	3	0754	1678	0.
1	0556	179	4.	*	1	2236	679	149.	*	2	1516	1179	0.	*	3	0756	1679	0.
1	0558	180	4.	*	1	2238	680	147.	*	2	1518	1180	0.	*	3	0758	1680	0.
1	0600	181	4.	*	1	2240	681	146.	*	2	1520	1181	0.	*	3	0800	1681	0.
1	0602	182	4.	*	1	2242	682	145.	*	2	1522	1182	0.	*	3	0802	1682	0.
1	0604	183	4.	*	1	2244	683	143.	*	2	1524	1183	0.	*	3	0804	1683	0.
1	0606	184	4.	*	1	2246	684	142.	*	2	1526	1184	0.	*	3	0806	1684	0.
1	0608	185	4.	*	1	2248	685	141.	*	2	1528	1185	0.	*	3	0808	1685	0.
1	0610	186	4.	*	1	2250	686	139.	*	2	1530	1186	0.	*	3	0810	1686	0.
1	0612	187	4.	*	1	2252	687	138.	*	2	1532	1187	0.	*	3	0812	1687	0.
1	0614	188	4.	*	1	2254	688	137.	*	2	1534	1188	0.	*	3	0814	1688	0.
1	0616	189	4.	*	1	2256	689	136.	*	2	1536	1189	0.	*	3	0816	1689	0.
1	0618	190	4.	*	1	2258	690	134.	*	2	1538	1190	0.	*	3	0818	1690	0.
1	0620	191	4.	*	1	2300	691	133.	*	2	1540	1191	0.	*	3	0820	1691	0.
1	0622	192	4.	*	1	2302	692	132.	*	2	1542	1192	0.	*	3	0822	1692	0.
1	0624	193	4.	*	1	2304	693	131.	*	2	1544	1193	0.	*	3	0824	1693	0.
1	0626	194	4.	*	1	2306	694	130.	*	2	1546	1194	0.	*	3	0826	1694	0.
1	0628	195	4.	*	1	2308	695	128.	*	2	1548	1195	0.	*	3	0828	1695	0.
1	0630	196	4.	*	1	2310	696	127.	*	2	1550	1196	0.	*	3	0830	1696	0.
1	0632	197	4.	*	1	2312	697	126.	*	2	1552	1197	0.	*	3	0832	1697	0.
1	0634	198	4.	*	1	2314	698	125.	*	2	1554	1198	0.	*	3	0834	1698	0.
1	0636	199	4.	*	1	2316	699	124.	*	2	1556	1199	0.	*	3	0836	1699	0.
1	0638	200	4.	*	1	2318	700	123.	*	2	1558	1200	0.	*	3	0838	1700	0.
1	0640	201	4.	*	1	2320	701	122.	*	2	1600	1201	0.	*	3	0840	1701	0.
1	0642	202	5.	*	1	2322	702	121.	*	2	1602	1202	0.	*	3	0842	1702	0.
1	0644	203	5.	*	1	2324	703	120.	*	2	1604	1203	0.	*	3	0844	1703	0.
1	0646	204	5.	*	1	2326	704	119.	*	2	1606	1204	0.	*	3	0846	1704	0.
1	0648	205	5.	*	1	2328	705	118.	*	2	1608	1205	0.	*	3	0848	1705	0.
1	0650	206	5.	*	1	2330	706	117.	*	2	1610	1206	0.	*	3	0850	1706	0.
1	0652	207	5.	*	1	2332	707	116.	*	2	1612	1207	0.	*	3	0852	1707	0.
1	0654	208	5.	*	1	2334	708	115.	*	2	1614	1208	0.	*	3	0854	1708	0.
1	0656	209	5.	*	1	2336	709	114.	*	2	1616	1209	0.	*	3	0856	1709	0.
1	0658	210	5.	*	1	2338	710	113.	*	2	1618	1210	0.	*	3	0858	1710	0.
1	0700	211	5.	*	1	2340	711	112.	*	2	1620	1211	0.	*	3	0900	1711	0.
1	0702	212	5.	*	1	2342	712	111.	*	2	1622	1212	0.	*	3	0902	1712	0.
1	0704	213	5.	*	1	2344	713	110.	*	2	1624	1213	0.	*	3	0904	1713	0.
1	0706	214	5.	*	1	2346	714	109.	*	2	1626	1214	0.	*	3	0906	1714	0.
1	0708	215	5.	*	1	2348	715	108.	*	2	1628	1215	0.	*	3	0908	1715	0.
1	0710	216	5.	*	1	2350	716	107.	*	2	1630	1216	0.	*	3	0910	1716	0.
1	0712	217	6.	*	1	2352	717	106.	*	2	1632	1217	0.	*	3	0912	1717	0.
1	0714	218	6.	*	1	2354	718	105.	*	2	1634	1218	0.	*	3	0914	1718	0.
1	0716	219	6.	*	1	2356	719	104.	*	2	1636	1219	0.	*	3	0916	1719	0.
1	0718	220	6.	*	1	2358	720	103.	*	2	1638	1220	0.	*	3	0918	1720	0.
1	0720	221	6.	*	2	0000	721	102.	*	2	1640	1221	0.	*	3	0920	1721	0.
1	0722	222	6.	*	2	0002	722	101.	*	2	1642	1222	0.	*	3	0922	1722	0.
1	0724	223	6.	*	2	0004	723	100.	*	2	1644	1223	0.	*	3	0924	1723	0.
1	0726	224	6.	*	2	0006	724	98.	*	2	1646	1224	0.	*	3	0926	1724	0.
1	0728	225	6.	*	2	0008	725	97.	*	2	1648	1225	0.	*	3	0928	1725	0.
1	0730	226	6.	*	2	0010	726	96.	*	2	1650	1226	0.	*	3	0930	1726	0.
1	0732	227	6.	*	2	0012	727	95.	*	2	1652	1227	0.	*	3	0932	1727	0.
1	0734	228	7.	*	2	0014	728	94.	*	2	1654	1228	0.	*	3	0934	1728	0.
1	0736	229	7.	*	2	0016	729	93.	*	2	1656	1229	0.	*	3	0936	1729	0.
1	0738	230	7.	*	2	0018	730	92.	*	2	1658	1230	0.	*	3	0938	1730	0.
1	0740	231	7.	*	2	0020	731	90.	*	2	1700	1231	0.	*	3	0940	1731	0.
1	0742	232	7.	*	2	0022	732	89.	*	2	1702	1232	0.	*	3	0942	1732	0.
1	0744	233	7.	*	2	0024	733	88.	*	2	1704	1233	0.	*	3	0944	1733	0.
1	0746	234	7.	*	2	0026	734	86.	*	2	1706	1234	0.	*	3	0946	1734	0.
1	0748	235	7.	*	2	0028	735	85.	*	2	1708	1235	0.	*	3	0948	1735	0.
1	0750	236	7.	*	2	0030	736	84.	*	2	1710	1236	0.	*	3	0950	1736	0.
1	0752	237	7.	*	2	0032	737	82.	*	2	1712	1237	0.	*	3	0952	1737	0.
1	0754	238	8.	*	2	0034	738	81.	*	2	1714	1238	0.	*	3	0954	1738	0.
1	0756	239	8.	*	2	0036	739	79.	*	2	1716	1239	0.	*	3	0956	1739	0.
1	0758	240	8.	*	2	0038	740	78.	*	2	1718	1240	0.	*	3	0958	1740	0.
1	0800	241	8.	*	2	0040	741	76.	*	2	1720	1241	0.	*	3	1000	1741	0.
1	0802	242	8.	*	2	0042	742	75.	*	2	1722	1242	0.	*	3	1002	1742	0.
1	0804	243	8.	*	2	0044	743	73.	*	2	1724	1243	0.	*	3	1004	1743	0.
1	0806	244	8.	*	2	0046	744	71.	*	2	1726	1244	0.	*	3	1006	1744	0.
1	0808	245	9.	*	2	0048	745	70.	*	2	1728	1245	0.	*	3	1008	1745	0.
1	0810	246	9.	*	2	0050	746	68.	*	2	1730	1246	0.	*	3	1010	1746	0.
1	0812	247	9.	*	2	0052	747	67.	*	2	1732	1247	0.	*	3	1012	1747	0.
1	0814	248	9.	*	2	0054	748	65.	*	2	1734	1248	0.	*	3	1014	1748	0.
1	0816	249	9.	*	2	0056	749	64.	*	2	1736	1249	0.	*	3	1016	1749	0.
1	0818	250	10.	*	2	0058	750	62.	*	2	1738	1250	0.	*	3	1018	1750	0.
1	0820	251	10.	*	2	0100	751	61.	*	2	1740	1251	0.	*	3	1020	1751	0.
1	0822	252	10.	*	2	0102	752	60.	*	2	1742	1252	0.	*	3	1022	1752	0.
1	0824	253	11.	*	2	0104	753	59.	*	2	1744	1253	0.	*	3	1024	1753	0.
1	0826	254	11.	*	2	0106	754	57.	*	2	1746	1254	0.	*	3	1026	1754	0.
1	0828	255	11.	*	2	0108	755	56.	*	2	1748	1255	0.	*	3	1028	1755	0.
1	0830	256	12.	*	2	0110	756	55.	*	2	1750	1256	0.	*	3	1030	1756	0.
1	0832	257	12.	*	2	0112	757	54.	*	2	1752	1257	0.	*	3	1032	1757	0.
1	0834	258	13.	*	2	0114	758	53.	*	2	1754	1258	0.	*	3	1034	1758	0.
1	0836	259	13.	*	2	0116	759	52.	*	2	1756	1259	0.	*	3	1036	1759	0.
1	0838	260	14.	*	2	0118	760	51.	*	2	1758	1260	0.	*	3	1038	1760	0.
1	0840	261	14.	*	2	0120	761	50.	*	2	1800	1261	0.	*	3	1040	1761	0.
1	0842	262	14.	*	2	0122	762	49.	*	2	1802	1262	0.	*	3	1042	1762	0.
1	0844	263	14.	*	2	0124	763	48.	*	2	1804	1263	0.	*	3	1044	1763	0.
1	0846	264	15.	*	2	0126	764	47.	*	2	1806	1264	0.	*	3	1046	1764	0.
1	0848	265	15.	*	2	0128	765	46.	*	2	1808	1265	0.	*	3	1048	1765	0.
1	0850	266	15.	*	2	0130	766	45.	*	2	1810	1266	0.	*	3	1050	1766	0.
1	0852	267	15.	*	2	0132	767	44.	*	2	1812	1267	0.	*	3	1052	1767	0.
1	0854	268	15.	*	2	0134	768	43.	*	2	1814	1268	0.	*	3	1054	1768	0.
1	0856	269	15.	*	2	0136	769	42.	*	2	1816	1269	0.	*	3	1056	1769	0.
1	0858	270	16.	*	2	0138	770	41.	*	2	1818	1270	0.	*	3	1058	1770	0.

1	0900	271	16.	*	2	0140	771	41.	*	2	1820	1271	0.	*	3	1100	1771	0.
1	0902	272	16.	*	2	0142	772	40.	*	2	1822	1272	0.	*	3	1102	1772	0.
1	0904	273	16.	*	2	0144	773	39.	*	2	1824	1273	0.	*	3	1104	1773	0.
1	0906	274	16.	*	2	0146	774	38.	*	2	1826	1274	0.	*	3	1106	1774	0.
1	0908	275	16.	*	2	0148	775	37.	*	2	1828	1275	0.	*	3	1108	1775	0.
1	0910	276	17.	*	2	0150	776	37.	*	2	1830	1276	0.	*	3	1110	1776	0.
1	0912	277	17.	*	2	0152	777	36.	*	2	1832	1277	0.	*	3	1112	1777	0.
1	0914	278	17.	*	2	0154	778	35.	*	2	1834	1278	0.	*	3	1114	1778	0.
1	0916	279	17.	*	2	0156	779	35.	*	2	1836	1279	0.	*	3	1116	1779	0.
1	0918	280	17.	*	2	0158	780	34.	*	2	1838	1280	0.	*	3	1118	1780	0.
1	0920	281	17.	*	2	0200	781	34.	*	2	1840	1281	0.	*	3	1120	1781	0.
1	0922	282	18.	*	2	0202	782	33.	*	2	1842	1282	0.	*	3	1122	1782	0.
1	0924	283	18.	*	2	0204	783	33.	*	2	1844	1283	0.	*	3	1124	1783	0.
1	0926	284	18.	*	2	0206	784	32.	*	2	1846	1284	0.	*	3	1126	1784	0.
1	0928	285	18.	*	2	0208	785	32.	*	2	1848	1285	0.	*	3	1128	1785	0.
1	0930	286	18.	*	2	0210	786	31.	*	2	1850	1286	0.	*	3	1130	1786	0.
1	0932	287	18.	*	2	0212	787	31.	*	2	1852	1287	0.	*	3	1132	1787	0.
1	0934	288	19.	*	2	0214	788	30.	*	2	1854	1288	0.	*	3	1134	1788	0.
1	0936	289	19.	*	2	0216	789	30.	*	2	1856	1289	0.	*	3	1136	1789	0.
1	0938	290	19.	*	2	0218	790	29.	*	2	1858	1290	0.	*	3	1138	1790	0.
1	0940	291	19.	*	2	0220	791	29.	*	2	1900	1291	0.	*	3	1140	1791	0.
1	0942	292	20.	*	2	0222	792	28.	*	2	1902	1292	0.	*	3	1142	1792	0.
1	0944	293	20.	*	2	0224	793	28.	*	2	1904	1293	0.	*	3	1144	1793	0.
1	0946	294	20.	*	2	0226	794	27.	*	2	1906	1294	0.	*	3	1146	1794	0.
1	0948	295	20.	*	2	0228	795	27.	*	2	1908	1295	0.	*	3	1148	1795	0.
1	0950	296	20.	*	2	0230	796	27.	*	2	1910	1296	0.	*	3	1150	1796	0.
1	0952	297	21.	*	2	0232	797	26.	*	2	1912	1297	0.	*	3	1152	1797	0.
1	0954	298	21.	*	2	0234	798	26.	*	2	1914	1298	0.	*	3	1154	1798	0.
1	0956	299	21.	*	2	0236	799	25.	*	2	1916	1299	0.	*	3	1156	1799	0.
1	0958	300	21.	*	2	0238	800	25.	*	2	1918	1300	0.	*	3	1158	1800	0.
1	1000	301	22.	*	2	0240	801	24.	*	2	1920	1301	0.	*	3	1200	1801	0.
1	1002	302	22.	*	2	0242	802	24.	*	2	1922	1302	0.	*	3	1202	1802	0.
1	1004	303	22.	*	2	0244	803	24.	*	2	1924	1303	0.	*	3	1204	1803	0.
1	1006	304	22.	*	2	0246	804	23.	*	2	1926	1304	0.	*	3	1206	1804	0.
1	1008	305	23.	*	2	0248	805	23.	*	2	1928	1305	0.	*	3	1208	1805	0.
1	1010	306	23.	*	2	0250	806	22.	*	2	1930	1306	0.	*	3	1210	1806	0.
1	1012	307	23.	*	2	0252	807	22.	*	2	1932	1307	0.	*	3	1212	1807	0.
1	1014	308	23.	*	2	0254	808	22.	*	2	1934	1308	0.	*	3	1214	1808	0.
1	1016	309	23.	*	2	0256	809	21.	*	2	1936	1309	0.	*	3	1216	1809	0.
1	1018	310	23.	*	2	0258	810	21.	*	2	1938	1310	0.	*	3	1218	1810	0.
1	1020	311	24.	*	2	0300	811	21.	*	2	1940	1311	0.	*	3	1220	1811	0.
1	1022	312	24.	*	2	0302	812	20.	*	2	1942	1312	0.	*	3	1222	1812	0.
1	1024	313	24.	*	2	0304	813	20.	*	2	1944	1313	0.	*	3	1224	1813	0.
1	1026	314	24.	*	2	0306	814	20.	*	2	1946	1314	0.	*	3	1226	1814	0.
1	1028	315	24.	*	2	0308	815	19.	*	2	1948	1315	0.	*	3	1228	1815	0.
1	1030	316	24.	*	2	0310	816	19.	*	2	1950	1316	0.	*	3	1230	1816	0.
1	1032	317	24.	*	2	0312	817	19.	*	2	1952	1317	0.	*	3	1232	1817	0.
1	1034	318	24.	*	2	0314	818	19.	*	2	1954	1318	0.	*	3	1234	1818	0.
1	1036	319	25.	*	2	0316	819	18.	*	2	1956	1319	0.	*	3	1236	1819	0.
1	1038	320	25.	*	2	0318	820	18.	*	2	1958	1320	0.	*	3	1238	1820	0.
1	1040	321	25.	*	2	0320	821	18.	*	2	2000	1321	0.	*	3	1240	1821	0.
1	1042	322	25.	*	2	0322	822	18.	*	2	2002	1322	0.	*	3	1242	1822	0.
1	1044	323	25.	*	2	0324	823	17.	*	2	2004	1323	0.	*	3	1244	1823	0.
1	1046	324	25.	*	2	0326	824	17.	*	2	2006	1324	0.	*	3	1246	1824	0.
1	1048	325	25.	*	2	0328	825	17.	*	2	2008	1325	0.	*	3	1248	1825	0.
1	1050	326	26.	*	2	0330	826	17.	*	2	2010	1326	0.	*	3	1250	1826	0.
1	1052	327	26.	*	2	0332	827	17.	*	2	2012	1327	0.	*	3	1252	1827	0.
1	1054	328	26.	*	2	0334	828	16.	*	2	2014	1328	0.	*	3	1254	1828	0.
1	1056	329	26.	*	2	0336	829	16.	*	2	2016	1329	0.	*	3	1256	1829	0.
1	1058	330	26.	*	2	0338	830	16.	*	2	2018	1330	0.	*	3	1258	1830	0.
1	1100	331	26.	*	2	0340	831	16.	*	2	2020	1331	0.	*	3	1300	1831	0.
1	1102	332	26.	*	2	0342	832	16.	*	2	2022	1332	0.	*	3	1302	1832	0.
1	1104	333	27.	*	2	0344	833	16.	*	2	2024	1333	0.	*	3	1304	1833	0.
1	1106	334	27.	*	2	0346	834	15.	*	2	2026	1334	0.	*	3	1306	1834	0.
1	1108	335	27.	*	2	0348	835	15.	*	2	2028	1335	0.	*	3	1308	1835	0.
1	1110	336	27.	*	2	0350	836	15.	*	2	2030	1336	0.	*	3	1310	1836	0.
1	1112	337	27.	*	2	0352	837	15.	*	2	2032	1337	0.	*	3	1312	1837	0.
1	1114	338	28.	*	2	0354	838	15.	*	2	2034	1338	0.	*	3	1314	1838	0.
1	1116	339	28.	*	2	0356	839	15.	*	2	2036	1339	0.	*	3	1316	1839	0.
1	1118	340	28.	*	2	0358	840	15.	*	2	2038	1340	0.	*	3	1318	1840	0.
1	1120	341	28.	*	2	0400	841	14.	*	2	2040	1341	0.	*	3	1320	1841	0.
1	1122	342	28.	*	2	0402	842	14.	*	2	2042	1342	0.	*	3	1322	1842	0.
1	1124	343	29.	*	2	0404	843	14.	*	2	2044	1343	0.	*	3	1324	1843	0.
1	1126	344	29.	*	2	0406	844	14.	*	2	2046	1344	0.	*	3	1326	1844	0.
1	1128	345	29.	*	2	0408	845	14.	*	2	2048	1345	0.	*	3	1328	1845	0.
1	1130	346	29.	*	2	0410	846	14.	*	2	2050	1346	0.	*	3	1330	1846	0.
1	1132	347	29.	*	2	0412	847	14.	*	2	2052	1347	0.	*	3	1332	1847	0.
1	1134	348	31.	*	2	0414	848	14.	*	2	2054	1348	0.	*	3	1334	1848	0.
1	1136	349	33.	*	2	0416	849	13.	*	2	2056	1349	0.	*	3	1336	1849	0.
1	1138	350	35.	*	2	0418	850	13.	*	2	2058	1350	0.	*	3	1338	1850	0.
1	1140	351	37.	*	2	0420	851	13.	*	2	2100	1351	0.	*	3	1340	1851	0.
1	1142	352	39.	*	2	0422	852	13.	*	2	2102	1352	0.	*	3	1342	1852	0.
1	1144	353	41.	*	2	0424	853	13.	*	2	2104	1353	0.	*	3	1344	1853	0.
1	1146	354	43.	*	2	0426	854	13.	*	2	2106	1354	0.	*	3	1346	1854	0.
1	1148	355	50.	*	2	0428	855	13.	*	2	2108	1355	0.	*	3	1348	1855	0.
1	1150	356	60.	*	2	0430	856	13.	*	2	2110	1356	0.	*	3	1350	1856	0.
1	1152	357	73.	*	2	0432	857	13.	*	2	2112	1357	0.	*	3	1352	1857	0.
1	1154	358	86.	*	2	0434	858	13.	*	2	2114	1358	0.	*	3	1354	1858	0.
1	1156	359	100.	*	2	0436	859	13.	*	2	2116	1359	0.	*	3	1356	1859	0.
1	1158	360	115.	*	2	0438	860	12.	*	2	2118	1360	0.	*	3	1358	1860	0.
1	1200	361	131.	*	2	0440	861	12.	*	2	2120	1361	0.	*	3	1400	1861	0.
1	1202	362	148.	*	2	0442	862	12.	*	2	2122	1362	0.	*	3	1402	1862	0.
1	1204	363	156.	*	2	0444	863	12.	*	2	2124	1363	0.	*	3	1404	1863	0.
1	1206	364	171.	*	2	0446	864	12.	*	2	2126	1364	0.	*	3	1406	1864	0.
1	1208	365	195.	*	2	0448	865	12.	*	2	2128	1365	0.	*	3	1408	1865	0.
1	1210	366	223.	*	2	0450	866	12.	*	2	2130	1366	0.	*	3	1410	1866	0.
1	1212	367	256.	*	2	0452	867	12.	*	2	2132	1367	0.	*	3	1412	1867	0.
1	1214	368	294.	*	2	0454	868	12.	*	2	2134	1368	0.	*	3	1414	1868	0.
1	1216	369	337.	*	2	0456	869	12.	*	2	2136	1369	0.	*	3	1416	1869	0.
1	1218	370	386.	*	2	0458	870	12.	*	2	2138	1370	0.	*	3	1418	1870	0.
1	1220	371	441.	*	2	0500	871	12.	*	2	2140	1371	0.	*	3	1420	1871	0.
1	1222	372	488.	*	2	0502	872	12.	*	2	2142	1372	0.	*	3	1422	1872	0.
1	1224	373	534.	*	2	0504	873	12.	*	2	2144	1373	0.	*	3	1424	1873	0.
1	1226	374	587.	*	2	0506	874	12.	*	2	2146	1374	0.	*	3	1426	1874	0.
1	1228	375	638.	*	2	0508	875	12.	*	2	2148	1375	0.	*	3	1428	1875	0.
1	1230	376	688.	*	2	0510	876	12.	*	2	2150	1376	0.	*	3	1430	1876	0.
1	1232	377	741.	*	2	0512	877	12.	*	2	2152	1377	0.	*	3	1432	1877	0.
1	1234	378	785.	*	2	0514	878	11.	*	2	2154	1378	0.	*	3	1434	1878	0.
1	1236	379	831.	*	2	0516	879	11.	*	2	2156	1379	0.	*	3	1436	1879	0.
1	1238	380	877.	*	2	0518	880	11.	*	2	2158	1380	0.	*	3	1438	1880	0.
1	1240	381	921.	*	2	0520	881	11.	*	2	2200	1381	0.	*	3	1440	1881	0.
1	1242	382	963.	*	2	0522	882	11.	*	2	2202	1382	0.	*	3	1442	1882	0.
1	1244	383	1000.	*	2	0524	883	11.	*	2	2204	1383	0.	*	3	1444	1883	0.
1	1246	384	1034.	*	2	0526	884	11.	*	2	2206	1384	0.	*	3	1446	1884	0.
1	1248	385	1065.	*	2	0528	885	11.	*	2	2208	1385	0.	*	3	1448	1885	0.
1	1250	386	1098.	*	2	0530	886	11.	*	2	2210	1386	0.	*	3	1450	1886	0.
1	1252	387	1119.	*	2	0532	887	11.	*	2	2212	1387	0.	*	3	1452	1887	0.
1	1254	388	1140.	*	2	0534	888	11.	*	2	2214	1388	0.	*	3	1454	1888	0.
1	1256	389	1158.	*	2	0536	889	11.	*	2	2216	1389	0.	*	3	1456	1889	0.
1	1258	390	1171.	*	2	0538	890	11.	*	2	2218	1390	0.	*	3	1458	1890	0.
1	1300	391	1181.	*	2	0540	891	11.	*	2	2220	1391	0.	*	3	1500	1891	0.
1	1302	392	1187.	*	2	0542	892	11.	*	2	2222	1392	0.	*	3	1502	1892	0.
1	1304	393	1193.	*	2	0544	893	11.	*	2	2224	1393	0.	*	3	1504	1893	0.

1	1306	394	1194.	*	2	0546	894	11.	*	2	2226	1394	0.	*	3	1506	1894	0.
1	1308	395	1189.	*	2	0548	895	11.	*	2	2228	1395	0.	*	3	1508	1895	0.
1	1310	396	1184.	*	2	0550	896	11.	*	2	2230	1396	0.	*	3	1510	1896	0.
1	1312	397	1179.	*	2	0552	897	11.	*	2	2232	1397	0.	*	3	1512	1897	0.
1	1314	398	1176.	*	2	0554	898	11.	*	2	2234	1398	0.	*	3	1514	1898	0.
1	1316	399	1173.	*	2	0556	899	11.	*	2	2236	1399	0.	*	3	1516	1899	0.
1	1318	400	1173.	*	2	0558	900	10.	*	2	2238	1400	0.	*	3	1518	1900	0.
1	1320	401	1170.	*	2	0600	901	10.	*	2	2240	1401	0.	*	3	1520	1901	0.
1	1322	402	1171.	*	2	0602	902	10.	*	2	2242	1402	0.	*	3	1522	1902	0.
1	1324	403	1170.	*	2	0604	903	10.	*	2	2244	1403	0.	*	3	1524	1903	0.
1	1326	404	1171.	*	2	0606	904	10.	*	2	2246	1404	0.	*	3	1526	1904	0.
1	1328	405	1168.	*	2	0608	905	10.	*	2	2248	1405	0.	*	3	1528	1905	0.
1	1330	406	1165.	*	2	0610	906	10.	*	2	2250	1406	0.	*	3	1530	1906	0.
1	1332	407	1161.	*	2	0612	907	10.	*	2	2252	1407	0.	*	3	1532	1907	0.
1	1334	408	1159.	*	2	0614	908	10.	*	2	2254	1408	0.	*	3	1534	1908	0.
1	1336	409	1158.	*	2	0616	909	10.	*	2	2256	1409	0.	*	3	1536	1909	0.
1	1338	410	1159.	*	2	0618	910	10.	*	2	2258	1410	0.	*	3	1538	1910	0.
1	1340	411	1164.	*	2	0620	911	10.	*	2	2300	1411	0.	*	3	1540	1911	0.
1	1342	412	1167.	*	2	0622	912	10.	*	2	2302	1412	0.	*	3	1542	1912	0.
1	1344	413	1173.	*	2	0624	913	10.	*	2	2304	1413	0.	*	3	1544	1913	0.
1	1346	414	1183.	*	2	0626	914	10.	*	2	2306	1414	0.	*	3	1546	1914	0.
1	1348	415	1197.	*	2	0628	915	10.	*	2	2308	1415	0.	*	3	1548	1915	0.
1	1350	416	1213.	*	2	0630	916	10.	*	2	2310	1416	0.	*	3	1550	1916	0.
1	1352	417	1230.	*	2	0632	917	10.	*	2	2312	1417	0.	*	3	1552	1917	0.
1	1354	418	1251.	*	2	0634	918	10.	*	2	2314	1418	0.	*	3	1554	1918	0.
1	1356	419	1276.	*	2	0636	919	10.	*	2	2316	1419	0.	*	3	1556	1919	0.
1	1358	420	1303.	*	2	0638	920	10.	*	2	2318	1420	0.	*	3	1558	1920	0.
1	1400	421	1330.	*	2	0640	921	10.	*	2	2320	1421	0.	*	3	1600	1921	0.
1	1402	422	1362.	*	2	0642	922	10.	*	2	2322	1422	0.	*	3	1602	1922	0.
1	1404	423	1396.	*	2	0644	923	10.	*	2	2324	1423	0.	*	3	1604	1923	0.
1	1406	424	1433.	*	2	0646	924	10.	*	2	2326	1424	0.	*	3	1606	1924	0.
1	1408	425	1468.	*	2	0648	925	10.	*	2	2328	1425	0.	*	3	1608	1925	0.
1	1410	426	1503.	*	2	0650	926	10.	*	2	2330	1426	0.	*	3	1610	1926	0.
1	1412	427	1537.	*	2	0652	927	10.	*	2	2332	1427	0.	*	3	1612	1927	0.
1	1414	428	1570.	*	2	0654	928	10.	*	2	2334	1428	0.	*	3	1614	1928	0.
1	1416	429	1605.	*	2	0656	929	9.	*	2	2336	1429	0.	*	3	1616	1929	0.
1	1418	430	1637.	*	2	0658	930	9.	*	2	2338	1430	0.	*	3	1618	1930	0.
1	1420	431	1664.	*	2	0700	931	9.	*	2	2340	1431	0.	*	3	1620	1931	0.
1	1422	432	1688.	*	2	0702	932	9.	*	2	2342	1432	0.	*	3	1622	1932	0.
1	1424	433	1708.	*	2	0704	933	9.	*	2	2344	1433	0.	*	3	1624	1933	0.
1	1426	434	1726.	*	2	0706	934	9.	*	2	2346	1434	0.	*	3	1626	1934	0.
1	1428	435	1744.	*	2	0708	935	9.	*	2	2348	1435	0.	*	3	1628	1935	0.
1	1430	436	1763.	*	2	0710	936	9.	*	2	2350	1436	0.	*	3	1630	1936	0.
1	1432	437	1779.	*	2	0712	937	9.	*	2	2352	1437	0.	*	3	1632	1937	0.
1	1434	438	1792.	*	2	0714	938	9.	*	2	2354	1438	0.	*	3	1634	1938	0.
1	1436	439	1803.	*	2	0716	939	9.	*	2	2356	1439	0.	*	3	1636	1939	0.
1	1438	440	1815.	*	2	0718	940	9.	*	2	2358	1440	0.	*	3	1638	1940	0.
1	1440	441	1826.	*	2	0720	941	9.	*	3	0000	1441	0.	*	3	1640	1941	0.
1	1442	442	1834.	*	2	0722	942	9.	*	3	0002	1442	0.	*	3	1642	1942	0.
1	1444	443	1838.	*	2	0724	943	9.	*	3	0004	1443	0.	*	3	1644	1943	0.
1	1446	444	1842.	*	2	0726	944	9.	*	3	0006	1444	0.	*	3	1646	1944	0.
1	1448	445	1845.	*	2	0728	945	9.	*	3	0008	1445	0.	*	3	1648	1945	0.
1	1450	446	1848.	*	2	0730	946	9.	*	3	0010	1446	0.	*	3	1650	1946	0.
1	1452	447	1849.	*	2	0732	947	8.	*	3	0012	1447	0.	*	3	1652	1947	0.
1	1454	448	1849.	*	2	0734	948	8.	*	3	0014	1448	0.	*	3	1654	1948	0.
1	1456	449	1848.	*	2	0736	949	8.	*	3	0016	1449	0.	*	3	1656	1949	0.
1	1458	450	1848.	*	2	0738	950	8.	*	3	0018	1450	0.	*	3	1658	1950	0.
1	1500	451	1850.	*	2	0740	951	8.	*	3	0020	1451	0.	*	3	1700	1951	0.
1	1502	452	1849.	*	2	0742	952	8.	*	3	0022	1452	0.	*	3	1702	1952	0.
1	1504	453	1846.	*	2	0744	953	8.	*	3	0024	1453	0.	*	3	1704	1953	0.
1	1506	454	1843.	*	2	0746	954	8.	*	3	0026	1454	0.	*	3	1706	1954	0.
1	1508	455	1839.	*	2	0748	955	8.	*	3	0028	1455	0.	*	3	1708	1955	0.
1	1510	456	1834.	*	2	0750	956	8.	*	3	0030	1456	0.	*	3	1710	1956	0.
1	1512	457	1829.	*	2	0752	957	8.	*	3	0032	1457	0.	*	3	1712	1957	0.
1	1514	458	1823.	*	2	0754	958	8.	*	3	0034	1458	0.	*	3	1714	1958	0.
1	1516	459	1819.	*	2	0756	959	8.	*	3	0036	1459	0.	*	3	1716	1959	0.
1	1518	460	1816.	*	2	0758	960	8.	*	3	0038	1460	0.	*	3	1718	1960	0.
1	1520	461	1813.	*	2	0800	961	8.	*	3	0040	1461	0.	*	3	1720	1961	0.
1	1522	462	1809.	*	2	0802	962	8.	*	3	0042	1462	0.	*	3	1722	1962	0.
1	1524	463	1806.	*	2	0804	963	8.	*	3	0044	1463	0.	*	3	1724	1963	0.
1	1526	464	1802.	*	2	0806	964	7.	*	3	0046	1464	0.	*	3	1726	1964	0.
1	1528	465	1796.	*	2	0808	965	7.	*	3	0048	1465	0.	*	3	1728	1965	0.
1	1530	466	1788.	*	2	0810	966	7.	*	3	0050	1466	0.	*	3	1730	1966	0.
1	1532	467	1780.	*	2	0812	967	7.	*	3	0052	1467	0.	*	3	1732	1967	0.
1	1534	468	1772.	*	2	0814	968	7.	*	3	0054	1468	0.	*	3	1734	1968	0.
1	1536	469	1764.	*	2	0816	969	7.	*	3	0056	1469	0.	*	3	1736	1969	0.
1	1538	470	1755.	*	2	0818	970	7.	*	3	0058	1470	0.	*	3	1738	1970	0.
1	1540	471	1746.	*	2	0820	971	7.	*	3	0100	1471	0.	*	3	1740	1971	0.
1	1542	472	1737.	*	2	0822	972	7.	*	3	0102	1472	0.	*	3	1742	1972	0.
1	1544	473	1732.	*	2	0824	973	7.	*	3	0104	1473	0.	*	3	1744	1973	0.
1	1546	474	1727.	*	2	0826	974	7.	*	3	0106	1474	0.	*	3	1746	1974	0.
1	1548	475	1721.	*	2	0828	975	7.	*	3	0108	1475	0.	*	3	1748	1975	0.
1	1550	476	1715.	*	2	0830	976	7.	*	3	0110	1476	0.	*	3	1750	1976	0.
1	1552	477	1709.	*	2	0832	977	7.	*	3	0112	1477	0.	*	3	1752	1977	0.
1	1554	478	1703.	*	2	0834	978	7.	*	3	0114	1478	0.	*	3	1754	1978	0.
1	1556	479	1697.	*	2	0836	979	7.	*	3	0116	1479	0.	*	3	1756	1979	0.
1	1558	480	1690.	*	2	0838	980	7.	*	3	0118	1480	0.	*	3	1758	1980	0.
1	1600	481	1684.	*	2	0840	981	7.	*	3	0120	1481	0.	*	3	1800	1981	0.
1	1602	482	1677.	*	2	0842	982	7.	*	3	0122	1482	0.	*	3	1802	1982	0.
1	1604	483	1670.	*	2	0844	983	7.	*	3	0124	1483	0.	*	3	1804	1983	0.
1	1606	484	1662.	*	2	0846	984	7.	*	3	0126	1484	0.	*	3	1806	1984	0.
1	1608	485	1655.	*	2	0848	985	7.	*	3	0128	1485	0.	*	3	1808	1985	0.
1	1610	486	1647.	*	2	0850	986	7.	*	3	0130	1486	0.	*	3	1810	1986	0.
1	1612	487	1639.	*	2	0852	987	7.	*	3	0132	1487	0.	*	3	1812	1987	0.
1	1614	488	1631.	*	2	0854	988	6.	*	3	0134	1488	0.	*	3	1814	1988	0.
1	1616	489	1623.	*	2	0856	989	6.	*	3	0136	1489	0.	*	3	1816	1989	0.
1	1618	490	1615.	*	2	0858	990	6.	*	3	0138	1490	0.	*	3	1818	1990	0.
1	1620	491	1607.	*	2	0900	991	6.	*	3	0140	1491	0.	*	3	1820	1991	0.
1	1622	492	1599.	*	2	0902	992	6.	*	3	0142	1492	0.	*	3	1822	1992	0.
1	1624	493	1591.	*	2	0904	993	6.	*	3	0144	1493	0.	*	3	1824	1993	0.
1	1626	494	1583.	*	2	0906	994	6.	*	3	0146	1494	0.	*	3	1826	1994	0.
1	1628	495	1575.	*	2	0908	995	6.	*	3	0148	1495	0.	*	3	1828	1995	0.
1	1630	496	1567.	*	2	0910	996	6.	*	3	0150	1496	0.	*	3	1830	1996	0.
1	1632	497	1558.	*	2	0912	997	6.	*	3	0152	1497	0.	*	3	1832	1997	0.
1	1634	498	1550.	*	2	0914	998	6.	*	3	0154	1498	0.	*	3	1834	1998	0.
1	1636	499	1541.	*	2	0916	999	6.	*	3	0156	1499	0.	*	3	1836	1999	0.
1	1638	500	1532.	*	2	0918	1000	6.	*	3	0158	1500	0.	*	3	1838	2000	0.
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PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	66.63-HR
+		(CFS)				
+ 1850.	15.00		1405.	448.	162.	162.
		(INCHES)	4.568	5.828	5.852	5.852
		(AC-FT)	697.	889.	892.	892.

CUMULATIVE AREA = 2.86 SQ MI

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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	180	877.	12.30	126.	36.	13.	0.96		
+	HYDROGRAPH AT	168	683.	12.13	67.	18.	7.	0.50		
+	2 COMBINED AT	CO169	1428.	12.23	193.	55.	20.	1.46		
+	ROUTED TO	R171	1373.	12.27	193.	54.	20.	1.46		
+									4.58	12.27
+	HYDROGRAPH AT	92	169.	12.03	12.	4.	1.	0.09		
+	ROUTED TO	DR92	143.	12.07	12.	4.	1.	0.09		
+									1941.02	12.07
+	ROUTED TO	R161	118.	12.37	12.	4.	1.	0.09		
+									1.16	12.37
+	HYDROGRAPH AT	160	650.	12.17	73.	20.	7.	0.55		
+	3 COMBINED AT	CO173	2072.	12.27	278.	78.	28.	2.10		
+	ROUTED TO	R175	1983.	12.37	278.	78.	28.	2.10		
+									4.83	12.37
+	HYDROGRAPH AT	150	1119.	12.13	120.	34.	12.	0.88		
+	HYDROGRAPH AT	76	972.	12.23	124.	36.	13.	0.94		
+	ROUTED TO	DR76	962.	12.27	124.	36.	13.	0.94		
+									1857.65	12.27
+	ROUTED TO	R153	901.	12.43	124.	36.	13.	0.94		
+									2.98	12.43
+	3 COMBINED AT	CO155	3528.	12.33	523.	147.	53.	3.92		
+	HYDROGRAPH AT	72	241.	12.07	19.	5.	2.	0.14		
+	ROUTED TO	DR72	230.	12.10	19.	5.	2.	0.14		
+									1844.06	12.10
+	HYDROGRAPH AT	70	178.	12.03	12.	3.	1.	0.09		
+	ROUTED TO	DR70	130.	12.10	12.	3.	1.	0.09		
+									1837.43	12.10
+	HYDROGRAPH AT	68	624.	12.20	81.	24.	9.	0.60		
+	ROUTED TO	DR68	620.	12.23	81.	24.	9.	0.60		
+									1838.70	12.23
+	3 COMBINED AT	CO141	910.	12.17	112.	33.	12.	0.83		
+	ROUTED TO	R145	858.	12.33	112.	33.	12.	0.83		
+									2.63	12.33
+	HYDROGRAPH AT	144	428.	12.17	46.	12.	4.	0.34		
+	3 COMBINED AT	CO147	4705.	12.30	680.	192.	69.	5.09		
+	ROUTED TO	R149	4663.	12.37	680.	192.	69.	5.09		
+									6.01	12.37
+	HYDROGRAPH AT	54	1230.	12.20	159.	47.	17.	1.17		
+	ROUTED TO	R55	1194.	12.30	159.	47.	17.	1.17		
+									3.20	12.30
+	HYDROGRAPH AT	56	830.	12.17	103.	30.	11.	0.75		
+	2 COMBINED AT	CO57	1969.	12.27	262.	77.	28.	1.92		
+	ROUTED TO	R59	1931.	12.33	262.	77.	28.	1.92		
+									4.01	12.33
+	HYDROGRAPH AT	50	308.	12.13	32.	9.	3.	0.23		
+	2 COMBINED AT	CO61	2100.	12.33	294.	87.	31.	2.16		
+	ROUTED TO	DR61	2089.	12.40	294.	87.	31.	2.16		
+									1846.27	12.40
	HYDROGRAPH AT									

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+                    46     1208.  12.43      206.      61.      22.     1.63
     HYDROGRAPH AT
+                    42      661.  12.23       88.      26.       9.     0.63
     2 COMBINED AT
+                   CO47     1690.  12.37      293.      86.      31.     2.26
     ROUTED TO
+                   R49      1654.  12.50      293.      86.      31.     2.26
+                                                                        3.56      12.50
     HYDROGRAPH AT
+                    48      576.  12.17       65.      18.       6.     0.42
     2 COMBINED AT
+                   CO63     1939.  12.43      357.     104.      37.     2.68
     ROUTED TO
+                   DR63     1900.  12.50      357.     104.      37.     2.68
+                                                                     1845.54      12.50
     2 COMBINED AT
+                   CO65     3893.  12.43      651.     190.      69.     4.84
     ROUTED TO
+                   R123     3881.  12.43      651.     190.      69.     4.84
+                                                                        5.50      12.43
     HYDROGRAPH AT
+                    64      524.  12.13       59.      17.       6.     0.44
     ROUTED TO
+                   DR64      517.  12.20       59.      17.       6.     0.44
+                                                                     1836.39      12.20
     ROUTED TO
+                   R121      517.  12.20       59.      17.       6.     0.44
+                                                                        2.81      12.20
     2 COMBINED AT
+                  CO127     4170.  12.43      710.     208.      75.     5.28
     ROUTED TO
+                   R129     4052.  12.53      710.     208.      75.     5.28
+                                                                        5.39      12.53
     HYDROGRAPH AT
+                   132       434.  12.20       50.      13.       5.     0.35
     2 COMBINED AT
+                  CO132     4260.  12.53      760.     221.      80.     5.63
     2 COMBINED AT
+                  CO133     8553.  12.43     1440.     412.     149.    10.72
     ROUTED TO
+                   R137     8518.  12.50     1439.     412.     149.    10.72
+                                                                        6.85      12.50
     HYDROGRAPH AT
+                    10     1263.  12.27      177.      52.      19.     1.29
     ROUTED TO
+                    R11     1221.  12.37      177.      52.      19.     1.29
+                                                                        4.10      12.37
     HYDROGRAPH AT
+                    16      839.  12.17       94.      26.      10.     0.65
     2 COMBINED AT
+                   CO17     1883.  12.27      271.      78.      28.     1.94
     ROUTED TO
+                    R19     1818.  12.37      271.      78.      28.     1.94
+                                                                        4.45      12.37
     HYDROGRAPH AT
+                    20     1470.  12.23      204.      60.      22.     1.50
     HYDROGRAPH AT
+                    24      850.  12.23      117.      34.      12.     0.85
     3 COMBINED AT
+                   CO25     3993.  12.33      591.     172.      62.     4.30
     ROUTED TO
+                    R27     3810.  12.50      591.     172.      62.     4.30
+                                                                        5.66      12.50
     HYDROGRAPH AT
+                    30      419.  12.30       60.      16.       6.     0.40
     2 COMBINED AT
+                   CO31     4150.  12.47      651.     188.      68.     4.69
     ROUTED TO
+                   DR31     4067.  12.53      651.     188.      68.     4.69
+                                                                     1869.27      12.53
     ROUTED TO
+                   R113     4006.  12.57      651.     188.      68.     4.69
+                                                                        6.63      12.57
     HYDROGRAPH AT
+                    32      138.  12.10       13.       3.       1.     0.08
     ROUTED TO
+                   DR32      138.  12.10       13.       3.       1.     0.08
+                                                                     1860.75      12.10
     ROUTED TO
+                   R111      129.  12.20       13.       3.       1.     0.08
+                                                                        1.95      12.20
     2 COMBINED AT
+                  CO115     4059.  12.57      664.     191.      69.     4.77
     ROUTED TO
+                   R117     4052.  12.60      664.     191.      69.     4.77
+                                                                        6.67      12.60
     HYDROGRAPH AT
```

+		34	1058.	12.47	185.	47.	17.	1.13		
	ROUTED TO									
+		DR34	1041.	12.53	185.	47.	17.	1.13		
+									1878.58	12.53
	ROUTED TO									
+		R107	1030.	12.57	185.	47.	17.	1.13		
+									3.23	12.57
	HYDROGRAPH AT									
+		38	208.	12.07	20.	5.	2.	0.10		
	ROUTED TO									
+		DR38	199.	12.10	20.	5.	2.	0.10		
+									1879.69	12.10
	ROUTED TO									
+		R103	186.	12.17	20.	5.	2.	0.10		
+									2.03	12.17
	2 COMBINED AT									
+		CO105	1090.	12.57	205.	52.	19.	1.23		
	ROUTED TO									
+		R109	1074.	12.63	205.	52.	19.	1.23		
+									3.29	12.63
	HYDROGRAPH AT									
+		102	206.	12.13	26.	6.	2.	0.13		
	HYDROGRAPH AT									
+		112	393.	12.07	34.	9.	3.	0.22		
	4 COMBINED AT									
+		CO119	5252.	12.60	929.	258.	93.	6.35		
	ROUTED TO									
+		R118	5156.	12.70	929.	258.	93.	6.35		
+									6.38	12.70
	HYDROGRAPH AT									
+		122	749.	12.13	74.	19.	7.	0.49		
	2 COMBINED AT									
+		CO124	5294.	12.67	1003.	277.	100.	6.84		
	2 COMBINED AT									
+		CO125	13131.	12.57	2442.	689.	249.	17.56		
	HYDROGRAPH AT									
+		106	467.	12.33	71.	18.	6.	0.45		
	HYDROGRAPH AT									
+		36	224.	12.13	24.	6.	2.	0.14		
	ROUTED TO									
+		DR36	214.	12.17	24.	6.	2.	0.14		
+									1905.43	12.17
	ROUTED TO									
+		R101	189.	12.57	24.	6.	2.	0.14		
+									2.04	12.57
	ROUTED TO									
+		R101A	178.	12.80	24.	6.	2.	0.14		
+									1.46	12.80
	3 COMBINED AT									
+		CO191	13584.	12.57	2537.	712.	257.	18.15		
	ROUTED TO									
+		R193	13486.	12.63	2537.	712.	257.	18.15		
+									4.79	12.63
	HYDROGRAPH AT									
+		192	802.	12.10	67.	18.	7.	0.52		
	2 COMBINED AT									
+		CO195	13568.	12.63	2604.	730.	264.	18.67		
	ROUTED TO									
+		R197	13388.	12.77	2604.	730.	264.	18.67		
+									4.57	12.77
	HYDROGRAPH AT									
+		198	419.	12.20	47.	13.	5.	0.42		
	2 COMBINED AT									
+		CO199	13482.	12.77	2650.	743.	269.	19.09		
	DIVERSION TO									
+		MAIN3	8882.	12.77	1549.	405.	146.	19.09		
	HYDROGRAPH AT									
+		SPLIT3	4600.	12.77	1102.	339.	123.	19.09		
	ROUTED TO									
+		R301	4419.	13.10	1101.	339.	123.	19.09		
+									3.77	13.10
	HYDROGRAPH AT									
+		216	181.	12.20	17.	4.	2.	0.20		
	2 COMBINED AT									
+		CO215	4431.	13.10	1119.	343.	124.	19.29		
	DIVERSION TO									
+		SPLIT4	695.	13.10	132.	33.	12.	19.29		
	HYDROGRAPH AT									
+		SPLT3	3736.	13.10	986.	310.	113.	19.29		
	ROUTED TO									
+		R323	3692.	13.27	986.	310.	113.	19.29		
+									3.79	13.27
	HYDROGRAPH AT									
+		218	189.	12.13	16.	4.	1.	0.17		
	2 COMBINED AT									
+		CO219	3696.	13.27	1003.	314.	114.	19.46		

+	HYDROGRAPH AT	SPLIT4	695.	13.10	132.	33.	12.	0.00		
+	ROUTED TO	R321	686.	13.27	132.	33.	12.	0.00		
+									1.97	13.27
+	HYDROGRAPH AT	214	196.	12.17	18.	5.	2.	0.20		
+	2 COMBINED AT	CO217	692.	13.27	151.	38.	14.	0.20		
+	2 COMBINED AT	CO400	4388.	13.27	1153.	352.	128.	19.66		
+	ROUTED TO	DR400	2926.	13.83	993.	352.	128.	19.66		
+									1556.17	13.83
+	DIVERSION TO	DV501	2454.	13.83	576.	144.	52.	19.66		
+	HYDROGRAPH AT	DV400	472.	13.83	417.	208.	76.	19.66		
+	HYDROGRAPH AT	MAIN3	8882.	12.77	1549.	405.	146.	0.00		
+	DIVERSION TO	MAIN2	5804.	12.77	1132.	300.	108.	0.00		
+	HYDROGRAPH AT	SPLIT2	3078.	12.77	417.	104.	38.	0.00		
+	ROUTED TO	R318	2816.	13.27	417.	104.	38.	0.00		
+									2.86	13.27
+	HYDROGRAPH AT	220	163.	12.37	21.	5.	2.	0.24		
+	2 COMBINED AT	CO410	2845.	13.27	438.	110.	39.	0.24		
+	HYDROGRAPH AT	MAIN2	5804.	12.77	1132.	300.	108.	0.00		
+	DIVERSION TO	MAIN1	1522.	12.77	258.	65.	23.	0.00		
+	HYDROGRAPH AT	SPLIT1	4282.	12.77	874.	236.	85.	0.00		
+	ROUTED TO	R316	4213.	12.97	874.	236.	85.	0.00		
+									4.95	12.97
+	HYDROGRAPH AT	212	231.	12.13	22.	6.	2.	0.22		
+	2 COMBINED AT	CO208	4230.	12.97	895.	241.	87.	0.22		
+	DIVERSION TO	MN1	1389.	12.97	135.	34.	12.	0.22		
+	HYDROGRAPH AT	SPLT1	2841.	12.97	760.	208.	75.	0.22		
+	HYDROGRAPH AT	210	679.	12.20	76.	20.	7.	0.64		
+	2 COMBINED AT	CO209	2940.	12.93	836.	228.	82.	0.86		
+	DIVERSION TO	SPLIT5	1042.	12.93	286.	79.	28.	0.86		
+	HYDROGRAPH AT	SPLT1	1898.	12.93	551.	149.	54.	0.86		
+	ROUTED TO	R211	1870.	13.30	550.	149.	54.	0.86		
+									3.54	13.30
+	HYDROGRAPH AT	226	200.	12.23	22.	5.	2.	0.24		
+	2 COMBINED AT	CO430	1885.	13.27	572.	155.	56.	1.09		
+	HYDROGRAPH AT	230	527.	12.10	49.	14.	5.	0.36		
+	ROUTED TO	R231	455.	12.33	49.	14.	5.	0.36		
+									3.39	12.33
+	HYDROGRAPH AT	240	907.	12.20	106.	29.	10.	0.84		
+	HYDROGRAPH AT	232	422.	12.10	34.	9.	3.	0.26		
+	3 COMBINED AT	CO235	1587.	12.20	189.	51.	18.	1.46		
+	ROUTED TO	R237	1531.	12.33	189.	51.	18.	1.46		
+									3.95	12.33
+	HYDROGRAPH AT	244	292.	12.07	19.	5.	2.	0.19		
+	2 COMBINED AT	CO247	1606.	12.30	208.	56.	20.	1.65		
+	HYDROGRAPH AT	238	328.	12.20	34.	8.	3.	0.36		
+	HYDROGRAPH AT	SPLIT5	1042.	12.93	286.	79.	28.	0.00		

+	ROUTED TO	R251	1031.	13.10	286.	79.	28.	0.00		
+									3.72	13.10
+	2 COMBINED AT	CO255	1060.	13.10	319.	87.	31.	0.36		
+	HYDROGRAPH AT	MAIN1	1522.	12.77	258.	65.	23.	0.00		
+	ROUTED TO	R203	1455.	13.17	258.	65.	23.	0.00		
+									3.13	13.17
+	HYDROGRAPH AT	MN1	1389.	12.97	135.	34.	12.	0.00		
+	2 COMBINED AT	CO207	2728.	13.07	393.	98.	35.	0.00		
+	ROUTED TO	R205	2608.	13.37	393.	98.	35.	0.00		
+									3.78	13.37
+	HYDROGRAPH AT	222	375.	12.33	46.	12.	4.	0.51		
+	2 COMBINED AT	CO420	2650.	13.37	439.	110.	40.	0.51		
+	5 COMBINED AT	CO500	8423.	13.30	1975.	516.	186.	3.86		
+	HYDROGRAPH AT	DV501	2454.	13.83	576.	144.	52.	0.00		
+	2 COMBINED AT	CO501	9534.	13.40	2551.	660.	238.	3.86		
+	ROUTED TO	DR501	3162.	14.40	2250.	660.	238.	3.86		
+									1549.94	14.40
+	DIVERSION TO	DV2	320.	14.40	209.	59.	21.	3.86		
+	HYDROGRAPH AT	DV3-6	2842.	14.40	2041.	601.	217.	3.86		
+	DIVERSION TO	DV3	1044.	14.40	733.	210.	76.	3.86		
+	HYDROGRAPH AT	DV4-6	1798.	14.40	1308.	391.	141.	3.86		
+	DIVERSION TO	DV4	356.	14.40	258.	80.	29.	3.86		
+	HYDROGRAPH AT	DV5-6	1442.	14.40	1050.	311.	112.	3.86		
+	DIVERSION TO	DV5	359.	14.40	260.	80.	29.	3.86		
+	HYDROGRAPH AT	DV6	1084.	14.40	790.	232.	84.	3.86		
+	HYDROGRAPH AT	DV5	359.	14.37	260.	80.	29.	0.00		
+	ROUTED TO	R2b	357.	15.33	259.	80.	29.	0.00		
+									88.77	15.33
+	HYDROGRAPH AT	2B	308.	12.87	71.	18.	6.	0.65		
+	2 COMBINED AT	cp2B	366.	14.93	286.	97.	35.	0.65		
+	ROUTED TO	5R	365.	15.13	286.	97.	35.	0.65		
+									1412.90	15.13
+	HYDROGRAPH AT	DV3	1044.	14.40	733.	210.	76.	0.00		
+	ROUTED TO	R1b1	1042.	14.80	732.	210.	76.	0.00		
+									84.21	14.80
+	HYDROGRAPH AT	DV4	356.	14.37	258.	80.	29.	0.00		
+	ROUTED TO	R1b2	355.	15.10	257.	80.	29.	0.00		
+									67.95	15.10
+	2 COMBINED AT	comDV	1394.	14.87	987.	290.	105.	0.00		
+	ROUTED TO	R1b3	1392.	15.10	986.	290.	105.	0.00		
+									29.22	15.10
+	HYDROGRAPH AT	1B	855.	13.07	238.	62.	22.	2.20		
+	3 COMBINED AT	3C	1850.	15.00	1405.	448.	162.	2.86		

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

Appendix 2. HEC-1 Output File for 100-year 6-hour Storm

```
1*************************************
 *                                   *
 *   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
 *              JUN  1998            *
 *           VERSION 4.1             *
 *                                   *
 *  RUN DATE   10FEB03  TIME  18:35:07  *
 *                                   *
 *************************************

*************************************
*                                   *
*   U.S. ARMY CORPS OF ENGINEERS    *
*   HYDROLOGIC ENGINEERING CENTER   *
*         609 SECOND STREET         *
*      DAVIS, CALIFORNIA 95616      *
*          (916) 756-1104           *
*                                   *
*************************************

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

1                                          HEC-1 INPUT                                                    PAGE  1

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

        1           ID         Project ID: Bonita Dam Hydrology
        2           ID         FCDMC
        3           ID         July 2002, January 2003
        4           ID         100-YR. 6 HR. STORM  2 minute Time Step
        5           ID
                    *DIAGRAM*
        6           IT       2                    2000
        7           IO       5
        8           IN      15

        9           KK     180   BASIN
       10           PB    3.02
       11           PC    .000    .017    .024    .035    .054    .069    .083    .099    .115    .129
       12           PC    .146    .164    .189    .237    .319    .479    .667    .790    .861    .906
       13           PC    .941    .956    .971    .986   1.000
       14           BA   0.959
       15           LG    0.25    0.35    4.60    0.36      17
       16           UI      96     100      96     130     287     360     450     585     619     684
       17           UI     748     805     924    1134    1122     793     682     615     572     564
       18           UI     516     482     467     425     399     388     338     309     287     254
       19           UI     236     237     223     207     209     159     160     138     124     123
       20           UI     114     106     105     100      74      75      76      74      66      49
       21           UI      48       0       0       0       0       0       0       0       0       0
       22           UI       0       0       0       0       0       0       0       0       0       0
       23           UI       0       0       0       0       0       0       0       0       0       0
       24           UI       0       0       0       0       0       0       0       0       0       0

       25           KK     168   BASIN
       26           BA   0.504
       27           LG    0.25    0.37    5.30    0.26      11
       28           UI      88      91     232     370     550     620     716     976     904     625
       29           UI     547     484     432     401     349     299     259     221     203     197
       30           UI     149     127     116     101      97      75      68      68      45      43
       31           UI      44      44      30      17      17      17      17      17      17      17
       32           UI      18      17      17       0       0       0       0       0       0       0
       33           UI       0       0       0       0       0       0       0       0       0       0

       34           KK   CO169
       35           KM         COMBINE S180 AND S168
       36           HC       2

       37           KK    R171   ROUTE   REACH
       38           KM         ROUTE CO169 TO CO173
       39           RS       1    STOR      -1
       40           RC   0.065   0.037   0.065    1750  0.0067    0.00
       41           RX     0.0    10.0    37.5    45.0    70.0    77.5   105.0   115.0
       42           RY     7.0     5.0     3.0     0.0     0.0     3.0     5.0     7.0

       43           KK      92   BASIN
       44           BA   0.088
       45           LG    0.25    0.35    4.25    0.46      21
       46           UI      41     170     277     364     221     171     125      93      69      46
       47           UI      36      27      18      14       7       7       8       7       0       0
       48           UI       0       0       0       0       0       0       0       0       0       0
1                                          HEC-1 INPUT                                                    PAGE  2

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

       49           KK    DR92
       50           KM         ROUTE S92 THRU THE 60 IN. I.D. X 114 FT. RCP CULVERT UNDER S.R.74
       51           KM         AND THE ASSOC. STORAGE AT THE RD.
       52           RS       1    STOR       0
       53           SV     0.0   0.209   0.617   1.241   2.080   3.134   4.404   5.890
       54           SQ     0.0    47.2   106.8   178.3   229.1   268.1   302.8   332.7
       55           SE  1935.2  1938.0  1940.0  1942.0  1944.0  1946.0  1948.0  1950.0

       56           KK    R161   ROUTE   REACH
       57           KM         RO161; ROUTE S92 TO CO173
       58           RS       8    STOR      -1
       59           RC   0.065   0.037   0.065    7950  0.0190    0.00
       60           RX     0.0     4.0    10.0    27.5    42.5    60.0    66.0    70.0
       61           RY     8.0     7.0     6.0     0.0     0.0     6.0     7.0     8.0

       62           KK     160   BASIN
       63           BA   0.549
       64           LG    0.25    0.39    5.70    0.22      10
       65           UI      76      79     111     239     334     450     510     592     632     803
       66           UI     909     579     496     461     419     381     369     324     296     266
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 67          UI     227     201     190     176     161     144     126     100     101      87
 68          UI      84      80      59      58      60      46      37      39      37      37
 69          UI      39      15      15      15      15      14      15      15      15      15
 70          UI      14       0       0       0       0       0       0       0       0       0
 71          UI       0       0       0       0       0       0       0       0       0       0

 72          KK   C0173
 73          KM        COMBINE R0169, R0161, AND S160
 74          HC       3

 75          KK    R175   ROUTE   REACH
 76          KM        ROUTE C0173 TO C0155
 77          RS       2    STOR      -1
 78          RC   0.065   0.037   0.065    3200  0.0075    0.00
 79          RX     0.0     9.0    15.0    23.0    54.0    62.0    92.0   100.0
 80          RY     6.0     3.0     3.0     0.0     0.0     3.0     4.0     7.0

 81          KK     150   BASIN
 82          BA   0.877
 83          LG    0.25    0.37    5.20    0.27      14
 84          UI     139     142     289     509     775     894    1049    1221    1547    1400
 85          UI     994     863     769     721     645     573     536     452     371     352
 86          UI     322     298     253     215     178     173     151     145     110     106
 87          UI     107      70      69      68      71      64      27      28      26      27
 88          UI      28      26      27      28      26      27      28      26       0       0
 89          UI       0       0       0       0       0       0       0       0       0       0

 90          KK      76   BASIN
 91          BA   0.938
 92          LG    0.25    0.35    4.55    0.38      17
 93          UI     115     119     115     306     435     585     708     808     882     951
 94          UI    1231    1372    1012     847     704     686     637     576     544     512
 95          UI     454     420     388     326     293     284     267     247     231     191
 96          UI     170     152     147     126     130     118      89      91      89      84
1                                          HEC-1 INPUT                                          PAGE  3

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

 97          UI      58      57      57      58      57      57      29      22      22      23
 98          UI      23       0       0       0       0       0       0       0       0       0
 99          UI       0       0       0       0       0       0       0       0       0       0
100          UI       0       0       0       0       0       0       0       0       0       0

101          KK    DR76
102          KM        ROUTE S76 THRU 2-10 FT.(SPAN) X 8 FT. X 150 FT. (LONG) RCB'S UNDER S.R.7
103          KM        AND ASSOC. STOARGE AT RD.
104          RS       1    STOR       0
105          SV     0.0   0.453   1.145   2.152   3.474   5.575   8.917   13.50  19.324  26.389
106          SQ     0.0   324.7   642.2  1029.8  1473.8  1967.1  2390.8  2721.3  3017.8  3285.9
107          SE  1850.6  1854.0  1856.0  1858.0  1860.0  1862.0  1864.0  1866.0  1868.0  1870.0

108          KK    R153   ROUTE   REACH
109          KM        R153; ROUTE S76 TO C0155
110          RS       4    STOR      -1
111          RC   0.065   0.037   0.065    5200  0.0140    0.00
112          RX     0.0     6.0    12.0    18.0    43.0    46.0    76.0    82.0
113          RY    12.0     9.0     6.0     0.0     0.0     1.5     2.0     6.0

114          KK   C0155
115          KM        COMBINE R175, R153, AND S150
116          HC       3

117          KK      72   BASIN
118          BA   0.143
119          LG    0.25    0.35    4.70    0.34      14
120          UI      39      95     198     286     393     373     250     212     175     145
121          UI     116      94      78      61      48      42      32      27      19      20
122          UI      14       7       8       8       7       8       8       0       0       0
123          UI       0       0       0       0       0       0       0       0       0       0

124          KK    DR72
125          KM        ROUTE S72 THRU (1) 8 FT. (SPAN) X 5 FT. X 147 FT RCB UNDER S.R.74
126          KM        AND ASSOC. STORAGE AT RD.
127          RS       1    STOR       0
128          SV     0.0   0.024   0.259   0.736   1.455   2.416   3.619
129          SQ     0.0    26.0   103.4   225.3   374.6   503.5   600.0
130          SE  1839.1  1840.0  1842.0  1844.0  1846.0  1848.0  1850.0

131          KK      70   BASIN
132          BA   0.090
133          LG    0.25    0.35    4.80    0.33      14
134          UI      42     174     284     371     227     174     128      95      71      47
135          UI      37      27      18      15       7       7       8       7       0       0
136          UI       0       0       0       0       0       0       0       0       0       0

137          KK    DR70
138          KM        ROUTE S70 THRU (1) 54 IN. I.D. RCP X 118 FT. LONG AND (1) 42 IN. I.D.
139          KM        RCP X 162 FT. LONG CULVERTS UNDER S.R. 74 AND ASSOC. STORAGE AR RD.
140          RS       1    STOR       0
141          SV     0.0   0.317   0.904   1.792   2.980   3.687
142          SQ     0.0    25.6    99.0   142.4   192.9   226.0
143          SE  1831.1  1834.0  1836.0  1838.0  1840.0  1841.0
1                                          HEC-1 INPUT                                          PAGE  4

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

144          KK      68   BASIN
145          BA   0.601
146          LG    0.25    0.35    4.25    0.46      21
147          UI      77      79      77     225     314     406     482     559     592     680
148          UI     872     873     582     509     462     425     407     376     340     318
149          UI     284     253     226     197     186     183     163     146     132     109
150          UI      99      97      84      85      72      59      59      61      45      38
151          UI      39      37      38      39      25      15      15      15      14      16
152          UI      14       0       0       0       0       0       0       0       0       0
153          UI       0       0       0       0       0       0       0       0       0       0
154          UI       0       0       0       0       0       0       0       0       0       0

155          KK    DR68
156          KM        ROUTE S68 THRU (2) 8 FT.(SPAN) X 6 FT. X 72 FT LONG RCB'S UNDER
157          KM        S.R.74 AND ASSOC. STORAGE AT RD.
158          RS       1    STOR       0
159          SV     0.0   0.052   0.310   0.784   1.474   2.326
160          SQ     0.0    67.9   254.7   511.4   821.7   993.1
161          SE  1832.6  1834.0  1836.0  1838.0  1840.0  1841.0

162          KK   C0141
163          KM        COMBINE S72, S70, AND S68
164          HC       3

165          KK    R145   ROUTE   REACH
166          KM        R145; ROUTE C0141 TO C0147
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 167          RS       5    STOR      -1
 168          RC   0.065   0.037   0.065    4910  0.0150    0.00
 169          RX     0.0    20.0    28.0    31.0    56.0    59.0    89.0   101.0
 170          RY     7.0     1.5     1.0     0.0     0.0     1.0     2.0     6.0

 171          KK     144   BASIN
 172          BA   0.343
 173          LG    0.25    0.39    5.70    0.22       9
 174          UI      52      54      98     176     266     328     378     428     516     609
 175          UI     415     342     303     285     258     231     217     187     164     142
 176          UI     129     119     114      91      82      69      65      57      58      43
 177          UI      40      41      32      25      27      25      26      20      10      10
 178          UI      10      10      10      10      10      10      10      10      10      10
 179          UI       0       0       0       0       0       0       0       0       0       0
 180          UI       0       0       0       0       0       0       0       0       0       0

 181          KK   CO147
 182          KM        COMBINE S144, R145, AND CO155
 183          HC       3

 184          KK    R149    ROUTE   REACH
 185          KM          R149; ROUTE CO147 TO CO133
 186          RS       2    STOR      -1
 187          RC   0.065   0.037   0.065    2300  0.0110    0.00
 188          RX     0.0    10.0    50.0    57.5    97.5   105.0   125.0   131.0
 189          RY     6.5     3.5     3.0     0.0     0.0     3.0     7.0     9.0
1                                          HEC-1 INPUT                                                    PAGE  5

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

 190          KK      54   BASIN
 191          BA   1.171
 192          LG    0.25    0.35    4.30    0.44      21
 193          UI     149     155     149     441     610     790     940    1091    1154    1322
 194          UI    1701    1700    1133     992     902     827     793     732     663     619
 195          UI     554     493     441     383     362     359     316     285     256     213
 196          UI     192     190     164     164     141     116     115     119      87      73
 197          UI      76      73      73      76      49      28      30      29      29      29
 198          UI      29       0       0       0       0       0       0       0       0       0
 199          UI       0       0       0       0       0       0       0       0       0       0
 200          UI       0       0       0       0       0       0       0       0       0       0

 201          KK     R55    ROUTE   REACH
 202          KM          R55; ROUTE S54 TO CO57
 203          RS       2    STOR      -1
 204          RC   0.065   0.037   0.065    3800  0.0170    0.00
 205          RX     0.0     9.0    18.0    27.0    57.0    63.0    69.0    75.0
 206          RY     9.0     6.0     3.0     0.0     0.0     4.0     8.0    12.0

 207          KK      56   BASIN
 208          BA   0.750
 209          LG    0.25    0.35    4.30    0.44      21
 210          UI     104     107     152     327     457     614     696     810     863    1097
 211          UI    1241     792     678     629     572     521     504     442     405     363
 212          UI     310     276     259     239     221     197     171     138     137     119
 213          UI     114     111      80      79      83      62      51      53      51      51
 214          UI      52      21      20      21      20      20      20      20      20      21
 215          UI      20       0       0       0       0       0       0       0       0       0
 216          UI       0       0       0       0       0       0       0       0       0       0

 217          KK    CO57
 218          KM        COMBINE S56 AND R55
 219          HC       2

 220          KK     R59    ROUTE   REACH
 221          KM          R59; ROUTE CO57 TO CO61
 222          RS       3    STOR      -1
 223          RC   0.065   0.037   0.065    4500  0.0150    0.00
 224          RX     0.0    12.0    24.0    36.0    69.0    75.0    81.0    87.0
 225          RY     9.0     6.0     3.0     0.0     0.0     4.0     8.0    12.0

 226          KK      50   BASIN
 227          BA   0.235
 228          LG    0.25    0.35    4.25    0.46      21
 229          UI      44      44     129     200     284     320     383     520     351     281
 230          UI     251     222     202     182     148     128     114     101      92      75
 231          UI      61      55      50      45      33      35      28      21      22      21
 232          UI      19       8       9       8       9       8       8       9       8       9
 233          UI       8       0       0       0       0       0       0       0       0       0
 234          UI       0       0       0       0       0       0       0       0       0       0
1                                          HEC-1 INPUT                                                    PAGE  6

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

 235          KK    CO61
 236          KM        COMBINE S50 AND R59
 237          HC       2

 238          KK    DR61
 239          KM        ROUTE CO61 THRU (2) 12 FT. (SPAN) X 10 FT. X 84.5 FT. RCB'S UNDER
 240          KM        S.R.74 AND ASSOC. STORAGE AT RD.
 241          RS       1    STOR       0
 242          SV     0.0   0.045   0.294   1.041   2.521   4.826   8.212
 243          SQ     0.0   190.2   517.0   938.6  1437.8  2003.0  2629.5
 244          SE  1835.9  1838.0  1840.0  1842.0  1844.0  1846.0  1848.0

 245          KK      46   BASIN
 246          BA   1.629
 247          LG    0.25    0.35    4.35    0.43      21
 248          UI     126     130     126     127     144     365     404     505     578     719
 249          UI     803     835     901     974     990    1103    1262    1441    1578    1238
 250          UI     954     886     841     766     735     728     681     646     625     585
 251          UI     562     549     504     484     454     417     393     356     336     306
 252          UI     315     291     289     280     267     241     213     206     188     167
 253          UI     161       0       0       0       0       0       0       0       0       0
 254          UI       0       0       0       0       0       0       0       0       0       0
 255          UI       0       0       0       0       0       0       0       0       0       0
 256          UI       0       0       0       0       0       0       0       0       0       0
 257          UI       0       0       0       0       0       0       0       0       0       0
 258          UI       0       0       0       0       0       0       0       0       0       0
 259          UI       0       0       0       0       0       0       0       0       0       0

 260          KK      42   BASIN
 261          BA   0.632
 262          LG    0.25    0.35    4.45    0.40      21
 263          UI      78      80      78     206     292     395     477     544     595     640
 264          UI     829     925     682     570     475     461     431     387     367     345
 265          UI     306     283     261     219     198     192     179     167     156     128
 266          UI     114     103      99      85      87      80      60      61      60      57
 267          UI      39      39      38      39      39      38      20      15      14      16
 268          UI      15       0       0       0       0       0       0       0       0       0
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 269          UI      0      0      0      0      0      0      0      0      0      0
 270          UI      0      0      0      0      0      0      0      0      0      0

 271          KK    C047
 272          KM        COMBINE S46 AND S42
 273          HC       2

 274          KK     R49   ROUTE   REACH
 275          KM        R49; ROUTE C047 TO C063
 276          RS       4    STOR      -1
 277          RC   0.065   0.041   0.065    6200  0.0125    0.00
 278          RX     0.0    12.0    24.0    36.0    79.5    85.5    91.5    97.5
 279          RY     9.0     6.0     3.0     0.0     0.0     3.0     6.0     9.0
1                                          HEC-1 INPUT                                                          PAGE  7

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

 280          KK      48   BASIN
 281          BA   0.422
 282          LG    0.25    0.35    7.00    0.13      11
 283          UI      64      66     120     218     327     403     466     526     635     750
 284          UI     510     420     374     350     317     285     267     229     203     174
 285          UI     159     145     140     114     101      84      80      70      72      52
 286          UI      49      51      39      31      33      31      31      25      12      12
 287          UI      13      12      13      12      13      12      13      12      12      13
 288          UI       0       0       0       0       0       0       0       0       0       0
 289          UI       0       0       0       0       0       0       0       0       0       0

 290          KK    C063
 291          KM        COMBINE S48 AND R49.  THIS IS TRIBUTARY 'C' TO PADELFORD WASH AT S.R.74
 292          HC       2

 293          KK    DR63
 294          KM        ROUTE C063 THRU (3) 10 FT. (SPAN) X 10 FT. X 122.5 FT. LONG RCB'S
 295          KM        UNDER S.R.74 AND ASSOC. STORAGE AT RD.
 296          RS       1    STOR       0
 297          SV     0.0   0.027   0.355   1.210   3.189   6.826  12.377
 298          SQ     0.0   156.9   391.5   842.8  1403.6  2048.6  2773.1
 299          SE  1837.1  1838.0  1840.0  1842.0  1844.0  1846.0  1848.0

 300          KK    C065
 301          KM        COMBINE C061 AND C063
 302          HC       2

 303          KK    R123   ROUTE   REACH
 304          KM        R123; ROUTE C065 TO C0127
 305          RS       1    STOR      -1
 306          RC   0.065   0.040   0.065    1400  0.0150    0.00
 307          RX     0.0     6.0    26.0    46.0    78.0    84.0    90.0    96.0
 308          RY     9.0     5.0     3.0     0.0     0.0     2.0     4.0     6.0

 309          KK      64   BASIN
 310          BA   0.437
 311          LG    0.25    0.35    4.30    0.44      20
 312          UI      69      71     144     254     386     445     523     608     771     698
 313          UI     495     430     383     360     321     286     267     225     185     176
 314          UI     160     148     126     107      89      86      76      72      55      53
 315          UI      53      35      34      34      35      32      13      14      13      14
 316          UI      13      14      13      14      13      13      14      13       0       0
 317          UI       0       0       0       0       0       0       0       0       0       0

 318          KK    DR64
 319          KM        ROUTE S64 THRU (1) 10 FT. (SPAN) X 6 FT. X 118.5 FT. RCB AND
 320          KM        (1) 10 FT. (SPAN) X 6 FT. X 118.5 FT. RCB AND (1) 6 FT. (SPAN)
 321          KM        X 5 FT. X 122 FT. RCB. UNDER S.R.74 AND ASSOC. STORAGE AT THE RD.
 322          RS       1    STOR       0
 323          SV     0.0   0.065   0.384   0.853   1.621   3.088   5.495   9.367  15.915
 324          SQ     0.0   103.9   215.9   459.4   759.8  1064.2  1297.2  1489.7  1660.8
 325          SE  1830.8  1832.0  1834.0  1836.0  1838.0  1840.0  1842.0  1844.0  1846.0
1                                          HEC-1 INPUT                                                          PAGE  8

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

 326          KK    R121   ROUTE   REACH
 327          KM        R121; ROUTE S64 TO C0127
 328          RS       1    STOR      -1
 329          RC   0.065   0.040   0.065     700  0.0230    0.00
 330          RX     0.0    11.0    22.0    33.0    39.0    50.0    61.0    72.0
 331          RY     6.0     4.0     2.0     0.0     0.0     2.0     4.0     6.0

 332          KK   C0127
 333          KM        COMBINE R121 AND R123
 334          HC       2

 335          KK    R129   ROUTE   REACH
 336          KM        R129; ROUTE C0127 TO C0132
 337          RS       3    STOR      -1
 338          RC   0.065   0.038   0.065    5600  0.0120    0.00
 339          RX     0.0    10.0    50.0    56.0    97.0   111.0   116.5   123.5
 340          RY     6.0     3.0     3.0     0.0     0.0     3.5     5.0     7.0

 341          KK     132   BASIN
 342          BA   0.352
 343          LG    0.25    0.36    6.80    0.14       6
 344          UI      47      48      58     142     198     257     301     357     376     448
 345          UI     579     426     325     297     270     253     232     216     190     183
 346          UI     158     139     123     114     108     104      87      76      67      60
 347          UI      56      53      52      38      37      35      35      23      23      23
 348          UI      24      23      19      10       9       9       9       9       9       9
 349          UI       9       0       0       0       0       0       0       0       0       0
 350          UI       0       0       0       0       0       0       0       0       0       0

 351          KK   C0132
 352          KM        COMBINE S132 AND R129.   THIS IS TRIBUTARY 'C' JUST U/S OF PADELFORD
 353          KM        WASH
 354          HC       2

 355          KK   C0133
 356          KM        COMBINE C0132 AND R149. THIS IS PADELFORD WASH D/S OF TRIB. 'C' CONFLUEN
 357          HC       2

 358          KK    R137   ROUTE   REACH
 359          KM        R137; ROUTE C0133 TO C0125
 360          RS       2    STOR      -1
 361          RC   0.065   0.037   0.065    1920  0.0089    0.00
 362          RX     0.0     4.0    24.0    40.0   100.0   112.0   192.0   202.0
 363          RY     8.0     5.0     4.0     0.0     0.0     3.5     3.5     8.0

 364          KK      10   BASIN
 365          BA   1.291
 366          LG    0.25    0.35    4.55    0.38      20
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 367          UI     143     148     144     290     475     599     779     921    1000    1071
 368          UI    1236    1392    1737    1491    1071     944     880     818     766     737
 369          UI     674     624     605     538     480     455     384     359     354     330
 370          UI     304     295     236     231     189     183     173     162     157     146
 371          UI     113     110     110     113      80      70      73      70      70      73
 372          UI      70       0       0       0       0       0       0       0       0       0
1                                          HEC-1 INPUT                                          PAGE  9

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

 373          UI       0       0       0       0       0       0       0       0       0       0
 374          UI       0       0       0       0       0       0       0       0       0       0
 375          UI       0       0       0       0       0       0       0       0       0       0

 376          KK     R11   ROUTE   REACH
 377          KM         R11; ROUTE S10 TO CO17
 378          RS       2    STOR      -1
 379          RC   0.065   0.040   0.065    4600  0.0170    0.00
 380          RX     0.0     6.0    12.0    18.0    38.0    43.0    49.0    55.0
 381          RY     7.0     5.0     3.0     0.0     0.0     3.0     5.0     7.0

 382          KK      16   BASIN
 383          BA   0.653
 384          LG    0.25    0.40    6.00    0.20      15
 385          UI      99     103     186     337     505     624     720     814     982    1161
 386          UI     790     651     577     542     491     440     414     354     315     268
 387          UI     246     226     217     175     156     131     123     108     112      80
 388          UI      76      79      60      49      50      49      48      38      19      19
 389          UI      20      19      19      19      19      19      20      19      19      19
 390          UI       0       0       0       0       0       0       0       0       0       0
 391          UI       0       0       0       0       0       0       0       0       0       0

 392          KK    CO17
 393          KM         COMBINE R11 AND S16
 394          HC       2

 395          KK     R19   ROUTE   REACH
 396          KM         R19; ROUTE CO17 TO CO25
 397          RS       3    STOR      -1
 398          RC   0.065   0.040   0.065    6200  0.0190    0.00
 399          RX     0.0     6.0    12.0    18.0    43.0    48.0    54.0    60.0
 400          RY     7.0     5.0     3.0     0.0     0.0     3.0     5.0     7.0

 401          KK      20   BASIN
 402          BA   1.499
 403          LG    0.25    0.35    4.35    0.43      21
 404          UI     172     178     173     385     593     748     989    1132    1241    1315
 405          UI    1569    1836    2069    1491    1200    1068    1050     950     869     851
 406          UI     770     702     685     600     532     477     436     415     403     365
 407          UI     343     295     269     221     227     199     188     193     156     132
 408          UI     137     132     122      87      84      84      87      85      84      65
 409          UI      33       0       0       0       0       0       0       0       0       0
 410          UI       0       0       0       0       0       0       0       0       0       0
 411          UI       0       0       0       0       0       0       0       0       0       0

 412          KK      24   BASIN
 413          BA   0.853
 414          LG    0.25    0.35    4.50    0.39      20
 415          UI      98     101      98     220     337     426     563     644     706     748
 416          UI     893    1045    1177     849     682     609     597     540     494     486
 417          UI     437     399     391     341     303     271     248     236     229     208
 418          UI     196     167     154     126     128     114     107     110      88      75
 419          UI      78      75      69      50      48      48      50      48      48      37
 420          UI      19       0       0       0       0       0       0       0       0       0
 421          UI       0       0       0       0       0       0       0       0       0       0
1                                          HEC-1 INPUT                                          PAGE 10

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

 422          UI       0       0       0       0       0       0       0       0       0       0

 423          KK    CO25
 424          KM         COMBINE S24, S20, AND R19
 425          HC       3

 426          KK     R27   ROUTE   REACH
 427          KM         R27; ROUTE CO25 TO CO31
 428          RS       6    STOR      -1
 429          RC   0.065   0.037   0.065   11200  0.0160    0.00
 430          RX     0.0    14.0    28.0    38.0    70.5    79.5    93.5   107.5
 431          RY     7.5     5.5     3.5     0.0     0.0     4.0     6.0     8.0

 432          KK      30   BASIN
 433          BA   0.396
 434          LG    0.25    0.32    7.60    0.10       7
 435          UI      39      40      39      45     114     138     171     225     240     270
 436          UI     294     311     350     428     474     358     297     261     234     232
 437          UI     218     200     191     182     164     163     149     133     126     110
 438          UI     103      98      91      89      86      82      63      65      56      49
 439          UI      51      46      43      44      42      31      31      29      30      31
 440          UI      20       0       0       0       0       0       0       0       0       0
 441          UI       0       0       0       0       0       0       0       0       0       0
 442          UI       0       0       0       0       0       0       0       0       0       0
 443          UI       0       0       0       0       0       0       0       0       0       0

 444          KK    CO31
 445          KM         COMBINE S30 AND R27. THIS IS TRIBUTARY 'B' AT S.R.74.
 446          HC       2

 447          KK    DR31
 448          KM         ROUTE CO31 THRU (4) 10 FT. (SPAN) X 10 FT. X 102.5 FT. RCB'S UNDER
 449          KM         S.R.74 AND ASSOC. STORAGE AT RD.
 450          RS       1    STOR       0
 451          SV     0.0   0.150   0.719   2.099   4.504   7.849  12.219  14.863
 452          SQ     0.0   435.5   934.9  1642.9  2470.1  3411.8  4441.5  4994.4
 453          SE  1857.7  1860.0  1862.0  1864.0  1866.0  1868.0  1870.0  1971.0

 454          KK    R113   ROUTE   REACH
 455          KM         R113; ROUTE CO31 TO CO115
 456          RS       1    STOR      -1
 457          RC   0.065   0.040   0.065    3300  0.0150    0.00
 458          RX     0.0     7.0    14.0    19.0    53.0    59.0    65.0    71.0
 459          RY     9.0     7.0     5.0     0.0     0.0     4.0     8.0    12.0

 460          KK      32   BASIN
 461          BA   0.081
 462          LG    0.25    0.30    8.00    0.09       7
 463          UI      17      23      56      92     122     138     190     146     109      94
 464          UI      84      75      63      54      43      39      37      27      22      21
 465          UI      18      14      13      11       9       8       9       5       3       4
 466          UI       3       3       3       3       4       3       0       0       0       0
 467          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

 468          KK    DR32
 469          KM          ROUTE S32 THRU (1) 6 FT. X 5 FT X 110.5 FT. RCB UNDER S.R.74 AND
 470          KM          ASSOC. STORAGE AT RD.
 471          RS       1    STOR       0
 472          SV     0.0    0.105    0.147    0.218    0.346    0.673    1.555    3.049
 473          SQ     0.0     36.4    100.5    200.0    314.2    398.4    466.9    498.2
 474          SE  1856.5   1858.0   1860.0   1862.0   1864.0   1866.0   1868.0   1869.0

 475          KK    R111   ROUTE   REACH
 476          KM         ** R111; ROUTE S32 TO CO115
 477          RS       3    STOR      -1
 478          RC   0.065    0.040    0.065     3100   0.0170     0.00
 479          RX     0.0      7.0     14.0     21.0     26.0     33.0     40.0     47.0
 480          RY     6.0      4.0      2.0      0.0      0.0      2.0      4.0      6.0

 481          KK   CO115
 482          KM        COMBINE S32 AND R113
 483          HC       2

 484          KK    R117   ROUTE   REACH
 485          KM         *** R117; ROUTE CO115 TO CO119
 486          RS       1    STOR      -1
 487          RC   0.065    0.040    0.065     1000   0.0150     0.00
 488          RX     0.0      7.0     14.0     19.0     53.0     59.0     65.0     71.0
 489          RY     9.0      7.0      5.0      0.0      0.0      4.0      8.0     12.0

 490          KK      34   BASIN
 491          KM          ***  SUBAREA 34. ALSO. TRIBUTARY 'A' TO PADELFORD WASH AT S.R. 74.
 492          BA   1.125
 493          LG    0.25     0.25     9.70     0.05        2
 494          UI      83       86       83       83       86      211      239      329      366      438
 495          UI     505      524      579      630      629      667      778      844      961     1053
 496          UI     762      645      594      538      514      507      470      445      444      415
 497          UI     394      388      359      336      335      311      287      272      254      221
 498          UI     226      202      202      198      191      180      180      164      137      141
 499          UI     132        0        0        0        0        0        0        0        0        0
 500          UI       0        0        0        0        0        0        0        0        0        0
 501          UI       0        0        0        0        0        0        0        0        0        0
 502          UI       0        0        0        0        0        0        0        0        0        0
 503          UI       0        0        0        0        0        0        0        0        0        0
 504          UI       0        0        0        0        0        0        0        0        0        0
 505          UI       0        0        0        0        0        0        0        0        0        0

 506          KK    DR34
 507          KM        ROUTE S34 THRU (3) 10 FT. X 8 FT. X 70 FT. LONG RCB'S UNDER S.R.74.
 508          KM        AND ASSOC. STORAGE AT RD.
 509          RS       1    STOR       0
 510          SV     0.0    0.054    0.425    1.622    4.256
 511          SQ     0.0     52.1    412.9    877.9   1443.8
 512          SE  1872.9   1874.0   1876.0   1878.0   1880.0
1                                          HEC-1 INPUT                                          PAGE 12

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

 513          KK    R107   ROUTE   REACH
 514          KM         *** R107; ROUTE S34 TO CO105
 515          RS       1    STOR      -1
 516          RC   0.065    0.040    0.065     1700   0.0160     0.00
 517          RX     0.0      6.0     12.0     18.0     45.0     49.0     81.0     85.0
 518          RY    12.0      8.0      4.0      0.0      0.0      2.0      3.0      5.0

 519          KK      38   BASIN
 520          BA   0.102
 521          LG    0.25     0.22    10.10     0.04        0
 522          UI      28       67      142      204      280      266      178      151      126      103
 523          UI      82       67       57       43       34       30       23       19       14       14
 524          UI      10        5        6        5        6        6        5        0        0        0
 525          UI       0        0        0        0        0        0        0        0        0        0

 526          KK    DR38
 527          KM        ROUTE S38 THRU (1) 6 FT. X 5 FT. X 127 FT. RCB UNDER S.R. 74
 528          KM        AND ASSOC. STORAGE AT RD.
 529          RS       1    STOR       0
 530          SV     0.0    0.09     0.319    0.733    1.502    2.768    4.887
 531          SQ     0.0    45.1     114.4    214.8    327.5    445.4    477.2
 532          SE  1874.2   1876.0   1878.0   1880.0   1882.0   1884.0   1886.0

 533          KK    R103   ROUTE   REACH
 534          KM         *** R103; ROUTE S38 TO CO105
 535          RS       2    STOR      -1
 536          RC   0.065    0.040    0.065     2560   0.0180     0.00
 537          RX     0.0     12.0     24.0     36.0     40.0     52.0     64.0     76.0
 538          RY     6.0      4.0      2.0      0.0      0.0      2.0      4.0      6.0

 539          KK   CO105
 540          KM        COMBINE R103 AND R107
 541          HC       2

 542          KK    R109   ROUTE   REACH
 543          KM         **** R109; ROUTE CO105 TO CO119
 544          RS       2    STOR      -1
 545          RC   0.065    0.040    0.065     3200   0.0160     0.00
 546          RX     0.0      6.0     12.0     18.0     45.0     49.0     81.0     85.0
 547          RY    12.0      8.0      4.0      0.0      0.0      2.0      3.0      5.0

 548          KK     102   BASIN
 549          BA   0.133
 550          LG    0.25     0.22    10.10     0.04        0
 551          UI      21       21       44       77      118      136      158      186      234      213
 552          UI     151      130      117      109       98       87       81       69       56       54
 553          UI      48       46       38       32       28       26       23       21       17       17
 554          UI      16       11       10       10       11        9        4        5        4        4
 555          UI       4        4        4        4        5        4        4        4        0        0
 556          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

 557          KK     112   BASIN
 558          BA   0.217
 559          LG    0.25     0.29     8.40     0.08        0
 560          UI      51       94      210      317      408      537      484      327      284      243
 561          UI     214      177      133      127      104       83       68       57       49       41
 562          UI      34       25       26       25       10       10       10       10       10       10
 563          UI      10       10        0        0        0        0        0        0        0        0
 564          UI       0        0        0        0        0        0        0        0        0        0
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565          KK   CO119
566          KM        COMBINE S102, S112, R109, AND R117
567          HC       4

568          KK    R118   ROUTE   REACH
569          KM         *** R118; ROUTE CO119 TO CO125
570          RS       3    STOR     -1
571          RC   0.065   0.037   0.065    5400  0.0110    0.00
572          RX     0.0     6.0    12.0    18.0    58.0    68.0   108.0   116.0
573          RY     9.0     6.0     3.0     0.0     0.0     3.0     4.0     8.0

574          KK     122   BASIN
575          BA   0.493
576          LG    0.25    0.32    7.60    0.10       2
577          UI      86      89     227     362     537     608     700     954     884     612
578          UI     536     472     423     393     341     293     253     215     199     193
579          UI     145     125     114      98      96      73      67      66      44      43
580          UI      42      43      30      16      17      17      16      17      17      16
581          UI      17      17      16       0       0       0       0       0       0       0
582          UI       0       0       0       0       0       0       0       0       0       0

583          KK   CO124
584          KM        COMBINE S122 AND R118. THIS IS TRIB. 'C' JUST UPSTREAM OF PADELFORD
585          KM        WASH
586          HC       2

587          KK   CO125
588          KM        COMBINE CO124 AND R137. THIS IS PADELFORD WASH JUST DOWNSTREAM OF
589          KM        TRIB. 'A' CONFLUENCE.
590          HC       2

591          KK     106   BASIN
592          BA   0.452
593          LG    0.25    0.27    8.80    0.07       0
594          UI      41      42      40      41     100     129     160     203     241     261
595          UI     291     302     321     371     419     503     447     314     282     270
596          UI     246     233     226     211     198     193     178     167     164     145
597          UI     134     131     107     104     103      95      93      91      86      70
598          UI      69      63      52      54      52      46      46      45      45      32
599          UI      31       0       0       0       0       0       0       0       0       0
600          UI       0       0       0       0       0       0       0       0       0       0
601          UI       0       0       0       0       0       0       0       0       0       0
602          UI       0       0       0       0       0       0       0       0       0       0
603          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

604          KK      36   BASIN
605          BA   0.135
606          LG    0.25    0.25    9.70    0.05       0
607          UI      25      25      75     114     163     185     219     299     202     161
608          UI     144     128     116     104      86      73      65      59      52      43
609          UI      36      32      28      26      19      20      16      12      12      12
610          UI      11       5       5       5       5       5       4       5       5       5
611          UI       5       0       0       0       0       0       0       0       0       0
612          UI       0       0       0       0       0       0       0       0       0       0

613          KK    DR36
614          KM        ROUTE S36 THRU (1) 6 FT. (SPAN) X 7 FT. X 110 FT. LONG RCB UNDER
615          KM        S.R.74 AND ASSOC. STORAGE AT RD.
616          RS       1    STOR      0
617          SV     0.0   0.051   0.293   0.890   2.040
618          SQ     0.0    43.0   133.0   246.0   373.0
619          SE  1900.2  1902.0  1904.0  1906.0  1908.0

620          KK    R101   ROUTE   REACH
621          KM         *** R101; ROUTE S36 TO R101A
622          KM         *** S36 OCCURS AT ADOT STA.620+35 (6'X7' RCB) ON S.R.74
623          KM         *** END OF R101 IS AT S. EDGE SEC.36,T6N,R2W AND BEGINNING
624          KM         *** OF R101A
625          RS      12    STOR     -1
626          RC   0.065   0.042   0.065    8460  0.0130    0.00
627          RX     0.0     8.0    15.0    17.0    28.0    30.0    38.0    68.0
628          RY     4.0     2.0     1.0     0.0     0.0     1.0     2.0     4.0

629          KK   R101A   ROUTE   REACH
630          KM         *** R101A; ROUTE R101 TO CO191
631          KM  M      *** THIS ROUTE STEP COMPLETES ROUTING OF S36 TO CO191
632          RS       7    STOR     -1
633          RC   0.065   0.040   0.065    4300  0.0130    0.00
634          RX     0.0     2.0     4.0    16.0    33.0    40.0    64.0    80.0
635          RY     6.0     5.0     4.0     0.0     0.0     1.0     1.5     8.0

636          KK   CO191
637          KM        COMBINE S106, R101A, AND CO125
638          HC       3

639          KK    R193   ROUTE   REACH
640          KM         *** R193; ROUTE CO191 TO CO195
641          RS       2    STOR     -1
642          RC   0.065   0.037   0.065    2500  0.0100    0.00
643          RX     0.0    40.0   153.0   331.0   405.0   445.0   485.0   525.0
644          RY     5.5     3.0     2.0     0.0     0.0     2.0     3.0     5.5

645          KK     192   BASIN
646          BA   0.525
647          LG    0.25    0.37    5.20    0.27       9
648          UI     116     179     433     672     887    1047    1283     849     693     600
649          UI     545     457     379     305     272     244     196     149     133     126
650          UI      89      89      65      57      58      46      22      23      23      22
651          UI      22      23      23      22       0       0       0       0       0       0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

652          UI       0       0       0       0       0       0       0       0       0       0

653          KK   CO195
654          KM        COMBINE S192 AND R193
655          HC       2

656          KK    R197   ROUTE   REACH
657          KM         *** R197; ROUTE CO195 TO CO199
658          RS       7    STOR     -1
659          RC   0.065   0.037   0.065    4700  0.0110    0.00
660          RX     0.0   148.0   297.0   365.0   482.0   550.0   699.0   847.0
661          RY     5.5     3.0     2.0     0.0     0.0     2.0     3.0     5.5

662          KK     198   BASIN
663          BA   0.416
664          LG    0.25    0.35    3.92    0.53      12
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 665          UI      58      59      84     181     254     341     386     449     479     608
 666          UI     689     439     376     349     317     289     280     245     225     201
 667          UI     172     153     143     133     122     110      95      76      76      66
 668          UI      63      61      45      45      45      35      28      30      28      28
 669          UI      29      12      11      11      11      11      12      11      11      11
 670          UI      11       0       0       0       0       0       0       0       0       0
 671          UI       0       0       0       0       0       0       0       0       0       0

 672          KK   CO199
 673          KM        COMBINE S198 AND R197
 674          HC       2

 675          KK  SPLIT3
 676          KM        DIVERT AS 'MAIN3' THE FLOW TO PADELFORD WASH AND AS 'SPLIT3' THE
 677          KM        FLOW TO SPLIT3. FLOW SPLIT BASED ON A RATING CURVE OF ENERGY GRADE
 678          KM        VERSUS DISCHARGE FROM HEC-RAS MODEL ANALYSIS AT SEC. 32.443 OF
 679          KM        SPLIT3 AND SEC. 3.584 OF MAIN PADELFORD WASH.
 680          DT   MAIN3
 681          DI     0.0   164.0   380.0   597.0   952.0  1475.0  2215.0  3195.0  4384.0  5958.0
 682          DI   8608. 11401.0 14118.0
 683          DQ     0.0    34.0   167.0   300.0   431.0   669.0  1031.0  1568.0  2310.0  3318.0
 684          DQ  5233.0  7455.0  9318.0

 685          KK    R301   ROUTE   REACH
 686          KM         *** R301 ; ROUTE SPLIT3 TO CO215
 687          RS      10    STOR      -1
 688          RC   0.065   0.037   0.065    8920  0.0110    0.00
 689          RX     0.0    80.0   160.0   195.0   255.0   290.0   370.0   450.0
 690          RY     4.5     3.0     2.0     0.0     0.0     2.0     3.0     4.5

 691          KK     216   BASIN
 692          BA   0.198
 693          LG    0.25    0.35    3.85    0.56       0
 694          UI      28      28      40      86     121     162     184     213     228     290
 695          UI     328     209     179     166     151     137     133     117     107      96
 696          UI      82      72      69      63      58      52      46      36      36      32
 697          UI      30      28      22      21      22      16      14      14      13      14
 698          UI      14       5       5       6       5       5       6       5       5       5
 699          UI       6       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

 700          UI       0       0       0       0       0       0       0       0       0       0

 701          KK   CO215
 702          KM        COMBINE S216 AND R301 NEAR WHITE WING RD.
 703          HC       2

 704          KK   SPLT3
 705          KM        DIVERT AS 'SPLT3' FLOW TO SPLIT3 WASH AND AS 'SPLIT4'FLOW TO SPLIT4 WASH
 706          KM        FLOW SPLIT BASED ON RATING CURVE ANALYSIS BY HEC-RAS MODEL AT SEC. 30.71
 707          KM        OF SPLIT3 WASH AND SEC. 30.841 OF SPLIT4 WASH.
 708          DT  SPLIT4
 709          DI     0.0   448.0   780.0  1283.0  1892.0  2764.0  4240.0  5844.0
 710          DQ     0.0     0.0    51.0   131.0   212.0   380.0   663.0   931.0

 711          KK    R323   ROUTE   REACH
 712          KM         R323; ROUTE 'SPLIT3' TO CO219.
 713          RS       6    STOR      -1
 714          RC   0.065   0.037   0.065    3800  0.0110    0.00
 715          RX     0.0    40.0   160.0   188.0   228.0   256.0   376.0   416.0
 716          RY     4.2     3.0     2.0     0.0     0.0     2.0     3.0     4.2

 717          KK     218   BASIN
 718          BA   0.174
 719          LG    0.25    0.35    4.10    0.49       0
 720          UI      29      29      69     114     169     196     225     276     346     231
 721          UI     191     165     154     143     124     111      98      80      72      69
 722          UI      60      51      46      36      34      33      27      23      22      18
 723          UI      14      15      14      14       8       5       6       6       5       6
 724          UI       6       5       6       6       5       6       0       0       0       0
 725          UI       0       0       0       0       0       0       0       0       0       0

 726          KK   CO219
 727          KM        COMBINE 'SPLT3' FLOW AT CAP CANAL, S218 AND R323.
 728          HC       2

 729          KK  SPLIT4
 730          KM        RETRIEVE 'SPLIT4' FLOW FROM NEAR WHITE WING RD.
 731          DR  SPLIT4

 732          KK    R321   ROUTE   REACH
 733          KM         R321; ROUTE'SPLIT4' TO CO217.
 734          RS       5    STOR      -1
 735          RC   0.065   0.037   0.065    3400  0.0100    0.00
 736          RX     0.0    57.0   115.0   160.0   190.0   235.0   293.0   350.0
 737          RY     4.0     3.0     2.0     0.0     0.0     2.0     3.0     4.0

 738          KK     214   BASIN
 739          BA   0.201
 740          LG    0.25    0.35    4.00    0.51       0
 741          UI      29      30      49      95     139     175     203     230     269     338
 742          UI     283     205     176     173     148     141     130     114     105      90
 743          UI      78      71      68      61      53      50      37      38      33      32
 744          UI      27      23      22      22      15      14      14      15      14       9
 745          UI       5       6       5       6       6       5       6       5       6       6
 746          UI       5       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

 747          UI       0       0       0       0       0       0       0       0       0       0

 748          KK   CO217
 749          KM        COMBINE S214 AND R321 AT CAP CANAL FOR 'SPLIT4' WASH AT CAP CANAL.
 750          HC       2

 751          KK   CO400
 752          KM        COMBINE 'SPLIT3' AND 'SPLIT4' WASHES AT CAP CANAL.
 753          HC       2      23

 754          KK   DR400
 755          KM        ROUTE CO400 THRU THE (1) CAP CANAL OVERCHUTE STRUCTURE AND ASSOC.
 756          KM        STORAGE TO WEST OF 163RD. AVE .
 757          KM        OVERFLOW TO EAST ACROSS THE 163RD AVE. WAS MODELED, STARTING AT EL.1553
 758          KM        IN THE FOLLOWING DIVERT ROUTINE.
 759          KM        NO OVERFLOW TO WEST WAS ASSUMED AT THIS TIME, ALTHOUGH POTENTIAL EXISTS
 760          KM        AT EL. 1549.0
 761          RS       1    STOR       0
 762          SV     0.0     0.10     1.7   10.87   20.82   35.22   78.92  108.77  144.27   223.4
 763          SV   244.0   250.0
 764          SQ     0.0     51.1   130.6   227.5   276.7   314.4   373.1   399.0   623.5  2618.5
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765          SQ  3529.1  5500.0
766          SE  1541.1  1544.0  1546.0  1548.0  1549.0  1550.0  1552.0  1553.0  1554.0  1556.0
767          SE  1556.5  1557.0

768          KK   DV400
769          KM        DIVERT AS"DV400" FLOW REMAINING ON WEST SIDE OF 163RD AVE. AND AS
770          KM        "DV501" , FLOW WEIRING TO EAST OVER 163RD AVE.
771          DT   DV501
772          DI     0.0    51.1   130.6   227.5   276.7   314.4   373.1   399.0   623.5  2618.5
773          DI  3529.1  5500.0
774          DQ     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   200.0  2150.0
775          DQ  3050.0  4050.0

776          KK   MAIN3
777          KM        RETRIEVE'MAIN3' FLOW
778          DR   MAIN3

779          KK  SPLIT2
780          KM        DIVERT AS 'MAIN2' THE FLOW TO MAIN PADELFORD WASH AND AS 'SPLIT2'
781          KM        THE FLOW TO SPLIT2 WASH.
782          KM        THE FLOW SPLIT IS BASED ON A RATING CURVE ANALYSIS BY HEC-RAS MODEL
783          KM        OF ENERGY GRADE EL. VERSUS DISCHARGE AT MAIN SEC.3.300 AND
784          KM        SPLIT2 WASH SEC. 22.114
785          DT   MAIN2
786          DI     0.0   261.0   380.0   668.0  1015.0  1464.0  2108.0  2884.0  3789.0  4803.0
787          DI  5926.0  7158.0  8365.0  9380.0
788          DQ     0.0   261.0   348.0   570.0   850.0  1233.0  1718.0  2253.0  2825.0  3450.0
789          DQ  4130.0  4887.0  5572.0  6028.0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

790          KK    R318   ROUTE   REACH
791          KM        *** R318; ROUTE SPLIT2 TO CO410
792          RS      15    STOR      -1
793          RC   0.065   0.037   0.065   11200  0.0110    0.00
794          RX     0.0    60.0   180.0   255.0   295.0   370.0   490.0   550.0
795          RY     3.5     3.0     2.0     0.0     0.0     2.0     3.0     3.5

796          KK     220   BASIN
797          BA   0.242
798          LG    0.25    0.35    4.00    0.51       0
799          UI      21      22      21      22      47      64      82     100     125     132
800          UI     147     154     166     186     204     241     267     184     158     142
801          UI     131     126     123     113     108     103      99      88      88      82
802          UI      75      71      65      56      55      52      49      51      45      45
803          UI      39      35      35      27      27      27      26      23      23      24
804          UI      19       0       0       0       0       0       0       0       0       0
805          UI       0       0       0       0       0       0       0       0       0       0
806          UI       0       0       0       0       0       0       0       0       0       0
807          UI       0       0       0       0       0       0       0       0       0       0
808          UI       0       0       0       0       0       0       0       0       0       0

809          KK   CO410
810          KM        COMBINE R318 AND S220 AS SPLIT2 AT CAP CANAL
811          HC        2

812          KK   MAIN2
813          KM        RETRIEVE 'MAIN2' FLOW
814          DR   MAIN2

815          KK  SPLIT1
816          KM        DIVERT AS 'MAIN1' THE FLOW TO MAIN PADELFORD WASH AND AS 'SPLIT1'
817          KM        THE FLOW TO SPLIT1 WASH.
818          KM        FLOW SPLIT BASED ON RATING CURVE ANALYSIS BY HEC-RAS MODEL OF ENERGY
819          KM        GRADE VERSUS DISCHARGE AT SEC. 3.108 (MAIN) AND SEC. 12.019 (SPLIT1).
820          DT   MAIN1
821          DI     0.0   134.0   320.0   639.0  1031.0  1570.0  2329.0  3345.0  4905.0  6445.0
822          DQ     0.0     0.0    55.0   113.0   171.0   300.0   516.0   826.0  1280.0  1695.0

823          KK    R316   ROUTE   REACH
824          KM        *** R316; ROUTE SPLIT1 TO CO208
825          RS       7    STOR      -1
826          RC   0.065   0.037   0.065    4520  0.0110    0.00
827          RX     0.0   125.0   159.0   175.0   204.0   221.0   256.0   381.0
828          RY     5.3     3.0     2.0     0.0     0.0     2.0     3.0     5.3

829          KK     212   BASIN
830          BA   0.218
831          LG    0.25    0.35    4.00    0.51       4
832          UI      34      35      73     126     193     222     261     303     385     348
833          UI     247     214     192     179     160     143     133     112      93      87
834          UI      80      74      63      53      45      43      37      36      28      26
835          UI      27      17      17      17      18      16       6       7       7       6
836          UI       7       7       6       7       7       6       7       7       0       0
837          UI       0       0       0       0       0       0       0       0       0       0
1                                          HEC-1 INPUT                                          PAGE 19

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

838          KK   CO208
839          KM        COMBINE S212 AND R316
840          HC        2

841          KK   SPLT1
842          KM        DIVERT AS "SPLT1" FLOW CONTINUING ALONG SPLIT1 WASH AND DIVERT
843          KM        AS "MN1" FLOW WEIRING OVER BANK NEAR SPLIT1 SEC.11.523 AND RETURNING
844          KM        TO PADELFORD WASH "MAIN1" WASH AT CO207.
845          KM        THE SPLIT FLOW RELASHIONSHIP IS BASED ON DISCHARGE VS. Q AT SEC. 11.523,
846          KM        AND WEIR FLOW FROM NORMAL DEPTH RECTANGULAR CHANN. WITH BOTT. WIDTH
847          KM        OF 800 FT. N=0.055, S=0.02 FT./FT.
848          DT    MN1
849          DI     0.0   250.0   500.0   750.0  1000.0  1250.0  1500.0  1750.0  2021.0  2477.0
850          DI  3163.0  3947.0  4725.0  5533.0  6450.0  8115.0  9279.0
851          DQ     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    21.0   227.0
852          DQ   663.0  1197.0  1725.0  2283.0  2950.0  4365.0  5279.0

853          KK     210   BASIN
854          BA   0.637
855          LG    0.25    0.36    5.10    0.29       6
856          UI      82      83      82     239     333     429     512     592     629     719
857          UI     925     925     616     539     491     450     432     398     360     338
858          UI     301     268     240     207     198     195     172     155     140     116
859          UI     104     103      89      89      77      63      63      64      48      40
860          UI      41      40      40      41      27      15      16      16      15      17
861          UI      15       0       0       0       0       0       0       0       0       0
862          UI       0       0       0       0       0       0       0       0       0       0
863          UI       0       0       0       0       0       0       0       0       0       0

864          KK   CO209
865          KM        COMBINE S210, AND CO208
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866          HC       2

867          KK   SPLT1
868          KM        DIVERT AS "SPLT1" , FLOW TO SPLIT1 WASH AND AS "SPLIT5" TO SPLIT5
869          KM        WASH. FLOW SPLITS WERE DERIVED BY DETAIL HEC-RAS MODEL ANALYSIS
870          KM        TO DEVELOP FLOW SPLIT BASED ON E.G. ELEV. VS Q'S AT SEC. 11.093
871          KM        OF SPLIT1 AND SEC. 51.088 OF SPLIT5.
872          DT  SPLIT5
873          DI     0.0   383.0   685.0  1100.0  1712.0  2853.0  4288.0  6240.0
874          DQ     0.0   147.0   263.0   379.0   495.0  1000.0  1694.0  2548.0

875          KK    R211   ROUTE   REACH
876          KM        *** R211; ROUTE SPLT1  TO CO430
877          RS       9    STOR      -1
878          RC   0.065   0.037   0.065    6480  0.0100    0.00
879          RX     0.0    81.0   162.0   184.5   204.5   227.0   308.0   389.0
880          RY     4.8     3.0     2.0     0.0     0.0     2.0     3.0     4.8
1                                          HEC-1 INPUT                                                    PAGE 20

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

881          KK     226   BASIN
882          BA   0.239
883          LG    0.25    0.35    4.10    0.49       0
884          UI      28      28      28      61      95     119     157     181     197     210
885          UI     251     292     330     238     191     170     168     151     139     135
886          UI     123     112     110      95      85      76      69      67      64      58
887          UI      55      47      43      35      36      32      30      30      25      21
888          UI      22      21      20      14      13      13      14      14      13      10
889          UI       6       0       0       0       0       0       0       0       0       0
890          UI       0       0       0       0       0       0       0       0       0       0
891          UI       0       0       0       0       0       0       0       0       0       0

892          KK   CO430
893          KM        COMBINE R211 AND S226
894          HC       2

895          KK     230   BASIN
896          BA   0.364
897          LG    0.25    0.37    5.30    0.26      12
898          UI      72      81     229     361     478     551     695     793     503     427
899          UI     385     348     292     267     212     182     169     151     121     100
900          UI      87      78      69      54      55      38      35      35      36      15
901          UI      14      14      13      14      14      14      13      15      13       0
902          UI       0       0       0       0       0       0       0       0       0       0
903          UI       0       0       0       0       0       0       0       0       0       0

904          KK    R231   ROUTE   REACH
905          KM        *** R231; ROUTE S230 TO CO235
906          RS       6    STOR      -1
907          RC   0.065   0.040   0.065    4800  0.0130    0.00
908          RX     0.0     4.0    40.0    44.0    52.0    56.0    91.0    96.0
909          RY     5.0     4.0     2.0     0.0     0.0     2.0     4.0     5.0

910          KK     240   BASIN
911          BA   0.842
912          LG    0.25    0.36    5.00    0.30      10
913          UI     108     110     108     316     440     567     676     785     829     951
914          UI    1223    1222     816     713     649     594     571     526     476     446
915          UI     398     354     317     275     261     258     227     205     185     153
916          UI     138     136     118     118     102      82      83      85      63      53
917          UI      54      53      53      54      35      21      21      21      21      21
918          UI      21       0       0       0       0       0       0       0       0       0
919          UI       0       0       0       0       0       0       0       0       0       0
920          UI       0       0       0       0       0       0       0       0       0       0

921          KK     232   BASIN
922          BA   0.257
923          LG    0.25    0.36    6.80    0.14       0
924          UI      57      88     212     329     434     512     628     416     339     294
925          UI     266     224     186     149     133     120      95      73      65      62
926          UI      44      43      32      28      28      23      11      11      11      11
927          UI      11      11      11      11       0       0       0       0       0       0
928          UI       0       0       0       0       0       0       0       0       0       0
1                                          HEC-1 INPUT                                                    PAGE 21

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

929          KK   CO235
930          KM        COMBINE S240, S230, AND R231
931          HC       3

932          KK    R237   ROUTE   REACH
933          KM        *** R237; ROUTE CO235 TO CO247
934          RS       3    STOR      -1
935          RC   0.065   0.040   0.065    3760  0.0081    0.00
936          RX     0.0     2.0    22.0    72.0   112.0   142.0   162.0   167.0
937          RY    16.0    16.0    10.0     0.0     0.0    14.0    15.0    16.0

938          KK     244   BASIN
939          BA   0.185
940          LG    0.25    0.35    4.20    0.47       4
941          UI      57     151     317     424     627     399     317     265     219     161
942          UI     136     110      81      68      53      43      32      27      25      11
943          UI      11      11      11      11      10       0       0       0       0       0
944          UI       0       0       0       0       0       0       0       0       0       0

945          KK   CO247
946          KM        COMBINE S244 AND R237
947          HC       2

948          KK     238   BASIN
949          BA   0.360
950          LG    0.25    0.35    4.15    0.48       0
951          UI      46      47      46     136     188     242     290     335     355     406
952          UI     522     524     348     305     277     254     244     225     204     190
953          UI     171     151     136     117     111     111      97      88      79      65
954          UI      59      58      51      50      43      36      36      36      27      22
955          UI      24      22      23      23      15       9       9       9       9       9
956          UI       9       0       0       0       0       0       0       0       0       0
957          UI       0       0       0       0       0       0       0       0       0       0
958          UI       0       0       0       0       0       0       0       0       0       0

959          KK  SPLIT5
960          KM        RETRIEVE SPLIT5 FLOW
961          DR  SPLIT5

962          KK    R251
963          KM        ROUTE SPLIT5 FLOW ALONG WASH TO CAP CANAL TO CO255
964          RS       5    FLOW      -1
965          RC   0.065   0.037   0.065  5475.0   0.011
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 966          RX     0.0    50.0   250.0   290.0   300.0   340.0   540.0   590.0
 967          RY      10       6       5       0       0       5       6      10

 968          KK   CO255
 969          KM        COMBINE R251 AND S238 AT CAP CANAL AS COMBINED SPLIT5 WASH FLOW
 970          HC       2
1                                          HEC-1 INPUT                                                    PAGE 22

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

 971          KK   MAIN1
 972          KM        RETRIEVE 'MAIN1'FLOW.
 973          DR   MAIN1

 974          KK    R203   ROUTE   REACH
 975          KM         *** R203; ROUTE MAIN1 TO R205
 976          RS      10    STOR      -1
 977          RC   0.065   0.037   0.065    5600  0.0110    0.00
 978          RX     0.0   125.0   250.0   269.0   291.0   311.0   436.0   561.0
 979          RY     4.5     3.0     2.0     0.0     0.0     2.0     3.0     4.5

 980          KK     MN1
 981          KM         RETRIEVE 'MN1' FLOW FROM SPLIT1 WASH TO MAIN1 WASH AT CO207
 982          DR     MN1

 983          KK   CO207
 984          KM        COMBINE MN1 AND R203
 985          HC       2    19.1

 986          KK    R205   ROUTE   REACH
 987          KM         *** R205; ROUTE CO207 TO CO420 NEAR CAP CANAL AS MAIN1 OF PADELFORD WAS
 988          RS      11    STOR      -1
 989          RC   0.065   0.037   0.065    5600  0.0110    0.00
 990          RX     0.0   125.0   250.0   269.0   291.0   311.0   436.0   561.0
 991          RY     4.5     3.0     2.0     0.0     0.0     2.0     3.0     4.5

 992          KK     222   BASIN
 993          BA   0.515
 994          LG    0.25    0.35    4.10    0.49       0
 995          UI      49      51      49      49     141     168     208     273     294     334
 996          UI     367     375     421     504     586     543     396     347     310     301
 997          UI     280     258     261     235     218     215     196     184     173     149
 998          UI     137     133     119     115     116     104     103      86      81      73
 999          UI      64      63      60      55      54      53      45      38      37      39
1000          UI      38       0       0       0       0       0       0       0       0       0
1001          UI       0       0       0       0       0       0       0       0       0       0
1002          UI       0       0       0       0       0       0       0       0       0       0
1003          UI       0       0       0       0       0       0       0       0       0       0
1004          UI       0       0       0       0       0       0       0       0       0       0

1005          KK   CO420
1006          KM        COMBINE R203 AND S222 FOR MAIN1 WASH AT CAP CANAL
1007          HC       2

1008          KK   CO500
1009          KM        COMBINE CO255, CO247, CO430, CO420, AND CO410
1010          HC       5    23.0

1011          KK   DV501
1012          KM         RETRIEVE "DV501" , THE WEIR OVERFLOW FROM CO400, EAST ACROSS 163RD AVE
1013          DR   DV501
1                                          HEC-1 INPUT                                                    PAGE 23

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

1014          KK   CO501
1015          KM         COMBINE CO500 AND DV501 AT CAP CANAL
1016          HC       2    23.0

1017          KK   DR501
1018          KM         ROUTE CO501 THRU THE (5) SETS OF CAP CANAL OVERCHUTE STRUCTURES
1019          KM         AND THE ASSOC. STORAGE EAST OF 163 RD AVE.
1020          RS       1    STOR       0
1021          SV     0.0     2.88    34.7  115.64  258.34   457.0  711.36 1026.64 1205.57 1398.37
1022          SQ     0.0   117.3   327.5   907.1  1738.6  2605.6  3180.2  3656.4  3873.5  4078.7
1023          SE  1539.4  1540.0  1542.0  1544.0  1546.0  1548.0  1550.0  1552.0  1553.0  1554.0

1024          KK   DV3-6
1025          KM         DIVERT AS"DV3-6" THE FLOW TO STRUCTURE I.D.'S 3-6 ALONG CAP CANAL
1026          KM         AND AS "DV2" THE FLOW TO STRUCTUE I.D.#2,A.K.A.,STA.253+00.
1027          DT     DV2
1028          DI     0.0   117.3   327.5   907.1  1738.6  2605.6  3180.2  3656.4  3873.5  4078.7
1029          DI  4459.8
1030          DQ     0.0     5.6    29.9    62.7   145.0   243.0   322.8   380.3   406.4   430.1
1031          DQ   474.5

1032          KK   DV4-6
1033          KM         DIVERT AS "DV4-6" THE FLOW TO STRUCTURE I.D.'S 4-6 ALONG CAP CANAL
1034          KM         AND AS "DV3" THE FLOW TO STRUC. I.D.#3,A.K.A.,STA.272+35.
1035          DT     DV3
1036          DI     0.0   111.7   297.6   844.4  1593.6  2362.6  2857.4  3276.1  3467.1  3648.6
1037          DQ     0.0    25.0    83.6   282.6   558.8   850.8  1050.0  1209.7  1282.4  1351.3

1038          KK   DV5-6
1039          KM         DIVERT AS "DV5-6" THE FLOW TO STRUCTURE I.D.'S 5-6 ALONG CAP CANAL
1040          KM         AND AS "DV4" THE FLOW TO STRUC. I.D.#4, A.K.A., STA.279+00.
1041          DT     DV4
1042          DI     0.0    86.7   214.0   561.8  1034.8  1511.8  1807.4  2066.4  2184.7  2297.3
1043          DQ     0.0    31.9    43.9   106.8   200.5   302.8   357.8   410.0   433.6   456.5

1044          KK     DV6
1045          KM         DIVERT AS "DV5" THE FLOW TO STRUCTURE I.D.#5, A.K.A.,STA.298+00, AND
1046          KM         AS "DV6" THE FLOW TO STRUCTURE I.D.#6, A.K.A. , STA.315+00.
1047          DT     DV5
1048          DI     0.0    54.8   170.1   455.0   834.3  1209.0  1449.6  1656.4  1751.1  1840.8
1049          DQ     0.0    23.1    49.0   111.3   205.5   300.3   360.4   412.3   436.0   458.6
              *   ***********************************************************************
              *      This Section is the new Hydrology Model for Bonita Dam Developed by WMS
              *   ***********************************************************************

1050          KK     DV5
1051          DR     DV5

1052          KK    R2b   Route   Reach
1053          KM         Routing flows from above CAP through Basin 2b
1054          RS      28    FLOW     0.0     0.0
1055          RC    0.07   0.055    0.07   13406.  0.0098
1056          RX     0.0    30.4    59.5    99.1   168.5   237.8   247.7   396.4
1057          RY      92      91    90.6    87.9      87      91    91.9    91.7
1                                          HEC-1 INPUT                                                    PAGE 24
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1058          KK      2B
1059          BA  0.6549
1060          LG    0.35    0.35   4.685   0.307   0.067
              * 2BUHDesert2min
1061          UI     0.0   32.55   32.55   32.55   32.55   32.55   32.55   32.55   45.36   93.58
1062          UI   93.58  110.24  126.89  141.49  155.97  175.49  186.77  199.83  213.91  233.58
1063          UI   227.6  258.44  267.39  276.13  287.61  290.34  295.32  299.46  311.95  311.95
1064          UI  311.95  311.95  311.95  311.95  299.77  296.22  292.59  287.15  277.29   263.4
1065          UI  245.77  231.35  226.87  215.62  200.21  191.97  179.84  172.77  166.37  153.64
1066          UI  149.58  141.26  134.32  126.89  121.22  115.18  110.83   99.82   99.82   91.88
1067          UI   89.13   89.13   74.37   72.69   72.69   68.06   61.37   61.37   61.37    58.2
1068          UI   49.91   49.91   49.91   49.91   46.89    34.5    34.5    34.5    34.5    34.5
1069          UI    34.5    34.5   24.16   22.28   22.28   22.28   22.28   22.28   22.28   22.28
1070          UI   22.28   22.28   22.28   15.59    7.92    7.92    7.92    7.92    7.92    7.92
1071          UI    7.92    7.92    7.92    7.92    7.92    7.92    7.92    7.92    7.92    7.92
1072          UI    7.92    7.92    7.92    7.92    7.92    7.92    7.92    7.92    7.92    7.92
1073          UI    7.92    7.92    7.92    7.92    7.92     0.0

1074          KK    cp2B
1075          HC       2

1076          KK      5R   Route   Reach
1077          RS       6    FLOW     0.0     0.0
1078          RC   0.065    0.05   0.065 2930.75   0.009     0.0
              * 5R(fromDiketoDam)
1079          RX     0.0    16.0    43.0    71.0    90.0   108.0   127.0   167.0
1080          RY  1415.3 1415.46 1413.64 1411.74 1410.62 1410.82 1412.39 1416.24

1081          KK     DV3
1082          DR     DV3

1083          KK    R1b1   Route   Reach
1084          KM        Routing flows from above CAP overchute DV3 through half of Basin 1b
1085          RS      13    FLOW     0.0     0.0
1086          RC    0.08    0.05    0.08   10621  0.0094
1087          RX     0.0      95     171     211     231     281     302     523
1088          RY      86      86      86      81    79.5    86.9    86.5    85.6

1089          KK     DV4
1090          DR     DV4

1091          KK    R1b2   Route   Reach
1092          KM        Routing flows from above CAP overchute DV4 through half of Basin 1b
1093          RS      23    FLOW     0.0     0.0
1094          RC    0.08    0.05    0.08   10202  0.0098
1095          RX     101     121     131     191     204     302     322     403
1096          RY   69.21   69.09   68.86   66.06   66.12   69.13   69.72   70.01

1097          KK   comDV
1098          KM   Combine R1b1 and R1b2 at half of basin 1B
1099          HC       2
1                                        HEC-1 INPUT                                                PAGE 25

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

1100          KK    R1b3   Route   Reach
1101          KM        Routing combined flow from R1b1 and R1b2 through lower half of Basin 1b
1102          RS       7    FLOW     0.0     0.0
1103          RC    0.07    0.04    0.07    5458  0.0064
1104          RX     129     179     204     264     299     339     364     514
1105          RY   31.19   30.39   29.75   25.74   25.93   29.06   29.76   30.12

1106          KK      1B
1107          BA  2.2039
1108          LG   0.329   0.314   4.285   0.406   3.063
              * 1BUHDesert2min
1109          UI     0.0   92.24   92.24   92.24   92.24   92.24   92.24   92.24   92.24   92.24
1110          UI   221.6  265.18  265.18   315.2  359.57  372.47  441.97  456.23  505.11  533.62
1111          UI  558.65  606.13  640.21  656.68  642.87  755.95  757.66  778.22  805.26  815.95
1112          UI  834.05  830.67  850.15  883.94  883.94  883.94  883.94  883.94  883.94  883.94
1113          UI  856.38  848.58  823.51  839.53  803.53  785.73  756.21  713.69  678.91  642.87
1114          UI  642.87  609.78  573.37  544.32  527.69  505.11  480.55  471.44  436.06  432.95
1115          UI  401.97  400.28  367.05  359.57  344.87  326.38  326.38  290.34  282.86  282.86
1116          UI  258.27  252.55  252.55  232.42  205.97  205.97  205.97   196.7  173.89  173.89
1117          UI  173.89  173.89  161.51  141.43  141.43  141.43  141.43  141.43  126.25   97.76
1118          UI   97.76   97.76   97.76   97.76   97.76   97.76   97.76   76.35   63.14   63.14
1119          UI   63.14   63.14   63.14   63.14   63.14   63.14   63.14   63.14   63.14   63.14
1120          UI   58.97   22.45   22.45   22.45   22.45   22.45   22.45   22.45   22.45   22.45
1121          UI   22.45   22.45   22.45   22.45   22.45   22.45   22.45   22.45   22.45   22.45
1122          UI   22.45   22.45   22.45   22.45   22.45   22.45   22.45   22.45   22.45   22.45
1123          UI   22.45   22.45   22.45   22.45   22.45   22.45   22.45   22.45     0.0

1124          KK      3C
1125          KO       1
1126          HC       3
1127          ZZ
1
            SCHEMATIC DIAGRAM OF STREAM NETWORK
 INPUT
 LINE      (V) ROUTING          (--->) DIVERSION OR PUMP FLOW

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

    9        180
               .
               .
   25          .         168
               .           .
               .           .
   34      CO169............
               V
               V
   37       R171
               .
               .
   43          .          92
               .           V
               .           V
   49          .        DR92
               .           V
               .           V
   56          .        R161
               .           .
               .           .
   62          .           .         160
               .           .           .
               .           .           .
   72      CO173........................
               V
```

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                V
 75          R175
                .
                .
 81             .          150
                .            .
                .            .
 90             .            .          76
                .            .           V
                .            .           V
101             .            .        DR76
                .            .           V
                .            .           V
108             .            .        R153
                .            .           .
                .            .           .
114         CO155.......................
                .
                .
117             .           72
                .            V
                .            V
124             .         DR72
                .            .
                .            .
131             .            .          70
                .            .           V
                .            .           V
137             .            .        DR70
                .            .           .
                .            .           .
144             .            .           .          68
                .            .           .           V
                .            .           .           V
155             .            .           .        DR68
                .            .           .           .
                .            .           .           .
162             .        CO141.......................
                .            V
                .            V
165             .         R145
                .            .
                .            .
171             .            .         144
                .            .           .
                .            .           .
181         CO147.......................
                V
                V
184          R149
                .
                .
190             .           54
                .            V
                .            V
201             .          R55
                .            .
                .            .
207             .            .          56
                .            .           .
                .            .           .
217             .        CO57............
                .            V
                .            V
220             .          R59
                .            .
                .            .
226             .            .          50
                .            .           .
                .            .           .
235             .        CO61............
                .            V
                .            V
238             .         DR61
                .            .
                .            .
245             .            .          46
                .            .           .
                .            .           .
260             .            .           .          42
                .            .           .           .
                .            .           .           .
271             .            .        CO47............
                .            .           V
                .            .           V
274             .            .         R49
                .            .           .
                .            .           .
280             .            .           .          48
                .            .           .           .
                .            .           .           .
290             .            .        CO63............
                .            .           V
                .            .           V
293             .            .        DR63
                .            .           .
                .            .           .
300             .        CO65............
                .            V
                .            V
303             .         R123
                .            .
                .            .
309             .            .          64
                .            .           V
                .            .           V
318             .            .        DR64
                .            .           V
                .            .           V
326             .            .        R121
                .            .           .
                .            .           .
332             .       CO127............
                .            V
                .            V
335             .         R129
                .            .
                .            .
341             .            .         132
                .            .           .
                .            .           .
351             .       CO132............
                .            .
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355     CO133...........
           V
           V
358     R137
           .
           .
364        .        10
           .         V
           .         V
376        .       R11
           .         .
           .         .
382        .         .        16
           .         .         .
           .         .         .
392        .     CO17...........
           .         V
           .         V
395        .       R19
           .         .
           .         .
401        .         .        20
           .         .         .
           .         .         .
412        .         .         .        24
           .         .         .         .
           .         .         .         .
423        .     CO25......................
           .         V
           .         V
426        .       R27
           .         .
           .         .
432        .         .        30
           .         .         .
           .         .         .
444        .     CO31...........
           .         V
           .         V
447        .     DR31
           .         V
           .         V
454        .     R113
           .         .
           .         .
460        .         .        32
           .         .         V
           .         .         V
468        .         .      DR32
           .         .         V
           .         .         V
475        .         .      R111
           .         .         .
           .         .         .
481        .    CO115...........
           .         V
           .         V
484        .     R117
           .         .
           .         .
490        .         .        34
           .         .         V
           .         .         V
506        .         .      DR34
           .         .         V
           .         .         V
513        .         .      R107
           .         .         .
           .         .         .
519        .         .         .        38
           .         .         .         V
           .         .         .         V
526        .         .         .      DR38
           .         .         .         V
           .         .         .         V
533        .         .         .      R103
           .         .         .         .
           .         .         .         .
539        .         .     CO105...........
           .         .         V
           .         .         V
542        .         .      R109
           .         .         .
           .         .         .
548        .         .         .       102
           .         .         .         .
           .         .         .         .
557        .         .         .         .         .       112
           .         .         .         .         .         .
           .         .         .         .         .         .
565        .    CO119.................................
           .         V
           .         V
568        .     R118
           .         .
           .         .
574        .         .       122
           .         .         .
           .         .         .
583        .    CO124...........
           .         .
           .         .
587     CO125...........
           .
           .
591        .       106
           .         .
           .         .
604        .         .        36
           .         .         V
           .         .         V
613        .         .      DR36
           .         .         V
           .         .         V
620        .         .      R101
           .         .         V
           .         .         V
629        .         .     R101A
           .         .         .
           .         .         .
636     CO191......................
           V
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                V
639        R193
              .
              .
645           .         192
              .           .
              .           .
653       CO195............
                V
                V
656        R197
              .
              .
662           .         198
              .           .
              .           .
672       CO199............
              .
              .
680           .-------->   MAIN3
675      SPLIT3
                V
                V
685        R301
              .
              .
691           .         216
              .           .
              .           .
701       CO215............
              .
              .
708           .-------->  SPLIT4
704      SPLT3
                V
                V
711        R323
              .
              .
717           .         218
              .           .
              .           .
726       CO219............
              .
              .
731           .           .<-------  SPLIT4
729           .      SPLIT4
              .           V
              .           V
732           .        R321
              .           .
              .           .
738           .           .         214
              .           .           .
              .           .           .
748           .       CO217............
              .           .
              .           .
751       CO400............
                V
                V
754       DR400
              .
              .
771           .-------->   DV501
768      DV400
              .
              .
778           .           .<-------   MAIN3
776           .       MAIN3
              .           .
              .           .
785           .           .-------->   MAIN2
779           .      SPLIT2
              .           V
              .           V
790           .        R318
              .           .
              .           .
796           .           .         220
              .           .           .
              .           .           .
809           .       CO410............
              .           .
              .           .
814           .           .           .<-------   MAIN2
812           .           .       MAIN2
              .           .           .
              .           .           .
820           .           .           .-------->   MAIN1
815           .           .      SPLIT1
              .           .           V
              .           .           V
823           .           .        R316
              .           .           .
              .           .           .
829           .           .           .         212
              .           .           .           .
              .           .           .           .
838           .           .       CO208............
              .           .           .
              .           .           .
848           .           .           .-------->    MN1
841           .           .       SPLT1
              .           .           .
              .           .           .
853           .           .           .         210
              .           .           .           .
              .           .           .           .
864           .           .       CO209............
              .           .           .
              .           .           .
872           .           .           .-------->  SPLIT5
867           .           .       SPLT1
              .           .           V
              .           .           V
875           .           .        R211
              .           .           .
              .           .           .
881           .           .           .         226
              .           .           .           .
              .           .           .           .
892           .           .       CO430............
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                .         .         .
                .         .         .
 895            .         .         .        230
                .         .         .         V
                .         .         .         V
 904            .         .         .       R231
                .         .         .
                .         .         .
 910            .         .         .          .        240
                .         .         .          .
                .         .         .          .
 921            .         .         .          .          .        232
                .         .         .          .          .
                .         .         .          .          .
 929            .         .         .       CO235.......................
                .         .         .         V
                .         .         .         V
 932            .         .         .       R237
                .         .         .
                .         .         .
 938            .         .         .          .        244
                .         .         .          .
                .         .         .          .
 945            .         .         .       CO247............
                .         .         .
                .         .         .
 948            .         .         .          .        238
                .         .         .          .
                .         .         .          .
 961            .         .         .          .          .<-------  SPLIT5
 959            .         .         .          .     SPLIT5
                .         .         .          .          V
                .         .         .          .          V
 962            .         .         .          .       R251
                .         .         .          .          .
                .         .         .          .          .
 968            .         .         .          .     CO255............
                .         .         .          .
                .         .         .          .
 973            .         .         .          .          .<-------   MAIN1
 971            .         .         .          .    MAIN1
                .         .         .          .          V
                .         .         .          .          V
 974            .         .         .          .       R203
                .         .         .          .          .
                .         .         .          .          .
 982            .         .         .          .          .          .<-------     MN1
 980            .         .         .          .          .        MN1
                .         .         .          .          .          .
                .         .         .          .          .          .
 983            .         .         .          .    CO207............
                .         .         .          .          V
                .         .         .          .          V
 986            .         .         .          .       R205
                .         .         .          .          .
                .         .         .          .          .
 992            .         .         .          .          .        222
                .         .         .          .          .          .
                .         .         .          .          .          .
1005            .         .         .          .    CO420............
                .         .         .          .          .
                .         .         .          .          .
1008            .      CO500.............................................
                .         .
                .         .
1013            .         .         .<-------   DV501
1011            .         .      DV501
                .         .         .
                .         .         .
1014            .      CO501............
                .         V
                .         V
1017            .      DR501
                .         .
                .         .
1027            .         .-------->     DV2
1024            .      DV3-6
                .         .
                .         .
1035            .         .-------->     DV3
1032            .      DV4-6
                .         .
                .         .
1041            .         .-------->     DV4
1038            .      DV5-6
                .         .
                .         .
1047            .         .-------->     DV5
1044            .        DV6
                .         .
                .         .
1051            .         .         .<-------     DV5
1050            .         .       DV5
                .         .         V
                .         .         V
1052            .         .       R2b
                .         .         .
                .         .         .
1058            .         .         .         2B
                .         .         .          .
                .         .         .          .
1074            .         .       Cp2B............
                .         .         V
                .         .         V
1076            .         .        5R
                .         .         .
                .         .         .
1082            .         .         .          .<-------     DV3
1081            .         .         .       DV3
                .         .         .         V
                .         .         .         V
1083            .         .         .       R1b1
                .         .         .          .
                .         .         .          .
1090            .         .         .          .          .<-------     DV4
1089            .         .         .          .       DV4
                .         .         .          .         V
                .         .         .          .         V
1091            .         .         .          .       R1b2
                .         .         .          .          .
                .         .         .          .          .
1097            .         .         .       comDV............
                .         .         .         V
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                .          .          .          V
 1100           .          .          .       R1b3
                .          .          .          .
                .          .          .          .
 1106           .          .          .          .          1B
                .          .          .          .           .
                .          .          .          .           .
 1124           .          .         3C.......................
```

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

```
1*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*              JUN   1998               *
*            VERSION 4.1                *
*                                       *
*  RUN DATE   10FEB03  TIME  18:35:07   *
*                                       *
*****************************************
```

```
*************************************
*                                   *
*   U.S. ARMY CORPS OF ENGINEERS    *
*   HYDROLOGIC ENGINEERING CENTER   *
*         609 SECOND STREET         *
*      DAVIS, CALIFORNIA 95616      *
*          (916) 756-1104           *
*                                   *
*************************************
```

```
                         Project ID: Bonita Dam Hydrology
                         FCDMC
                         July 2002, January 2003
                         100-YR. 6 HR. STORM  2 minute Time Step

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

     IT          HYDROGRAPH TIME DATA
                       NMIN          2  MINUTES IN COMPUTATION INTERVAL
                      IDATE      1   0  STARTING DATE
                      ITIME       0000  STARTING TIME
                         NQ       2000  NUMBER OF HYDROGRAPH ORDINATES
                     NDDATE      3   0  ENDING DATE
                     NDTIME       1838  ENDING TIME
                      ICENT         19  CENTURY MARK

                 COMPUTATION INTERVAL    0.03 HOURS
                     TOTAL TIME BASE   66.63 HOURS

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

*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

            **************
            *            *
1124 KK     *        3C  *
            *            *
            **************

1125 KO          OUTPUT CONTROL VARIABLES
                      IPRNT          1  PRINT CONTROL
                      IPLOT          0  PLOT CONTROL
                      QSCAL         0.  HYDROGRAPH PLOT SCALE

1126 HC          HYDROGRAPH COMBINATION
                      ICOMP          3  NUMBER OF HYDROGRAPHS TO COMBINE
                                                          ***
```

****

HYDROGRAPH AT STATION 3C
SUM OF 3 HYDROGRAPHS

****

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW
1		0000	1	0.	*	1		1640	501	40.	*	2		0920	1001	0.	*	3		0200	1501	0.
1		0002	2	0.	*	1		1642	502	39.	*	2		0922	1002	0.	*	3		0202	1502	0.
1		0004	3	0.	*	1		1644	503	38.	*	2		0924	1003	0.	*	3		0204	1503	0.
1		0006	4	0.	*	1		1646	504	36.	*	2		0926	1004	0.	*	3		0206	1504	0.
1		0008	5	0.	*	1		1648	505	35.	*	2		0928	1005	0.	*	3		0208	1505	0.
1		0010	6	0.	*	1		1650	506	34.	*	2		0930	1006	0.	*	3		0210	1506	0.
1		0012	7	0.	*	1		1652	507	33.	*	2		0932	1007	0.	*	3		0212	1507	0.
1		0014	8	0.	*	1		1654	508	33.	*	2		0934	1008	0.	*	3		0214	1508	0.
1		0016	9	0.	*	1		1656	509	32.	*	2		0936	1009	0.	*	3		0216	1509	0.
1		0018	10	0.	*	1		1658	510	31.	*	2		0938	1010	0.	*	3		0218	1510	0.
1		0020	11	0.	*	1		1700	511	30.	*	2		0940	1011	0.	*	3		0220	1511	0.
1		0022	12	0.	*	1		1702	512	29.	*	2		0942	1012	0.	*	3		0222	1512	0.
1		0024	13	0.	*	1		1704	513	28.	*	2		0944	1013	0.	*	3		0224	1513	0.
1		0026	14	0.	*	1		1706	514	27.	*	2		0946	1014	0.	*	3		0226	1514	0.
1		0028	15	0.	*	1		1708	515	27.	*	2		0948	1015	0.	*	3		0228	1515	0.
1		0030	16	0.	*	1		1710	516	26.	*	2		0950	1016	0.	*	3		0230	1516	0.
1		0032	17	0.	*	1		1712	517	25.	*	2		0952	1017	0.	*	3		0232	1517	0.
1		0034	18	1.	*	1		1714	518	24.	*	2		0954	1018	0.	*	3		0234	1518	0.
1		0036	19	1.	*	1		1716	519	24.	*	2		0956	1019	0.	*	3		0236	1519	0.
1		0038	20	1.	*	1		1718	520	23.	*	2		0958	1020	0.	*	3		0238	1520	0.
1		0040	21	1.	*	1		1720	521	22.	*	2		1000	1021	0.	*	3		0240	1521	0.
1		0042	22	1.	*	1		1722	522	22.	*	2		1002	1022	0.	*	3		0242	1522	0.
1		0044	23	1.	*	1		1724	523	21.	*	2		1004	1023	0.	*	3		0244	1523	0.
1		0046	24	1.	*	1		1726	524	20.	*	2		1006	1024	0.	*	3		0246	1524	0.
1		0048	25	1.	*	1		1728	525	20.	*	2		1008	1025	0.	*	3		0248	1525	0.
1		0050	26	1.	*	1		1730	526	19.	*	2		1010	1026	0.	*	3		0250	1526	0.
1		0052	27	1.	*	1		1732	527	19.	*	2		1012	1027	0.	*	3		0252	1527	0.
1		0054	28	1.	*	1		1734	528	18.	*	2		1014	1028	0.	*	3		0254	1528	0.
1		0056	29	2.	*	1		1736	529	18.	*	2		1016	1029	0.	*	3		0256	1529	0.
1		0058	30	2.	*	1		1738	530	17.	*	2		1018	1030	0.	*	3		0258	1530	0.
1		0100	31	2.	*	1		1740	531	17.	*	2		1020	1031	0.	*	3		0300	1531	0.
1		0102	32	2.	*	1		1742	532	17.	*	2		1022	1032	0.	*	3		0302	1532	0.
1		0104	33	2.	*	1		1744	533	16.	*	2		1024	1033	0.	*	3		0304	1533	0.
1		0106	34	2.	*	1		1746	534	16.	*	2		1026	1034	0.	*	3		0306	1534	0.
1		0108	35	2.	*	1		1748	535	16.	*	2		1028	1035	0.	*	3		0308	1535	0.
1		0110	36	2.	*	1		1750	536	15.	*	2		1030	1036	0.	*	3		0310	1536	0.
1		0112	37	3.	*	1		1752	537	15.	*	2		1032	1037	0.	*	3		0312	1537	0.

1	0114	38	3.	*	1	1754	538	14.	*	2	1034	1038	0.	*	3	0314	1538	0.
1	0116	39	3.	*	1	1756	539	14.	*	2	1036	1039	0.	*	3	0316	1539	0.
1	0118	40	3.	*	1	1758	540	14.	*	2	1038	1040	0.	*	3	0318	1540	0.
1	0120	41	3.	*	1	1800	541	13.	*	2	1040	1041	0.	*	3	0320	1541	0.
1	0122	42	3.	*	1	1802	542	13.	*	2	1042	1042	0.	*	3	0322	1542	0.
1	0124	43	4.	*	1	1804	543	13.	*	2	1044	1043	0.	*	3	0324	1543	0.
1	0126	44	4.	*	1	1806	544	12.	*	2	1046	1044	0.	*	3	0326	1544	0.
1	0128	45	4.	*	1	1808	545	12.	*	2	1048	1045	0.	*	3	0328	1545	0.
1	0130	46	4.	*	1	1810	546	12.	*	2	1050	1046	0.	*	3	0330	1546	0.
1	0132	47	4.	*	1	1812	547	12.	*	2	1052	1047	0.	*	3	0332	1547	0.
1	0134	48	4.	*	1	1814	548	11.	*	2	1054	1048	0.	*	3	0334	1548	0.
1	0136	49	4.	*	1	1816	549	11.	*	2	1056	1049	0.	*	3	0336	1549	0.
1	0138	50	4.	*	1	1818	550	11.	*	2	1058	1050	0.	*	3	0338	1550	0.
1	0140	51	5.	*	1	1820	551	10.	*	2	1100	1051	0.	*	3	0340	1551	0.
1	0142	52	5.	*	1	1822	552	10.	*	2	1102	1052	0.	*	3	0342	1552	0.
1	0144	53	5.	*	1	1824	553	10.	*	2	1104	1053	0.	*	3	0344	1553	0.
1	0146	54	5.	*	1	1826	554	10.	*	2	1106	1054	0.	*	3	0346	1554	0.
1	0148	55	5.	*	1	1828	555	10.	*	2	1108	1055	0.	*	3	0348	1555	0.
1	0150	56	5.	*	1	1830	556	9.	*	2	1110	1056	0.	*	3	0350	1556	0.
1	0152	57	5.	*	1	1832	557	9.	*	2	1112	1057	0.	*	3	0352	1557	0.
1	0154	58	5.	*	1	1834	558	9.	*	2	1114	1058	0.	*	3	0354	1558	0.
1	0156	59	6.	*	1	1836	559	9.	*	2	1116	1059	0.	*	3	0356	1559	0.
1	0158	60	6.	*	1	1838	560	9.	*	2	1118	1060	0.	*	3	0358	1560	0.
1	0200	61	6.	*	1	1840	561	9.	*	2	1120	1061	0.	*	3	0400	1561	0.
1	0202	62	6.	*	1	1842	562	9.	*	2	1122	1062	0.	*	3	0402	1562	0.
1	0204	63	6.	*	1	1844	563	9.	*	2	1124	1063	0.	*	3	0404	1563	0.
1	0206	64	6.	*	1	1846	564	9.	*	2	1126	1064	0.	*	3	0406	1564	0.
1	0208	65	6.	*	1	1848	565	8.	*	2	1128	1065	0.	*	3	0408	1565	0.
1	0210	66	6.	*	1	1850	566	8.	*	2	1130	1066	0.	*	3	0410	1566	0.
1	0212	67	6.	*	1	1852	567	8.	*	2	1132	1067	0.	*	3	0412	1567	0.
1	0214	68	6.	*	1	1854	568	8.	*	2	1134	1068	0.	*	3	0414	1568	0.
1	0216	69	6.	*	1	1856	569	8.	*	2	1136	1069	0.	*	3	0416	1569	0.
1	0218	70	7.	*	1	1858	570	8.	*	2	1138	1070	0.	*	3	0418	1570	0.
1	0220	71	7.	*	1	1900	571	8.	*	2	1140	1071	0.	*	3	0420	1571	0.
1	0222	72	7.	*	1	1902	572	7.	*	2	1142	1072	0.	*	3	0422	1572	0.
1	0224	73	7.	*	1	1904	573	7.	*	2	1144	1073	0.	*	3	0424	1573	0.
1	0226	74	7.	*	1	1906	574	7.	*	2	1146	1074	0.	*	3	0426	1574	0.
1	0228	75	7.	*	1	1908	575	7.	*	2	1148	1075	0.	*	3	0428	1575	0.
1	0230	76	7.	*	1	1910	576	7.	*	2	1150	1076	0.	*	3	0430	1576	0.
1	0232	77	7.	*	1	1912	577	7.	*	2	1152	1077	0.	*	3	0432	1577	0.
1	0234	78	7.	*	1	1914	578	7.	*	2	1154	1078	0.	*	3	0434	1578	0.
1	0236	79	7.	*	1	1916	579	7.	*	2	1156	1079	0.	*	3	0436	1579	0.
1	0238	80	7.	*	1	1918	580	6.	*	2	1158	1080	0.	*	3	0438	1580	0.
1	0240	81	7.	*	1	1920	581	6.	*	2	1200	1081	0.	*	3	0440	1581	0.
1	0242	82	7.	*	1	1922	582	6.	*	2	1202	1082	0.	*	3	0442	1582	0.
1	0244	83	7.	*	1	1924	583	6.	*	2	1204	1083	0.	*	3	0444	1583	0.
1	0246	84	7.	*	1	1926	584	6.	*	2	1206	1084	0.	*	3	0446	1584	0.
1	0248	85	7.	*	1	1928	585	6.	*	2	1208	1085	0.	*	3	0448	1585	0.
1	0250	86	7.	*	1	1930	586	6.	*	2	1210	1086	0.	*	3	0450	1586	0.
1	0252	87	7.	*	1	1932	587	6.	*	2	1212	1087	0.	*	3	0452	1587	0.
1	0254	88	8.	*	1	1934	588	6.	*	2	1214	1088	0.	*	3	0454	1588**********	
1	0256	89	8.	*	1	1936	589	5.	*	2	1216	1089	0.	*	3	0456	1589**********	
1	0258	90	8.	*	1	1938	590	5.	*	2	1218	1090	0.	*	3	0458	1590**********	
1	0300	91	8.	*	1	1940	591	5.	*	2	1220	1091	0.	*	3	0500	1591**********	
1	0302	92	8.	*	1	1942	592	5.	*	2	1222	1092	0.	*	3	0502	1592**********	
1	0304	93	8.	*	1	1944	593	5.	*	2	1224	1093	0.	*	3	0504	1593**********	
1	0306	94	8.	*	1	1946	594	5.	*	2	1226	1094	0.	*	3	0506	1594**********	
1	0308	95	8.	*	1	1948	595	5.	*	2	1228	1095	0.	*	3	0508	1595**********	
1	0310	96	8.	*	1	1950	596	5.	*	2	1230	1096	0.	*	3	0510	1596**********	
1	0312	97	8.	*	1	1952	597	5.	*	2	1232	1097	0.	*	3	0512	1597**********	
1	0314	98	8.	*	1	1954	598	5.	*	2	1234	1098	0.	*	3	0514	1598**********	
1	0316	99	8.	*	1	1956	599	5.	*	2	1236	1099	0.	*	3	0516	1599**********	
1	0318	100	9.	*	1	1958	600	5.	*	2	1238	1100	0.	*	3	0518	1600**********	
1	0320	101	9.	*	1	2000	601	4.	*	2	1240	1101	0.	*	3	0520	1601**********	
1	0322	102	9.	*	1	2002	602	4.	*	2	1242	1102	0.	*	3	0522	1602**********	
1	0324	103	9.	*	1	2004	603	4.	*	2	1244	1103	0.	*	3	0524	1603**********	
1	0326	104	9.	*	1	2006	604	4.	*	2	1246	1104	0.	*	3	0526	1604**********	
1	0328	105	9.	*	1	2008	605	4.	*	2	1248	1105	0.	*	3	0528	1605**********	
1	0330	106	10.	*	1	2010	606	4.	*	2	1250	1106	0.	*	3	0530	1606**********	
1	0332	107	10.	*	1	2012	607	4.	*	2	1252	1107	0.	*	3	0532	1607**********	
1	0334	108	12.	*	1	2014	608	4.	*	2	1254	1108	0.	*	3	0534	1608**********	
1	0336	109	15.	*	1	2016	609	4.	*	2	1256	1109	0.	*	3	0536	1609**********	
1	0338	110	18.	*	1	2018	610	4.	*	2	1258	1110	0.	*	3	0538	1610**********	
1	0340	111	21.	*	1	2020	611	4.	*	2	1300	1111	0.	*	3	0540	1611**********	
1	0342	112	24.	*	1	2022	612	4.	*	2	1302	1112	0.	*	3	0542	1612**********	
1	0344	113	27.	*	1	2024	613	3.	*	2	1304	1113	0.	*	3	0544	1613**********	
1	0346	114	30.	*	1	2026	614	3.	*	2	1306	1114	0.	*	3	0546	1614**********	
1	0348	115	34.	*	1	2028	615	3.	*	2	1308	1115	0.	*	3	0548	1615**********	
1	0350	116	38.	*	1	2030	616	3.	*	2	1310	1116	0.	*	3	0550	1616**********	
1	0352	117	46.	*	1	2032	617	3.	*	2	1312	1117	0.	*	3	0552	1617**********	
1	0354	118	55.	*	1	2034	618	3.	*	2	1314	1118	0.	*	3	0554	1618**********	
1	0356	119	64.	*	1	2036	619	3.	*	2	1316	1119	0.	*	3	0556	1619**********	
1	0358	120	75.	*	1	2038	620	3.	*	2	1318	1120	0.	*	3	0558	1620**********	
1	0400	121	87.	*	1	2040	621	3.	*	2	1320	1121	0.	*	3	0600	1621**********	
1	0402	122	100.	*	1	2042	622	3.	*	2	1322	1122	0.	*	3	0602	1622**********	
1	0404	123	112.	*	1	2044	623	3.	*	2	1324	1123	0.	*	3	0604	1623**********	
1	0406	124	126.	*	1	2046	624	3.	*	2	1326	1124	0.	*	3	0606	1624**********	
1	0408	125	144.	*	1	2048	625	3.	*	2	1328	1125	0.	*	3	0608	1625**********	
1	0410	126	163.	*	1	2050	626	3.	*	2	1330	1126	0.	*	3	0610	1626**********	
1	0412	127	186.	*	1	2052	627	2.	*	2	1332	1127	0.	*	3	0612	1627**********	
1	0414	128	212.	*	1	2054	628	2.	*	2	1334	1128	0.	*	3	0614	1628**********	
1	0416	129	240.	*	1	2056	629	2.	*	2	1336	1129	0.	*	3	0616	1629**********	
1	0418	130	271.	*	1	2058	630	2.	*	2	1338	1130	0.	*	3	0618	1630**********	
1	0420	131	302.	*	1	2100	631	2.	*	2	1340	1131	0.	*	3	0620	1631**********	
1	0422	132	333.	*	1	2102	632	2.	*	2	1342	1132	0.	*	3	0622	1632**********	
1	0424	133	367.	*	1	2104	633	2.	*	2	1344	1133	0.	*	3	0624	1633**********	
1	0426	134	401.	*	1	2106	634	2.	*	2	1346	1134	0.	*	3	0626	1634**********	
1	0428	135	436.	*	1	2108	635	2.	*	2	1348	1135	0.	*	3	0628	1635**********	
1	0430	136	472.	*	1	2110	636	2.	*	2	1350	1136	0.	*	3	0630	1636**********	
1	0432	137	509.	*	1	2112	637	2.	*	2	1352	1137	0.	*	3	0632	1637**********	
1	0434	138	543.	*	1	2114	638	2.	*	2	1354	1138	0.	*	3	0634	1638**********	
1	0436	139	577.	*	1	2116	639	2.	*	2	1356	1139	0.	*	3	0636	1639**********	
1	0438	140	609.	*	1	2118	640	2.	*	2	1358	1140	0.	*	3	0638	1640**********	
1	0440	141	641.	*	1	2120	641	2.	*	2	1400	1141	0.	*	3	0640	1641**********	
1	0442	142	672.	*	1	2122	642	2.	*	2	1402	1142	0.	*	3	0642	1642**********	
1	0444	143	700.	*	1	2124	643	2.	*	2	1404	1143	0.	*	3	0644	1643**********	
1	0446	144	727.	*	1	2126	644	1.	*	2	1406	1144	0.	*	3	0646	1644**********	
1	0448	145	751.	*	1	2128	645	1.	*	2	1408	1145	0.	*	3	0648	1645**********	
1	0450	146	775.	*	1	2130	646	1.	*	2	1410	1146	0.	*	3	0650	1646**********	
1	0452	147	794.	*	1	2132	647	1.	*	2	1412	1147	0.	*	3	0652	1647**********	
1	0454	148	812.	*	1	2134	648	1.	*	2	1414	1148	0.	*	3	0654	1648**********	
1	0456	149	828.	*	1	2136	649	1.	*	2	1416	1149	0.	*	3	0656	1649**********	
1	0458	150	841.	*	1	2138	650	1.	*	2	1418	1150	0.	*	3	0658	1650**********	
1	0500	151	852.	*	1	2140	651	1.	*	2	1420	1151	0.	*	3	0700	1651**********	
1	0502	152	859.	*	1	2142	652	1.	*	2	1422	1152	0.	*	3	0702	1652**********	
1	0504	153	865.	*	1	2144	653	1.	*	2	1424	1153	0.	*	3	0704	1653**********	
1	0506	154	868.	*	1	2146	654	1.	*	2	1426	1154	0.	*	3	0706	1654**********	
1	0508	155	866.	*	1	2148	655	1.	*	2	1428	1155	0.	*	3	0708	1655**********	
1	0510	156	864.	*	1	2150	656	1.	*	2	1430	1156	0.	*	3	0710	1656**********	
1	0512	157	862.	*	1	2152	657	1.	*	2	1432	1157	0.	*	3	0712	1657**********	
1	0514	158	859.	*	1	2154	658	1.	*	2	1434	1158	0.	*	3	0714	1658**********	
1	0516	159	856.	*	1	2156	659	1.	*	2	1436	1159	0.	*	3	0716	1659**********	
1	0518	160	855.	*	1	2158	660	1.	*	2	1438	1160	0.	*	3	0718	1660**********	

1	0520	161	857.	*	1	2200	661	1.	*	2	1440	1161	0.	*	3	0720	1661**********		
1	0522	162	861.	*	1	2202	662	1.	*	2	1442	1162	0.	*	3	0722	1662**********		
1	0524	163	870.	*	1	2204	663	1.	*	2	1444	1163	0.	*	3	0724	1663**********		
1	0526	164	878.	*	1	2206	664	1.	*	2	1446	1164	0.	*	3	0726	1664**********		
1	0528	165	888.	*	1	2208	665	1.	*	2	1448	1165	0.	*	3	0728	1665**********		
1	0530	166	896.	*	1	2210	666	1.	*	2	1450	1166	0.	*	3	0730	1666**********		
1	0532	167	904.	*	1	2212	667	1.	*	2	1452	1167	0.	*	3	0732	1667**********		
1	0534	168	913.	*	1	2214	668	1.	*	2	1454	1168	0.	*	3	0734	1668**********		
1	0536	169	919.	*	1	2216	669	1.	*	2	1456	1169	0.	*	3	0736	1669**********		
1	0538	170	926.	*	1	2218	670	1.	*	2	1458	1170	0.	*	3	0738	1670**********		
1	0540	171	935.	*	1	2220	671	1.	*	2	1500	1171	0.	*	3	0740	1671**********		
1	0542	172	942.	*	1	2222	672	1.	*	2	1502	1172	0.	*	3	0742	1672**********		
1	0544	173	950.	*	1	2224	673	0.	*	2	1504	1173	0.	*	3	0744	1673**********		
1	0546	174	960.	*	1	2226	674	0.	*	2	1506	1174	0.	*	3	0746	1674**********		
1	0548	175	973.	*	1	2228	675	0.	*	2	1508	1175	0.	*	3	0748	1675**********		
1	0550	176	986.	*	1	2230	676	0.	*	2	1510	1176	0.	*	3	0750	1676**********		
1	0552	177	1000.	*	1	2232	677	0.	*	2	1512	1177	0.	*	3	0752	1677**********		
1	0554	178	1016.	*	1	2234	678	0.	*	2	1514	1178	0.	*	3	0754	1678**********		
1	0556	179	1035.	*	1	2236	679	0.	*	2	1516	1179	0.	*	3	0756	1679**********		
1	0558	180	1054.	*	1	2238	680	0.	*	2	1518	1180	0.	*	3	0758	1680**********		
1	0600	181	1074.	*	1	2240	681	0.	*	2	1520	1181	0.	*	3	0800	1681**********		
1	0602	182	1097.	*	1	2242	682	0.	*	2	1522	1182	0.	*	3	0802	1682**********		
1	0604	183	1124.	*	1	2244	683	0.	*	2	1524	1183	0.	*	3	0804	1683**********		
1	0606	184	1152.	*	1	2246	684	0.	*	2	1526	1184	0.	*	3	0806	1684**********		
1	0608	185	1182.	*	1	2248	685	0.	*	2	1528	1185	0.	*	3	0808	1685**********		
1	0610	186	1213.	*	1	2250	686	0.	*	2	1530	1186	0.	*	3	0810	1686**********		
1	0612	187	1247.	*	1	2252	687	0.	*	2	1532	1187	0.	*	3	0812	1687**********		
1	0614	188	1283.	*	1	2254	688	0.	*	2	1534	1188	0.	*	3	0814	1688**********		
1	0616	189	1320.	*	1	2256	689	0.	*	2	1536	1189	0.	*	3	0816	1689**********		
1	0618	190	1354.	*	1	2258	690	0.	*	2	1538	1190	0.	*	3	0818	1690**********		
1	0620	191	1386.	*	1	2300	691	0.	*	2	1540	1191	0.	*	3	0820	1691**********		
1	0622	192	1417.	*	1	2302	692	0.	*	2	1542	1192	0.	*	3	0822	1692**********		
1	0624	193	1447.	*	1	2304	693	0.	*	2	1544	1193	0.	*	3	0824	1693**********		
1	0626	194	1475.	*	1	2306	694	0.	*	2	1546	1194	0.	*	3	0826	1694**********		
1	0628	195	1501.	*	1	2308	695	0.	*	2	1548	1195	0.	*	3	0828	1695**********		
1	0630	196	1526.	*	1	2310	696	0.	*	2	1550	1196	0.	*	3	0830	1696**********		
1	0632	197	1548.	*	1	2312	697	0.	*	2	1552	1197	0.	*	3	0832	1697**********		
1	0634	198	1567.	*	1	2314	698	0.	*	2	1554	1198	0.	*	3	0834	1698**********		
1	0636	199	1583.	*	1	2316	699	0.	*	2	1556	1199	0.	*	3	0836	1699**********		
1	0638	200	1598.	*	1	2318	700	0.	*	2	1558	1200	0.	*	3	0838	1700**********		
1	0640	201	1612.	*	1	2320	701	0.	*	2	1600	1201	0.	*	3	0840	1701**********		
1	0642	202	1624.	*	1	2322	702	0.	*	2	1602	1202	0.	*	3	0842	1702**********		
1	0644	203	1636.	*	1	2324	703	0.	*	2	1604	1203	0.	*	3	0844	1703**********		
1	0646	204	1646.	*	1	2326	704	0.	*	2	1606	1204	0.	*	3	0846	1704**********		
1	0648	205	1655.	*	1	2328	705	0.	*	2	1608	1205	0.	*	3	0848	1705**********		
1	0650	206	1662.	*	1	2330	706	0.	*	2	1610	1206	0.	*	3	0850	1706**********		
1	0652	207	1667.	*	1	2332	707	0.	*	2	1612	1207	0.	*	3	0852	1707**********		
1	0654	208	1672.	*	1	2334	708	0.	*	2	1614	1208	0.	*	3	0854	1708**********		
1	0656	209	1675.	*	1	2336	709	0.	*	2	1616	1209	0.	*	3	0856	1709**********		
1	0658	210	1677.	*	1	2338	710	0.	*	2	1618	1210	0.	*	3	0858	1710**********		
1	0700	211	1679.	*	1	2340	711	0.	*	2	1620	1211	0.	*	3	0900	1711**********		
1	0702	212	1681.	*	1	2342	712	0.	*	2	1622	1212	0.	*	3	0902	1712**********		
1	0704	213	1681.	*	1	2344	713	0.	*	2	1624	1213	0.	*	3	0904	1713**********		
1	0706	214	1681.	*	1	2346	714	0.	*	2	1626	1214	0.	*	3	0906	1714**********		
1	0708	215	1681.	*	1	2348	715	0.	*	2	1628	1215	0.	*	3	0908	1715**********		
1	0710	216	1679.	*	1	2350	716	0.	*	2	1630	1216	0.	*	3	0910	1716**********		
1	0712	217	1677.	*	1	2352	717	0.	*	2	1632	1217	0.	*	3	0912	1717**********		
1	0714	218	1675.	*	1	2354	718	0.	*	2	1634	1218	0.	*	3	0914	1718**********		
1	0716	219	1672.	*	1	2356	719	0.	*	2	1636	1219	0.	*	3	0916	1719**********		
1	0718	220	1670.	*	1	2358	720	0.	*	2	1638	1220	0.	*	3	0918	1720**********		
1	0720	221	1667.	*	2	0000	721	0.	*	2	1640	1221	0.	*	3	0920	1721**********		
1	0722	222	1664.	*	2	0002	722	0.	*	2	1642	1222	0.	*	3	0922	1722**********		
1	0724	223	1660.	*	2	0004	723	0.	*	2	1644	1223	0.	*	3	0924	1723**********		
1	0726	224	1656.	*	2	0006	724	0.	*	2	1646	1224	0.	*	3	0926	1724**********		
1	0728	225	1651.	*	2	0008	725	0.	*	2	1648	1225	0.	*	3	0928	1725**********		
1	0730	226	1646.	*	2	0010	726	0.	*	2	1650	1226	0.	*	3	0930	1726	0.	
1	0732	227	1642.	*	2	0012	727	0.	*	2	1652	1227	0.	*	3	0932	1727	0.	
1	0734	228	1637.	*	2	0014	728	0.	*	2	1654	1228	0.	*	3	0934	1728	0.	
1	0736	229	1631.	*	2	0016	729	0.	*	2	1656	1229	0.	*	3	0936	1729	0.	
1	0738	230	1626.	*	2	0018	730	0.	*	2	1658	1230	0.	*	3	0938	1730	0.	
1	0740	231	1620.	*	2	0020	731	0.	*	2	1700	1231	0.	*	3	0940	1731	0.	
1	0742	232	1614.	*	2	0022	732	0.	*	2	1702	1232	0.	*	3	0942	1732	0.	
1	0744	233	1609.	*	2	0024	733	0.	*	2	1704	1233	0.	*	3	0944	1733	0.	
1	0746	234	1604.	*	2	0026	734	0.	*	2	1706	1234	0.	*	3	0946	1734	0.	
1	0748	235	1598.	*	2	0028	735	0.	*	2	1708	1235	0.	*	3	0948	1735	0.	
1	0750	236	1592.	*	2	0030	736	0.	*	2	1710	1236	0.	*	3	0950	1736	0.	
1	0752	237	1586.	*	2	0032	737	0.	*	2	1712	1237	0.	*	3	0952	1737	0.	
1	0754	238	1580.	*	2	0034	738	0.	*	2	1714	1238	0.	*	3	0954	1738	0.	
1	0756	239	1573.	*	2	0036	739	0.	*	2	1716	1239	0.	*	3	0956	1739	0.	
1	0758	240	1567.	*	2	0038	740	0.	*	2	1718	1240	0.	*	3	0958	1740	0.	
1	0800	241	1561.	*	2	0040	741	0.	*	2	1720	1241	0.	*	3	1000	1741	0.	
1	0802	242	1555.	*	2	0042	742	0.	*	2	1722	1242	0.	*	3	1002	1742	0.	
1	0804	243	1549.	*	2	0044	743	0.	*	2	1724	1243	0.	*	3	1004	1743	0.	
1	0806	244	1542.	*	2	0046	744	0.	*	2	1726	1244	0.	*	3	1006	1744	0.	
1	0808	245	1535.	*	2	0048	745	0.	*	2	1728	1245	0.	*	3	1008	1745	0.	
1	0810	246	1528.	*	2	0050	746	0.	*	2	1730	1246	0.	*	3	1010	1746	0.	
1	0812	247	1520.	*	2	0052	747	0.	*	2	1732	1247	0.	*	3	1012	1747	0.	
1	0814	248	1512.	*	2	0054	748	0.	*	2	1734	1248	0.	*	3	1014	1748	0.	
1	0816	249	1504.	*	2	0056	749	0.	*	2	1736	1249	0.	*	3	1016	1749	0.	
1	0818	250	1495.	*	2	0058	750	0.	*	2	1738	1250	0.	*	3	1018	1750	0.	
1	0820	251	1486.	*	2	0100	751	0.	*	2	1740	1251	0.	*	3	1020	1751	0.	
1	0822	252	1477.	*	2	0102	752	0.	*	2	1742	1252	0.	*	3	1022	1752	0.	
1	0824	253	1468.	*	2	0104	753	0.	*	2	1744	1253	0.	*	3	1024	1753	0.	
1	0826	254	1458.	*	2	0106	754	0.	*	2	1746	1254	0.	*	3	1026	1754	0.	
1	0828	255	1448.	*	2	0108	755	0.	*	2	1748	1255	0.	*	3	1028	1755	0.	
1	0830	256	1439.	*	2	0110	756	0.	*	2	1750	1256	0.	*	3	1030	1756	0.	
1	0832	257	1429.	*	2	0112	757	0.	*	2	1752	1257	0.	*	3	1032	1757	0.	
1	0834	258	1418.	*	2	0114	758	0.	*	2	1754	1258	0.	*	3	1034	1758	0.	
1	0836	259	1407.	*	2	0116	759	0.	*	2	1756	1259	0.	*	3	1036	1759	0.	
1	0838	260	1395.	*	2	0118	760	0.	*	2	1758	1260	0.	*	3	1038	1760	0.	
1	0840	261	1383.	*	2	0120	761	0.	*	2	1800	1261	0.	*	3	1040	1761	0.	
1	0842	262	1370.	*	2	0122	762	0.	*	2	1802	1262	0.	*	3	1042	1762	0.	
1	0844	263	1357.	*	2	0124	763	0.	*	2	1804	1263	0.	*	3	1044	1763	0.	
1	0846	264	1344.	*	2	0126	764	0.	*	2	1806	1264	0.	*	3	1046	1764	0.	
1	0848	265	1330.	*	2	0128	765	0.	*	2	1808	1265	0.	*	3	1048	1765	0.	
1	0850	266	1317.	*	2	0130	766	0.	*	2	1810	1266	0.	*	3	1050	1766	0.	
1	0852	267	1303.	*	2	0132	767	0.	*	2	1812	1267	0.	*	3	1052	1767	0.	
1	0854	268	1290.	*	2	0134	768	0.	*	2	1814	1268	0.	*	3	1054	1768	0.	
1	0856	269	1276.	*	2	0136	769	0.	*	2	1816	1269	0.	*	3	1056	1769	0.	
1	0858	270	1263.	*	2	0138	770	0.	*	2	1818	1270	0.	*	3	1058	1770	0.	
1	0900	271	1250.	*	2	0140	771	0.	*	2	1820	1271	0.	*	3	1100	1771	0.	
1	0902	272	1237.	*	2	0142	772	0.	*	2	1822	1272	0.	*	3	1102	1772	0.	
1	0904	273	1225.	*	2	0144	773	0.	*	2	1824	1273	0.	*	3	1104	1773	0.	
1	0906	274	1212.	*	2	0146	774	0.	*	2	1826	1274	0.	*	3	1106	1774	0.	
1	0908	275	1201.	*	2	0148	775	0.	*	2	1828	1275	0.	*	3	1108	1775	0.	
1	0910	276	1189.	*	2	0150	776	0.	*	2	1830	1276	0.	*	3	1110	1776	0.	
1	0912	277	1179.	*	2	0152	777	0.	*	2	1832	1277	0.	*	3	1112	1777	0.	
1	0914	278	1169.	*	2	0154	778	0.	*	2	1834	1278	0.	*	3	1114	1778	0.	
1	0916	279	1158.	*	2	0156	779	0.	*	2	1836	1279	0.	*	3	1116	1779	0.	
1	0918	280	1148.	*	2	0158	780	0.	*	2	1838	1280	0.	*	3	1118	1780	0.	
1	0920	281	1137.	*	2	0200	781	0.	*	2	1840	1281	0.	*	3	1120	1781	0.	
1	0922	282	1126.	*	2	0202	782	0.	*	2	1842	1282	0.	*	3	1122	1782	0.	
1	0924	283	1114.	*	2	0204	783	0.	*	2	1844	1283	0.	*	3	1124	1783	0.	

1	0926	284	1103.	*	2	0206	784	0.	*	2	1846	1284	0.	*	3	1126	1784	0.
1	0928	285	1091.	*	2	0208	785	0.	*	2	1848	1285	0.	*	3	1128	1785	0.
1	0930	286	1079.	*	2	0210	786	0.	*	2	1850	1286	0.	*	3	1130	1786	0.
1	0932	287	1067.	*	2	0212	787	0.	*	2	1852	1287	0.	*	3	1132	1787	0.
1	0934	288	1055.	*	2	0214	788	0.	*	2	1854	1288	0.	*	3	1134	1788	0.
1	0936	289	1042.	*	2	0216	789	0.	*	2	1856	1289	0.	*	3	1136	1789	0.
1	0938	290	1030.	*	2	0218	790	0.	*	2	1858	1290	0.	*	3	1138	1790	0.
1	0940	291	1017.	*	2	0220	791	0.	*	2	1900	1291	0.	*	3	1140	1791	0.
1	0942	292	1005.	*	2	0222	792	0.	*	2	1902	1292	0.	*	3	1142	1792	0.
1	0944	293	992.	*	2	0224	793	0.	*	2	1904	1293	0.	*	3	1144	1793	0.
1	0946	294	980.	*	2	0226	794	0.	*	2	1906	1294	0.	*	3	1146	1794	0.
1	0948	295	967.	*	2	0228	795	0.	*	2	1908	1295	0.	*	3	1148	1795	0.
1	0950	296	956.	*	2	0230	796	0.	*	2	1910	1296	0.	*	3	1150	1796	0.
1	0952	297	944.	*	2	0232	797	0.	*	2	1912	1297	0.	*	3	1152	1797	0.
1	0954	298	933.	*	2	0234	798	0.	*	2	1914	1298	0.	*	3	1154	1798	0.
1	0956	299	922.	*	2	0236	799	0.	*	2	1916	1299	0.	*	3	1156	1799	0.
1	0958	300	910.	*	2	0238	800	0.	*	2	1918	1300	0.	*	3	1158	1800	0.
1	1000	301	899.	*	2	0240	801	0.	*	2	1920	1301	0.	*	3	1200	1801	0.
1	1002	302	887.	*	2	0242	802	0.	*	2	1922	1302	0.	*	3	1202	1802	0.
1	1004	303	875.	*	2	0244	803	0.	*	2	1924	1303	0.	*	3	1204	1803	0.
1	1006	304	864.	*	2	0246	804	0.	*	2	1926	1304	0.	*	3	1206	1804	0.
1	1008	305	853.	*	2	0248	805	0.	*	2	1928	1305	0.	*	3	1208	1805	0.
1	1010	306	841.	*	2	0250	806	0.	*	2	1930	1306	0.	*	3	1210	1806	0.
1	1012	307	830.	*	2	0252	807	0.	*	2	1932	1307	0.	*	3	1212	1807	0.
1	1014	308	818.	*	2	0254	808	0.	*	2	1934	1308	0.	*	3	1214	1808	0.
1	1016	309	806.	*	2	0256	809	0.	*	2	1936	1309	0.	*	3	1216	1809	0.
1	1018	310	795.	*	2	0258	810	0.	*	2	1938	1310	0.	*	3	1218	1810	0.
1	1020	311	784.	*	2	0300	811	0.	*	2	1940	1311	0.	*	3	1220	1811	0.
1	1022	312	772.	*	2	0302	812	0.	*	2	1942	1312	0.	*	3	1222	1812	0.
1	1024	313	762.	*	2	0304	813	0.	*	2	1944	1313	0.	*	3	1224	1813	0.
1	1026	314	751.	*	2	0306	814	0.	*	2	1946	1314	0.	*	3	1226	1814	0.
1	1028	315	742.	*	2	0308	815	0.	*	2	1948	1315	0.	*	3	1228	1815	0.
1	1030	316	732.	*	2	0310	816	0.	*	2	1950	1316	0.	*	3	1230	1816	0.
1	1032	317	723.	*	2	0312	817	0.	*	2	1952	1317	0.	*	3	1232	1817	0.
1	1034	318	713.	*	2	0314	818	0.	*	2	1954	1318	0.	*	3	1234	1818	0.
1	1036	319	704.	*	2	0316	819	0.	*	2	1956	1319	0.	*	3	1236	1819	0.
1	1038	320	695.	*	2	0318	820	0.	*	2	1958	1320	0.	*	3	1238	1820	0.
1	1040	321	686.	*	2	0320	821	0.	*	2	2000	1321	0.	*	3	1240	1821	0.
1	1042	322	677.	*	2	0322	822	0.	*	2	2002	1322	0.	*	3	1242	1822	0.
1	1044	323	668.	*	2	0324	823	0.	*	2	2004	1323	0.	*	3	1244	1823	0.
1	1046	324	658.	*	2	0326	824	0.	*	2	2006	1324	0.	*	3	1246	1824	0.
1	1048	325	649.	*	2	0328	825	0.	*	2	2008	1325	0.	*	3	1248	1825	0.
1	1050	326	640.	*	2	0330	826	0.	*	2	2010	1326	0.	*	3	1250	1826	0.
1	1052	327	631.	*	2	0332	827	0.	*	2	2012	1327	0.	*	3	1252	1827	0.
1	1054	328	622.	*	2	0334	828	0.	*	2	2014	1328	0.	*	3	1254	1828	0.
1	1056	329	613.	*	2	0336	829	0.	*	2	2016	1329	0.	*	3	1256	1829	0.
1	1058	330	604.	*	2	0338	830	0.	*	2	2018	1330	0.	*	3	1258	1830	0.
1	1100	331	595.	*	2	0340	831	0.	*	2	2020	1331	0.	*	3	1300	1831	0.
1	1102	332	586.	*	2	0342	832	0.	*	2	2022	1332	0.	*	3	1302	1832	0.
1	1104	333	578.	*	2	0344	833	0.	*	2	2024	1333	0.	*	3	1304	1833	0.
1	1106	334	570.	*	2	0346	834	0.	*	2	2026	1334	0.	*	3	1306	1834	0.
1	1108	335	562.	*	2	0348	835	0.	*	2	2028	1335	0.	*	3	1308	1835	0.
1	1110	336	554.	*	2	0350	836	0.	*	2	2030	1336	0.	*	3	1310	1836	0.
1	1112	337	546.	*	2	0352	837	0.	*	2	2032	1337	0.	*	3	1312	1837	0.
1	1114	338	538.	*	2	0354	838	0.	*	2	2034	1338	0.	*	3	1314	1838	0.
1	1116	339	531.	*	2	0356	839	0.	*	2	2036	1339	0.	*	3	1316	1839	0.
1	1118	340	523.	*	2	0358	840	0.	*	2	2038	1340	0.	*	3	1318	1840	0.
1	1120	341	515.	*	2	0400	841	0.	*	2	2040	1341	0.	*	3	1320	1841	0.
1	1122	342	507.	*	2	0402	842	0.	*	2	2042	1342	0.	*	3	1322	1842	0.
1	1124	343	498.	*	2	0404	843	0.	*	2	2044	1343	0.	*	3	1324	1843	0.
1	1126	344	490.	*	2	0406	844	0.	*	2	2046	1344	0.	*	3	1326	1844	0.
1	1128	345	482.	*	2	0408	845	0.	*	2	2048	1345	0.	*	3	1328	1845	0.
1	1130	346	474.	*	2	0410	846	0.	*	2	2050	1346	0.	*	3	1330	1846	0.
1	1132	347	466.	*	2	0412	847	0.	*	2	2052	1347	0.	*	3	1332	1847	0.
1	1134	348	458.	*	2	0414	848	0.	*	2	2054	1348	0.	*	3	1334	1848	0.
1	1136	349	450.	*	2	0416	849	0.	*	2	2056	1349	0.	*	3	1336	1849	0.
1	1138	350	442.	*	2	0418	850	0.	*	2	2058	1350	0.	*	3	1338	1850	0.
1	1140	351	434.	*	2	0420	851	0.	*	2	2100	1351	0.	*	3	1340	1851	0.
1	1142	352	427.	*	2	0422	852	0.	*	2	2102	1352	0.	*	3	1342	1852	0.
1	1144	353	420.	*	2	0424	853	0.	*	2	2104	1353	0.	*	3	1344	1853	0.
1	1146	354	414.	*	2	0426	854	0.	*	2	2106	1354	0.	*	3	1346	1854	0.
1	1148	355	407.	*	2	0428	855	0.	*	2	2108	1355	0.	*	3	1348	1855	0.
1	1150	356	400.	*	2	0430	856	0.	*	2	2110	1356	0.	*	3	1350	1856	0.
1	1152	357	393.	*	2	0432	857	0.	*	2	2112	1357	0.	*	3	1352	1857	0.
1	1154	358	387.	*	2	0434	858	0.	*	2	2114	1358	0.	*	3	1354	1858	0.
1	1156	359	381.	*	2	0436	859	0.	*	2	2116	1359	0.	*	3	1356	1859	0.
1	1158	360	375.	*	2	0438	860	0.	*	2	2118	1360	0.	*	3	1358	1860	0.
1	1200	361	369.	*	2	0440	861	0.	*	2	2120	1361	0.	*	3	1400	1861	0.
1	1202	362	363.	*	2	0442	862	0.	*	2	2122	1362	0.	*	3	1402	1862	0.
1	1204	363	358.	*	2	0444	863	0.	*	2	2124	1363	0.	*	3	1404	1863	0.
1	1206	364	353.	*	2	0446	864	0.	*	2	2126	1364	0.	*	3	1406	1864	0.
1	1208	365	347.	*	2	0448	865	0.	*	2	2128	1365	0.	*	3	1408	1865	0.
1	1210	366	342.	*	2	0450	866	0.	*	2	2130	1366	0.	*	3	1410	1866	0.
1	1212	367	337.	*	2	0452	867	0.	*	2	2132	1367	0.	*	3	1412	1867	0.
1	1214	368	332.	*	2	0454	868	0.	*	2	2134	1368	0.	*	3	1414	1868	0.
1	1216	369	328.	*	2	0456	869	0.	*	2	2136	1369	0.	*	3	1416	1869	0.
1	1218	370	323.	*	2	0458	870	0.	*	2	2138	1370	0.	*	3	1418	1870	0.
1	1220	371	318.	*	2	0500	871	0.	*	2	2140	1371	0.	*	3	1420	1871	0.
1	1222	372	313.	*	2	0502	872	0.	*	2	2142	1372	0.	*	3	1422	1872	0.
1	1224	373	308.	*	2	0504	873	0.	*	2	2144	1373	0.	*	3	1424	1873	0.
1	1226	374	304.	*	2	0506	874	0.	*	2	2146	1374	0.	*	3	1426	1874	0.
1	1228	375	300.	*	2	0508	875	0.	*	2	2148	1375	0.	*	3	1428	1875	0.
1	1230	376	295.	*	2	0510	876	0.	*	2	2150	1376	0.	*	3	1430	1876	0.
1	1232	377	291.	*	2	0512	877	0.	*	2	2152	1377	0.	*	3	1432	1877	0.
1	1234	378	286.	*	2	0514	878	0.	*	2	2154	1378	0.	*	3	1434	1878	0.
1	1236	379	282.	*	2	0516	879	0.	*	2	2156	1379	0.	*	3	1436	1879	0.
1	1238	380	277.	*	2	0518	880	0.	*	2	2158	1380	0.	*	3	1438	1880	0.
1	1240	381	273.	*	2	0520	881	0.	*	2	2200	1381	0.	*	3	1440	1881	0.
1	1242	382	269.	*	2	0522	882	0.	*	2	2202	1382	0.	*	3	1442	1882	0.
1	1244	383	264.	*	2	0524	883	0.	*	2	2204	1383	0.	*	3	1444	1883	0.
1	1246	384	260.	*	2	0526	884	0.	*	2	2206	1384	0.	*	3	1446	1884	0.
1	1248	385	256.	*	2	0528	885	0.	*	2	2208	1385	0.	*	3	1448	1885	0.
1	1250	386	251.	*	2	0530	886	0.	*	2	2210	1386	0.	*	3	1450	1886	0.
1	1252	387	247.	*	2	0532	887	0.	*	2	2212	1387	0.	*	3	1452	1887	0.
1	1254	388	243.	*	2	0534	888	0.	*	2	2214	1388	0.	*	3	1454	1888	0.
1	1256	389	239.	*	2	0536	889	0.	*	2	2216	1389	0.	*	3	1456	1889	0.
1	1258	390	235.	*	2	0538	890	0.	*	2	2218	1390	0.	*	3	1458	1890	0.
1	1300	391	231.	*	2	0540	891	0.	*	2	2220	1391	0.	*	3	1500	1891	0.
1	1302	392	227.	*	2	0542	892	0.	*	2	2222	1392	0.	*	3	1502	1892	0.
1	1304	393	223.	*	2	0544	893	0.	*	2	2224	1393	0.	*	3	1504	1893	0.
1	1306	394	219.	*	2	0546	894	0.	*	2	2226	1394	0.	*	3	1506	1894	0.
1	1308	395	216.	*	2	0548	895	0.	*	2	2228	1395	0.	*	3	1508	1895	0.
1	1310	396	212.	*	2	0550	896	0.	*	2	2230	1396	0.	*	3	1510	1896	0.
1	1312	397	209.	*	2	0552	897	0.	*	2	2232	1397	0.	*	3	1512	1897	0.
1	1314	398	206.	*	2	0554	898	0.	*	2	2234	1398	0.	*	3	1514	1898	0.
1	1316	399	203.	*	2	0556	899	0.	*	2	2236	1399	0.	*	3	1516	1899	0.
1	1318	400	200.	*	2	0558	900	0.	*	2	2238	1400	0.	*	3	1518	1900	0.
1	1320	401	197.	*	2	0600	901	0.	*	2	2240	1401	0.	*	3	1520	1901	0.
1	1322	402	194.	*	2	0602	902	0.	*	2	2242	1402	0.	*	3	1522	1902	0.
1	1324	403	192.	*	2	0604	903	0.	*	2	2244	1403	0.	*	3	1524	1903	0.
1	1326	404	189.	*	2	0606	904	0.	*	2	2246	1404	0.	*	3	1526	1904	0.
1	1328	405	186.	*	2	0608	905	0.	*	2	2248	1405	0.	*	3	1528	1905	0.
1	1330	406	183.	*	2	0610	906	0.	*	2	2250	1406	0.	*	3	1530	1906	0.

1	1332	407	180.	*	2	0612	907	0.	*	2	2252	1407	0.	*	3	1532	1907	0.
1	1334	408	178.	*	2	0614	908	0.	*	2	2254	1408	0.	*	3	1534	1908	0.
1	1336	409	175.	*	2	0616	909	0.	*	2	2256	1409	0.	*	3	1536	1909	0.
1	1338	410	172.	*	2	0618	910	0.	*	2	2258	1410	0.	*	3	1538	1910	0.
1	1340	411	170.	*	2	0620	911	0.	*	2	2300	1411	0.	*	3	1540	1911	0.
1	1342	412	167.	*	2	0622	912	0.	*	2	2302	1412	0.	*	3	1542	1912	0.
1	1344	413	165.	*	2	0624	913	0.	*	2	2304	1413	0.	*	3	1544	1913	0.
1	1346	414	163.	*	2	0626	914	0.	*	2	2306	1414	0.	*	3	1546	1914	0.
1	1348	415	160.	*	2	0628	915	0.	*	2	2308	1415	0.	*	3	1548	1915	0.
1	1350	416	158.	*	2	0630	916	0.	*	2	2310	1416	0.	*	3	1550	1916	0.
1	1352	417	156.	*	2	0632	917	0.	*	2	2312	1417	0.	*	3	1552	1917	0.
1	1354	418	154.	*	2	0634	918	0.	*	2	2314	1418	0.	*	3	1554	1918	0.
1	1356	419	152.	*	2	0636	919	0.	*	2	2316	1419	0.	*	3	1556	1919	0.
1	1358	420	151.	*	2	0638	920	0.	*	2	2318	1420	0.	*	3	1558	1920	0.
1	1400	421	149.	*	2	0640	921	0.	*	2	2320	1421	0.	*	3	1600	1921	0.
1	1402	422	147.	*	2	0642	922	0.	*	2	2322	1422	0.	*	3	1602	1922	0.
1	1404	423	146.	*	2	0644	923	0.	*	2	2324	1423	0.	*	3	1604	1923	0.
1	1406	424	144.	*	2	0646	924	0.	*	2	2326	1424	0.	*	3	1606	1924	0.
1	1408	425	142.	*	2	0648	925	0.	*	2	2328	1425	0.	*	3	1608	1925	0.
1	1410	426	141.	*	2	0650	926	0.	*	2	2330	1426	0.	*	3	1610	1926	0.
1	1412	427	139.	*	2	0652	927	0.	*	2	2332	1427	0.	*	3	1612	1927	0.
1	1414	428	138.	*	2	0654	928	0.	*	2	2334	1428	0.	*	3	1614	1928	0.
1	1416	429	136.	*	2	0656	929	0.	*	2	2336	1429	0.	*	3	1616	1929	0.
1	1418	430	135.	*	2	0658	930	0.	*	2	2338	1430	0.	*	3	1618	1930	0.
1	1420	431	134.	*	2	0700	931	0.	*	2	2340	1431	0.	*	3	1620	1931	0.
1	1422	432	132.	*	2	0702	932	0.	*	2	2342	1432	0.	*	3	1622	1932	0.
1	1424	433	131.	*	2	0704	933	0.	*	2	2344	1433	0.	*	3	1624	1933	0.
1	1426	434	129.	*	2	0706	934	0.	*	2	2346	1434	0.	*	3	1626	1934	0.
1	1428	435	128.	*	2	0708	935	0.	*	2	2348	1435	0.	*	3	1628	1935	0.
1	1430	436	127.	*	2	0710	936	0.	*	2	2350	1436	0.	*	3	1630	1936	0.
1	1432	437	125.	*	2	0712	937	0.	*	2	2352	1437	0.	*	3	1632	1937	0.
1	1434	438	124.	*	2	0714	938	0.	*	2	2354	1438	0.	*	3	1634	1938	0.
1	1436	439	123.	*	2	0716	939	0.	*	2	2356	1439	0.	*	3	1636	1939	0.
1	1438	440	122.	*	2	0718	940	0.	*	2	2358	1440	0.	*	3	1638	1940	0.
1	1440	441	121.	*	2	0720	941	0.	*	3	0000	1441	0.	*	3	1640	1941	0.
1	1442	442	119.	*	2	0722	942	0.	*	3	0002	1442	0.	*	3	1642	1942	0.
1	1444	443	118.	*	2	0724	943	0.	*	3	0004	1443	0.	*	3	1644	1943	0.
1	1446	444	117.	*	2	0726	944	0.	*	3	0006	1444	0.	*	3	1646	1944	0.
1	1448	445	117.	*	2	0728	945	0.	*	3	0008	1445	0.	*	3	1648	1945	0.
1	1450	446	116.	*	2	0730	946	0.	*	3	0010	1446	0.	*	3	1650	1946	0.
1	1452	447	114.	*	2	0732	947	0.	*	3	0012	1447	0.	*	3	1652	1947	0.
1	1454	448	113.	*	2	0734	948	0.	*	3	0014	1448	0.	*	3	1654	1948	0.
1	1456	449	112.	*	2	0736	949	0.	*	3	0016	1449	0.	*	3	1656	1949	0.
1	1458	450	111.	*	2	0738	950	0.	*	3	0018	1450	0.	*	3	1658	1950	0.
1	1500	451	110.	*	2	0740	951	0.	*	3	0020	1451	0.	*	3	1700	1951	0.
1	1502	452	109.	*	2	0742	952	0.	*	3	0022	1452	0.	*	3	1702	1952	0.
1	1504	453	108.	*	2	0744	953	0.	*	3	0024	1453	0.	*	3	1704	1953	0.
1	1506	454	106.	*	2	0746	954	0.	*	3	0026	1454	0.	*	3	1706	1954	0.
1	1508	455	105.	*	2	0748	955	0.	*	3	0028	1455	0.	*	3	1708	1955	0.
1	1510	456	104.	*	2	0750	956	0.	*	3	0030	1456	0.	*	3	1710	1956	0.
1	1512	457	103.	*	2	0752	957	0.	*	3	0032	1457	0.	*	3	1712	1957	0.
1	1514	458	101.	*	2	0754	958	0.	*	3	0034	1458	0.	*	3	1714	1958	0.
1	1516	459	100.	*	2	0756	959	0.	*	3	0036	1459	0.	*	3	1716	1959	0.
1	1518	460	99.	*	2	0758	960	0.	*	3	0038	1460	0.	*	3	1718	1960	0.
1	1520	461	97.	*	2	0800	961	0.	*	3	0040	1461	0.	*	3	1720	1961	0.
1	1522	462	96.	*	2	0802	962	0.	*	3	0042	1462	0.	*	3	1722	1962	0.
1	1524	463	95.	*	2	0804	963	0.	*	3	0044	1463	0.	*	3	1724	1963	0.
1	1526	464	93.	*	2	0806	964	0.	*	3	0046	1464	0.	*	3	1726	1964	0.
1	1528	465	92.	*	2	0808	965	0.	*	3	0048	1465	0.	*	3	1728	1965	0.
1	1530	466	90.	*	2	0810	966	0.	*	3	0050	1466	0.	*	3	1730	1966	0.
1	1532	467	89.	*	2	0812	967	0.	*	3	0052	1467	0.	*	3	1732	1967	0.
1	1534	468	87.	*	2	0814	968	0.	*	3	0054	1468	0.	*	3	1734	1968	0.
1	1536	469	86.	*	2	0816	969	0.	*	3	0056	1469	0.	*	3	1736	1969	0.
1	1538	470	84.	*	2	0818	970	0.	*	3	0058	1470	0.	*	3	1738	1970	0.
1	1540	471	82.	*	2	0820	971	0.	*	3	0100	1471	0.	*	3	1740	1971	0.
1	1542	472	80.	*	2	0822	972	0.	*	3	0102	1472	0.	*	3	1742	1972	0.
1	1544	473	79.	*	2	0824	973	0.	*	3	0104	1473	0.	*	3	1744	1973	0.
1	1546	474	77.	*	2	0826	974	0.	*	3	0106	1474	0.	*	3	1746	1974	0.
1	1548	475	75.	*	2	0828	975	0.	*	3	0108	1475	0.	*	3	1748	1975	0.
1	1550	476	73.	*	2	0830	976	0.	*	3	0110	1476	0.	*	3	1750	1976	0.
1	1552	477	72.	*	2	0832	977	0.	*	3	0112	1477	0.	*	3	1752	1977	0.
1	1554	478	70.	*	2	0834	978	0.	*	3	0114	1478	0.	*	3	1754	1978	0.
1	1556	479	68.	*	2	0836	979	0.	*	3	0116	1479	0.	*	3	1756	1979	0.
1	1558	480	66.	*	2	0838	980	0.	*	3	0118	1480	0.	*	3	1758	1980	0.
1	1600	481	65.	*	2	0840	981	0.	*	3	0120	1481	0.	*	3	1800	1981	0.
1	1602	482	63.	*	2	0842	982	0.	*	3	0122	1482	0.	*	3	1802	1982	0.
1	1604	483	62.	*	2	0844	983	0.	*	3	0124	1483	0.	*	3	1804	1983	0.
1	1606	484	60.	*	2	0846	984	0.	*	3	0126	1484	0.	*	3	1806	1984	0.
1	1608	485	59.	*	2	0848	985	0.	*	3	0128	1485	0.	*	3	1808	1985	0.
1	1610	486	58.	*	2	0850	986	0.	*	3	0130	1486	0.	*	3	1810	1986	0.
1	1612	487	57.	*	2	0852	987	0.	*	3	0132	1487	0.	*	3	1812	1987	0.
1	1614	488	55.	*	2	0854	988	0.	*	3	0134	1488	0.	*	3	1814	1988	0.
1	1616	489	54.	*	2	0856	989	0.	*	3	0136	1489	0.	*	3	1816	1989	0.
1	1618	490	53.	*	2	0858	990	0.	*	3	0138	1490	0.	*	3	1818	1990	0.
1	1620	491	52.	*	2	0900	991	0.	*	3	0140	1491	0.	*	3	1820	1991	0.
1	1622	492	50.	*	2	0902	992	0.	*	3	0142	1492	0.	*	3	1822	1992	0.
1	1624	493	49.	*	2	0904	993	0.	*	3	0144	1493	0.	*	3	1824	1993	0.
1	1626	494	48.	*	2	0906	994	0.	*	3	0146	1494	0.	*	3	1826	1994	0.
1	1628	495	46.	*	2	0908	995	0.	*	3	0148	1495	0.	*	3	1828	1995	0.
1	1630	496	45.	*	2	0910	996	0.	*	3	0150	1496	0.	*	3	1830	1996	0.
1	1632	497	44.	*	2	0912	997	0.	*	3	0152	1497	0.	*	3	1832	1997	0.
1	1634	498	43.	*	2	0914	998	0.	*	3	0154	1498	0.	*	3	1834	1998	0.
1	1636	499	42.	*	2	0916	999	0.	*	3	0156	1499	0.	*	3	1836	1999	0.
1	1638	500	41.	*	2	0918	1000	0.	*	3	0158	1500	0.	*	3	1838	2000	0.
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PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	66.63-HR
+ 1681.	7.07	(CFS)	1217.	376.	135.	135.
		(INCHES)	3.957	4.891	4.891	4.891
		(AC-FT)	603.	746.	746.	746.

CUMULATIVE AREA = 2.86 SQ MI

1

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									
+		180	572.	4.37	113.	29.	10.	0.96		
	HYDROGRAPH AT									
+		168	396.	4.17	61.	15.	6.	0.50		
	2 COMBINED AT									

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+                    CO169     928.   4.23      174.      44.      16.     1.46
         ROUTED TO
+                     R171     915.   4.33      174.      44.      16.     1.46
+                                                                          3.77      4.33
         HYDROGRAPH AT
+                       92      78.   4.03       11.       3.       1.     0.09
         ROUTED TO
+                     DR92      73.   4.07       11.       3.       1.     0.09
+                                                                       1938.87      4.07
         ROUTED TO
+                     R161      64.   4.43       10.       3.       1.     0.09
+                                                                          0.82      4.43
         HYDROGRAPH AT
+                      160     406.   4.23       68.      17.       6.     0.55
         3 COMBINED AT
+                    CO173    1369.   4.30      252.      64.      23.     2.10
         ROUTED TO
+                     R175    1338.   4.43      252.      64.      23.     2.10
+                                                                          4.01      4.43
         HYDROGRAPH AT
+                      150     670.   4.20      111.      28.      10.     0.88
         HYDROGRAPH AT
+                       76     598.   4.27      110.      28.      10.     0.94
         ROUTED TO
+                     DR76     596.   4.30      110.      28.      10.     0.94
+                                                                       1855.71      4.30
         ROUTED TO
+                     R153     572.   4.50      110.      28.      10.     0.94
+                                                                          2.38      4.50
         3 COMBINED AT
+                    CO155    2452.   4.40      472.     119.      43.     3.92
         HYDROGRAPH AT
+                       72     124.   4.07       17.       4.       2.     0.14
         ROUTED TO
+                     DR72     122.   4.10       17.       4.       2.     0.14
+                                                                       1842.30      4.10
         HYDROGRAPH AT
+                       70      85.   4.03       11.       3.       1.     0.09
         ROUTED TO
+                     DR70      79.   4.10       11.       3.       1.     0.09
+                                                                       1835.45      4.10
         HYDROGRAPH AT
+                       68     372.   4.23       71.      18.       6.     0.60
         ROUTED TO
+                     DR68     371.   4.27       71.      18.       6.     0.60
+                                                                       1836.91      4.27
         3 COMBINED AT
+                    CO141     543.   4.20       98.      25.       9.     0.83
         ROUTED TO
+                     R145     527.   4.40       98.      25.       9.     0.83
+                                                                          2.07      4.40
         HYDROGRAPH AT
+                      144     261.   4.20       42.      10.       4.     0.34
         3 COMBINED AT
+                    CO147    3204.   4.37      612.     154.      56.     5.09
         ROUTED TO
+                     R149    3193.   4.43      612.     154.      56.     5.09
+                                                                          5.01      4.43
         HYDROGRAPH AT
+                       54     740.   4.23      141.      35.      13.     1.17
         ROUTED TO
+                      R55     729.   4.33      140.      35.      13.     1.17
+                                                                          2.42      4.33
         HYDROGRAPH AT
+                       56     490.   4.23       91.      23.       8.     0.75
         2 COMBINED AT
+                    CO57     1202.   4.30      231.      58.      21.     1.92
         ROUTED TO
+                      R59    1184.   4.40      230.      58.      21.     1.92
+                                                                          3.10      4.40
         HYDROGRAPH AT
+                       50     168.   4.13       28.       7.       3.     0.23
         2 COMBINED AT
+                    CO61     1314.   4.37      258.      65.      24.     2.16
         ROUTED TO
+                     DR61    1313.   4.40      258.      65.      24.     2.16
+                                                                       1843.50      4.40
         HYDROGRAPH AT
+                       46     812.   4.47      182.      46.      17.     1.63
         HYDROGRAPH AT
+                       42     410.   4.27       79.      20.       7.     0.63
         2 COMBINED AT
+                    CO47     1175.   4.40      261.      66.      24.     2.26
         ROUTED TO
+                     R49     1159.   4.57      260.      66.      24.     2.26
+                                                                          2.95      4.57
         HYDROGRAPH AT
```

+		48	374.	4.20	66.	16.	6.	0.42		
+	2 COMBINED AT	CO63	1439.	4.50	325.	82.	30.	2.68		
+	ROUTED TO	DR63	1424.	4.53	325.	82.	30.	2.68		
+									1844.06	4.53
+	2 COMBINED AT	CO65	2697.	4.47	582.	148.	53.	4.84		
+	ROUTED TO	R123	2688.	4.50	582.	148.	53.	4.84		
+									4.59	4.50
+	HYDROGRAPH AT	64	298.	4.20	52.	13.	5.	0.44		
+	ROUTED TO	DR64	297.	4.20	52.	13.	5.	0.44		
+									1834.67	4.20
+	ROUTED TO	R121	297.	4.23	52.	13.	5.	0.44		
+									2.25	4.23
+	2 COMBINED AT	CO127	2917.	4.47	634.	161.	58.	5.28		
+	ROUTED TO	R129	2863.	4.60	633.	161.	58.	5.28		
+									4.57	4.60
+	HYDROGRAPH AT	132	286.	4.23	50.	12.	4.	0.35		
+	2 COMBINED AT	CO132	3066.	4.60	682.	173.	62.	5.63		
+	2 COMBINED AT	CO133	6139.	4.50	1293.	327.	118.	10.72		
+	ROUTED TO	R137	6119.	4.57	1293.	327.	118.	10.72		
+									5.88	4.57
+	HYDROGRAPH AT	10	807.	4.33	160.	40.	15.	1.29		
+	ROUTED TO	R11	795.	4.40	160.	40.	15.	1.29		
+									3.30	4.40
+	HYDROGRAPH AT	16	522.	4.20	90.	23.	8.	0.65		
+	2 COMBINED AT	CO17	1263.	4.30	249.	63.	23.	1.94		
+	ROUTED TO	R19	1247.	4.43	248.	63.	23.	1.94		
+									3.65	4.43
+	HYDROGRAPH AT	20	912.	4.30	180.	45.	16.	1.50		
+	HYDROGRAPH AT	24	536.	4.30	105.	26.	10.	0.85		
+	3 COMBINED AT	CO25	2646.	4.37	531.	135.	49.	4.30		
+	ROUTED TO	R27	2581.	4.53	530.	135.	49.	4.30		
+									4.66	4.53
+	HYDROGRAPH AT	30	309.	4.40	63.	16.	6.	0.40		
+	2 COMBINED AT	CO31	2866.	4.53	592.	150.	54.	4.69		
+	ROUTED TO	DR31	2846.	4.57	592.	150.	54.	4.69		
+									1866.80	4.57
+	ROUTED TO	R113	2826.	4.63	592.	150.	54.	4.69		
+									5.49	4.63
+	HYDROGRAPH AT	32	85.	4.10	14.	3.	1.	0.08		
+	ROUTED TO	DR32	85.	4.10	14.	3.	1.	0.08		
+									1859.51	4.10
+	ROUTED TO	R111	82.	4.23	14.	3.	1.	0.08		
+									1.59	4.23
+	2 COMBINED AT	CO115	2879.	4.63	605.	154.	55.	4.77		
+	ROUTED TO	R117	2878.	4.63	605.	154.	55.	4.77		
+									5.55	4.63
+	HYDROGRAPH AT	34	858.	4.53	193.	48.	17.	1.13		
+	ROUTED TO	DR34	856.	4.53	193.	48.	17.	1.13		
+									1877.91	4.53
+	ROUTED TO	R107	851.	4.60	193.	48.	17.	1.13		
+									2.92	4.60
+	HYDROGRAPH AT	38	125.	4.07	21.	5.	2.	0.10		

+	ROUTED TO	DR38	123.	4.10	21.	5.	2.	0.10	
+									1878.17 4.10
+	ROUTED TO	R103	119.	4.20	21.	5.	2.	0.10	
+									1.69 4.20
+	2 COMBINED AT	CO105	926.	4.57	214.	54.	19.	1.23	
+	ROUTED TO	R109	917.	4.67	214.	54.	19.	1.23	
+									3.04 4.67
+	HYDROGRAPH AT	102	141.	4.17	27.	7.	2.	0.13	
+	HYDROGRAPH AT	112	235.	4.07	36.	9.	3.	0.22	
+	4 COMBINED AT	CO119	3976.	4.63	882.	223.	80.	6.35	
+	ROUTED TO	R118	3929.	4.73	881.	223.	80.	6.35	
+									5.58 4.73
+	HYDROGRAPH AT	122	473.	4.13	77.	19.	7.	0.49	
+	2 COMBINED AT	CO124	4130.	4.73	957.	242.	87.	6.84	
+	2 COMBINED AT	CO125	10057.	4.63	2245.	570.	205.	17.56	
+	HYDROGRAPH AT	106	358.	4.43	74.	19.	7.	0.45	
+	HYDROGRAPH AT	36	146.	4.13	25.	6.	2.	0.14	
+	ROUTED TO	DR36	144.	4.20	25.	6.	2.	0.14	
+									1904.19 4.20
+	ROUTED TO	R101	138.	4.57	25.	6.	2.	0.14	
+									1.74 4.57
+	ROUTED TO	R101A	134.	4.80	25.	6.	2.	0.14	
+									1.29 4.80
+	3 COMBINED AT	CO191	10499.	4.63	2345.	595.	214.	18.15	
+	ROUTED TO	R193	10434.	4.70	2344.	595.	214.	18.15	
+									4.26 4.70
+	HYDROGRAPH AT	192	438.	4.10	61.	15.	5.	0.52	
+	2 COMBINED AT	CO195	10554.	4.67	2403.	610.	220.	18.67	
+	ROUTED TO	R197	10460.	4.83	2402.	610.	220.	18.67	
+									4.10 4.83
+	HYDROGRAPH AT	198	224.	4.23	37.	9.	3.	0.42	
+	2 COMBINED AT	CO199	10532.	4.83	2438.	619.	223.	19.09	
+	DIVERSION TO	MAIN3	6764.	4.83	1374.	346.	124.	19.09	
+	HYDROGRAPH AT	SPLIT3	3768.	4.83	1063.	273.	98.	19.09	
+	ROUTED TO	R301	3699.	5.20	1062.	273.	98.	19.09	
+									3.49 5.20
+	HYDROGRAPH AT	216	85.	4.23	11.	3.	1.	0.20	
+	2 COMBINED AT	CO215	3705.	5.20	1073.	276.	99.	19.29	
+	DIVERSION TO	SPLIT4	560.	5.20	123.	31.	11.	19.29	
+	HYDROGRAPH AT	SPLT3	3144.	5.20	950.	245.	88.	19.29	
+	ROUTED TO	R323	3125.	5.37	950.	245.	88.	19.29	
+									3.56 5.37
+	HYDROGRAPH AT	218	91.	4.17	11.	3.	1.	0.17	
+	2 COMBINED AT	CO219	3127.	5.37	960.	248.	89.	19.46	
+	HYDROGRAPH AT	SPLIT4	560.	5.20	123.	31.	11.	0.00	
+	ROUTED TO	R321	555.	5.37	123.	31.	11.	0.00	
+									1.79 5.37
+	HYDROGRAPH AT	214	96.	4.20	12.	3.	1.	0.20	
+	2 COMBINED AT	CO217	559.	5.33	135.	34.	12.	0.20	

+	2 COMBINED AT	CO400	3685.	5.37	1095.	282.	102.	19.66	
+	ROUTED TO	DR400	2574.	6.00	938.	282.	102.	19.66	
+									1555.96 6.00
+	DIVERSION TO	DV501	2107.	6.00	524.	131.	47.	19.66	
+	HYDROGRAPH AT	DV400	467.	6.00	414.	151.	54.	19.66	
+	HYDROGRAPH AT	MAIN3	6764.	4.83	1374.	346.	124.	0.00	
+	DIVERSION TO	MAIN2	4645.	4.83	1036.	261.	94.	0.00	
+	HYDROGRAPH AT	SPLIT2	2119.	4.83	338.	85.	30.	0.00	
+	ROUTED TO	R318	1999.	5.30	338.	85.	30.	0.00	
+									2.50 5.30
+	HYDROGRAPH AT	220	88.	4.40	14.	3.	1.	0.24	
+	2 COMBINED AT	CO410	2017.	5.30	351.	88.	32.	0.24	
+	HYDROGRAPH AT	MAIN2	4645.	4.83	1036.	261.	94.	0.00	
+	DIVERSION TO	MAIN1	1204.	4.83	230.	57.	21.	0.00	
+	HYDROGRAPH AT	SPLIT1	3441.	4.83	807.	204.	73.	0.00	
+	ROUTED TO	R316	3384.	5.03	807.	204.	73.	0.00	
+									4.55 5.03
+	HYDROGRAPH AT	212	115.	4.20	15.	4.	1.	0.22	
+	2 COMBINED AT	CO208	3397.	5.03	822.	208.	75.	0.22	
+	DIVERSION TO	MN1	822.	5.03	78.	20.	7.	0.22	
+	HYDROGRAPH AT	SPLT1	2574.	5.03	744.	188.	68.	0.22	
+	HYDROGRAPH AT	210	414.	4.27	67.	17.	6.	0.64	
+	2 COMBINED AT	CO209	2677.	5.00	809.	205.	74.	0.86	
+	DIVERSION TO	SPLIT5	922.	5.00	274.	69.	25.	0.86	
+	HYDROGRAPH AT	SPLT1	1755.	5.00	535.	135.	49.	0.86	
+	ROUTED TO	R211	1735.	5.33	535.	135.	49.	0.86	
+									3.44 5.33
+	HYDROGRAPH AT	226	104.	4.30	15.	4.	1.	0.24	
+	2 COMBINED AT	CO430	1745.	5.33	549.	139.	50.	1.09	
+	HYDROGRAPH AT	230	300.	4.13	45.	11.	4.	0.36	
+	ROUTED TO	R231	283.	4.37	45.	11.	4.	0.36	
+									2.82 4.37
+	HYDROGRAPH AT	240	558.	4.27	95.	24.	9.	0.84	
+	HYDROGRAPH AT	232	243.	4.10	34.	8.	3.	0.26	
+	3 COMBINED AT	CO235	1033.	4.27	173.	43.	16.	1.46	
+	ROUTED TO	R237	1018.	4.37	173.	43.	16.	1.46	
+									3.15 4.37
+	HYDROGRAPH AT	244	130.	4.07	14.	3.	1.	0.19	
+	2 COMBINED AT	CO247	1085.	4.33	186.	47.	17.	1.65	
+	HYDROGRAPH AT	238	169.	4.27	23.	6.	2.	0.36	
+	HYDROGRAPH AT	SPLIT5	922.	5.00	274.	69.	25.	0.00	
+	ROUTED TO	R251	915.	5.17	273.	69.	25.	0.00	
+									3.53 5.17
+	2 COMBINED AT	CO255	934.	5.13	296.	75.	27.	0.36	
+	HYDROGRAPH AT	MAIN1	1204.	4.83	230.	57.	21.	0.00	
+	ROUTED TO	R203	1148.	5.23	230.	57.	21.	0.00	

```
+                                                                                                  2.90        5.23
          HYDROGRAPH AT
+                         MN1     822.   5.03      78.      20.       7.    0.00
          2 COMBINED AT
+                       CO207    1891.   5.10     308.      77.      28.    0.00
          ROUTED TO
+                        R205    1804.   5.47     308.      77.      28.    0.00
+                                                                                                  3.36        5.47
          HYDROGRAPH AT
+                         222     203.   4.40      31.       8.       3.    0.51
          2 COMBINED AT
+                       CO420    1825.   5.47     338.      85.      30.    0.51
          5 COMBINED AT
+                       CO500    6534.   5.37    1716.     433.     156.    3.86
          HYDROGRAPH AT
+                       DV501    2107.   6.00     524.     131.      47.    0.00
          2 COMBINED AT
+                       CO501    7508.   5.47    2240.     564.     203.    3.86
          ROUTED TO
+                       DR501    2906.   6.47    1997.     564.     203.    3.86
+                                                                                               1549.05        6.47
          DIVERSION TO
+                          DV2     285.   6.47     179.      50.      18.    3.86
          HYDROGRAPH AT
+                        DV3-6    2622.   6.47    1818.     515.     185.    3.86
          DIVERSION TO
+                          DV3     955.   6.47     647.     179.      65.    3.86
          HYDROGRAPH AT
+                        DV4-6    1667.   6.47    1171.     335.     121.    3.86
          DIVERSION TO
+                          DV4     332.   6.47     231.      68.      24.    3.86
          HYDROGRAPH AT
+                        DV5-6    1335.   6.47     940.     268.      96.    3.86
          DIVERSION TO
+                          DV5     332.   6.47     233.      68.      24.    3.86
          HYDROGRAPH AT
+                          DV6    1003.   6.47     707.     200.      72.    3.86
          HYDROGRAPH AT
+                          DV5     332.   6.47     233.      68.      24.    0.00
          ROUTED TO
+                          R2b     330.   7.40     231.      68.      24.    0.00
+                                                                                                 88.71        7.40
          HYDROGRAPH AT
+                           2B     234.   4.93      58.      15.       5.    0.65
          2 COMBINED AT
+                         cp2B     338.   7.30     250.      82.      30.    0.65
          ROUTED TO
+                           5R     338.   7.50     250.      82.      30.    0.65
+                                                                                              1412.82        7.50
          HYDROGRAPH AT
+                          DV3     955.   6.47     647.     179.      65.    0.00
          ROUTED TO
+                         R1b1     953.   6.90     646.     179.      65.    0.00
+                                                                                                 84.04        6.90
          HYDROGRAPH AT
+                          DV4     332.   6.47     231.      68.      24.    0.00
          ROUTED TO
+                         R1b2     331.   7.23     230.      68.      24.    0.00
+                                                                                                 67.90        7.23
          2 COMBINED AT
+                        comDV    1281.   7.00     874.     247.      89.    0.00
          ROUTED TO
+                         R1b3    1279.   7.23     873.     247.      89.    0.00
+                                                                                                 29.09        7.23
          HYDROGRAPH AT
+                           1B     631.   5.10     185.      47.      17.    2.20
          3 COMBINED AT
+                           3C    1681.   7.07    1217.     376.     135.    2.86

*** NORMAL END OF HEC-1 ***
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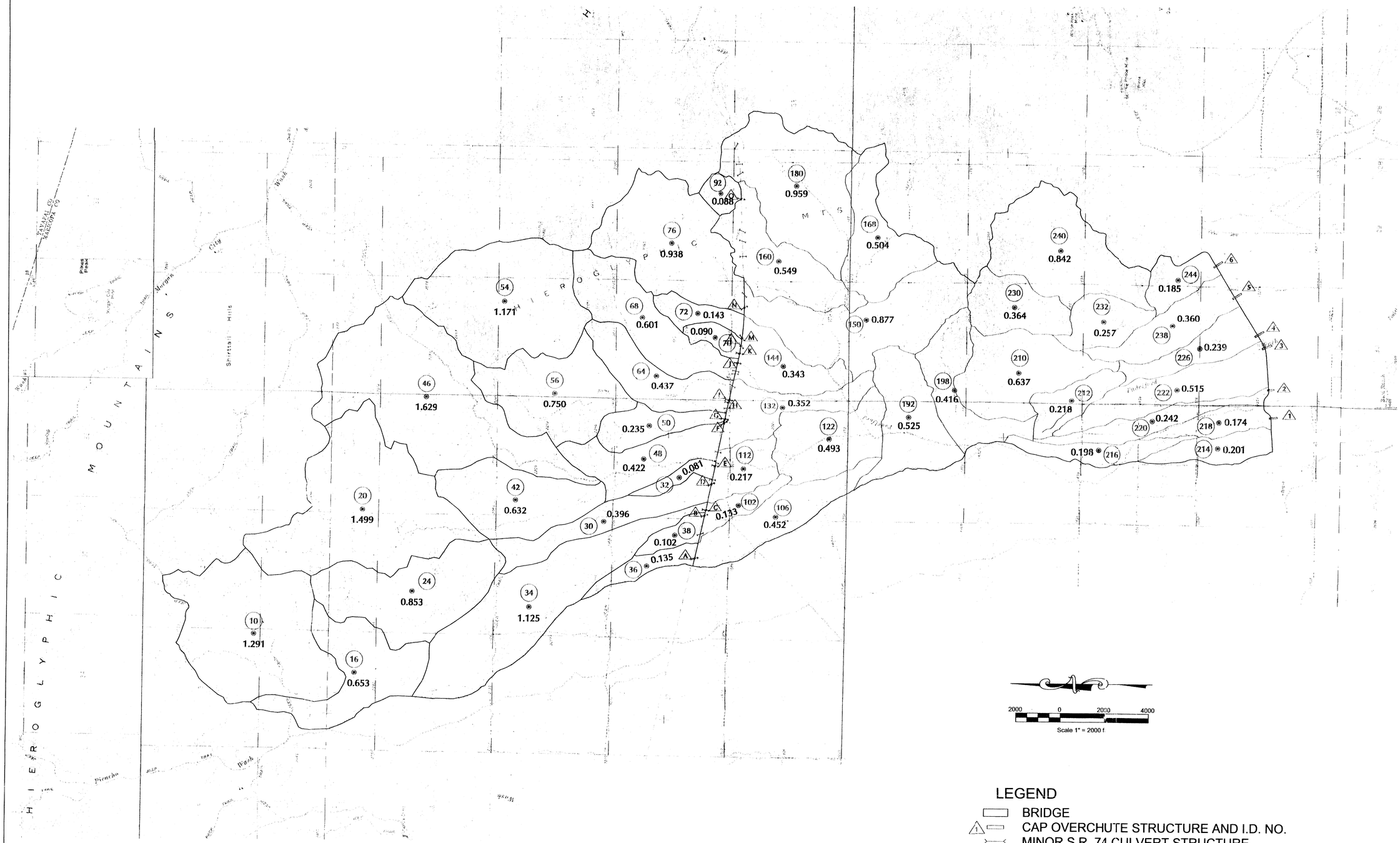
Appendix 3. Land Use Attribute Table for Green-Ampt Parameter Estimation

ID	Landuse Types	Surface Retention Loss (IA in inches)	Impervious Area in Percent	Vegetation on Cover in Percent	Ancedent Moisture Condition
110	Rural Residential (<= 1/5 du per acre)	0.3	5	30	normal
120	Estate Residential (1/5 du per acre to 1 du per acre)	0.3	5	30	normal
130	Large Lot Residential - Single Family (1 du per acre to 2 du per acre)	0.3	15	50	normal
140	Medium Lot Residential - Single Family (2-4 du per acre)	0.25	30	50	normal
150	Small Lot Residential - Single Family (4-6 du per acre)	0.25	30	50	normal
160	Very Small Lot Residential - Single Family (>6 du per acre-includes mobile home	0.25	40	50	normal
170	Medium Density Residential - Muli Family (5-10 du per acre)	0.25	45	50	normal
180	High Density Residential - Multi Family (10-15 du per acre)	0.25	45	50	normal
190	Very High Density Residential - Multi Family (> 15 du per acre)	0.25	45	50	normal
200	General Commercial (Commercial where no detail available)	0.1	80	60	normal
210	Specialty Commercial (<=50,000 sq. ft.)	0.1	80	65	normal
220	Neighborhood Commercial (50,000 to 100,000 sq. ft.)	0.1	80	65	normal
230	Community Commercial (100,000 to 500,000 sq. ft.)	0.1	80	75	normal
240	Regional Commercial (500,000 to 1,000,000 sq. ft.)	0.1	80	65	normal
250	Super-Regional Commercial (>= 1,000,000 sq. ft.)	0.1	80	70	normal
300	General Industrial (Industrial where no detail available)	0.15	55	60	normal
310	Warehouse/Distribution Centers	0.1	80	75	normal
320	Industrial	0.15	55	60	normal
400	Office General (Office where no detail available)	0.1	80	75	normal
410	Office Low Rise (1-4 stories)	0.1	80	75	normal
420	Office Mid Rise (5-12 stories)	0.1	80	75	normal
430	Office High Rise (13 stories or more)	0.1	80	75	normal
510	Tourist and Visitor Accommodations (Hotels, motels and resorts)	0.1	80	75	normal
520	Educational (Public schools, private schools and universities)	0.29	45	80	normal
530	Institutional (Includes hospitals and churches)	0.1	80	75	normal
540	Cemeteries	0.1	5	90	normal
550	Public Facilities (Includes community centers, power sub-stations, libraries, ci	0.1	80	75	normal
560	Special Events (Includes stadiums, sports complexes and fairgrounds)	0.1	80	75	normal
570	Other Employment - low (Proving grounds and land fills)	0.1	80	75	normal
580	Other Employment - medium	0.1	80	75	normal
590	Other Employment - high	0.1	80	75	normal
600	General Transportation (Transportation where no detail available)	0.1	80	75	normal
610	Transportation (Includes railroads, railyards, transit centers and freeways)	0.1	80	75	normal
620	Airports (Includes public use airports)	0.15	55	60	normal
700	General Open Space (Open space where no detail available)	0.1	5	90	normal
710	Active Open Space (Includes parks)	0.1	5	90	normal
720	Golf courses	0.1	5	90	normal
730	Passive Open Space (Includes mountain preserves and washes)	0.1	0	90	normal
740	Water	0	0	0	wet
750	Agriculture	0.5	0	85	normal
810	Business Park (Includes enclosed industrial, office or retail in a planned envir	0.1	80	75	normal
900	Vacant (Existing land use database only)	0.35	0	25	dry

Appendix 4. Workmaps from Padelford Wash Hydrology Study (A-N West Inc., 2002)



TOTAL WATERSHED DRAINAGE BDRY. = 23.535 SQ.ML.

LEGEND

- BRIDGE
- CAP OVERCHUTE STRUCTURE AND I.D. NO.
- MINOR S.R. 74 CULVERT STRUCTURE
- SIGNIFICANT S.R. 74 CULVERT AND I.D.
- (112) DRAINAGE SUBAREA I.D.
- CENTRIODS
- 0.867 SUBAREA SIZE SQUARE MILES
- SUBAREA DRAINAGE BDRY.
- TOTAL WATERSHED DRAINAGE BDRY.
- DRAINAGE / FLOWPATHS
- STUDY WASHES

CALL TWO WORKING DAYS BEFORE YOU DIG
263-1100
1-800-STAKE-IT
(OUTSIDE MARICOPA COUNTY)

NO.	DATE	DESCRIPTION	BY

Registered Professional Engineer (Civil) CERTIFICATE NO. 15290 GREGORY A. SCHIELKE Date Signed 1-17-01 ARIZONA, U.S.A.

A-N WEST INC.
Consulting Engineers
7600 N. 15th Street, Suite 200
Phoenix, Arizona 85020
(602) 861-1000
phoenix@anwest.com

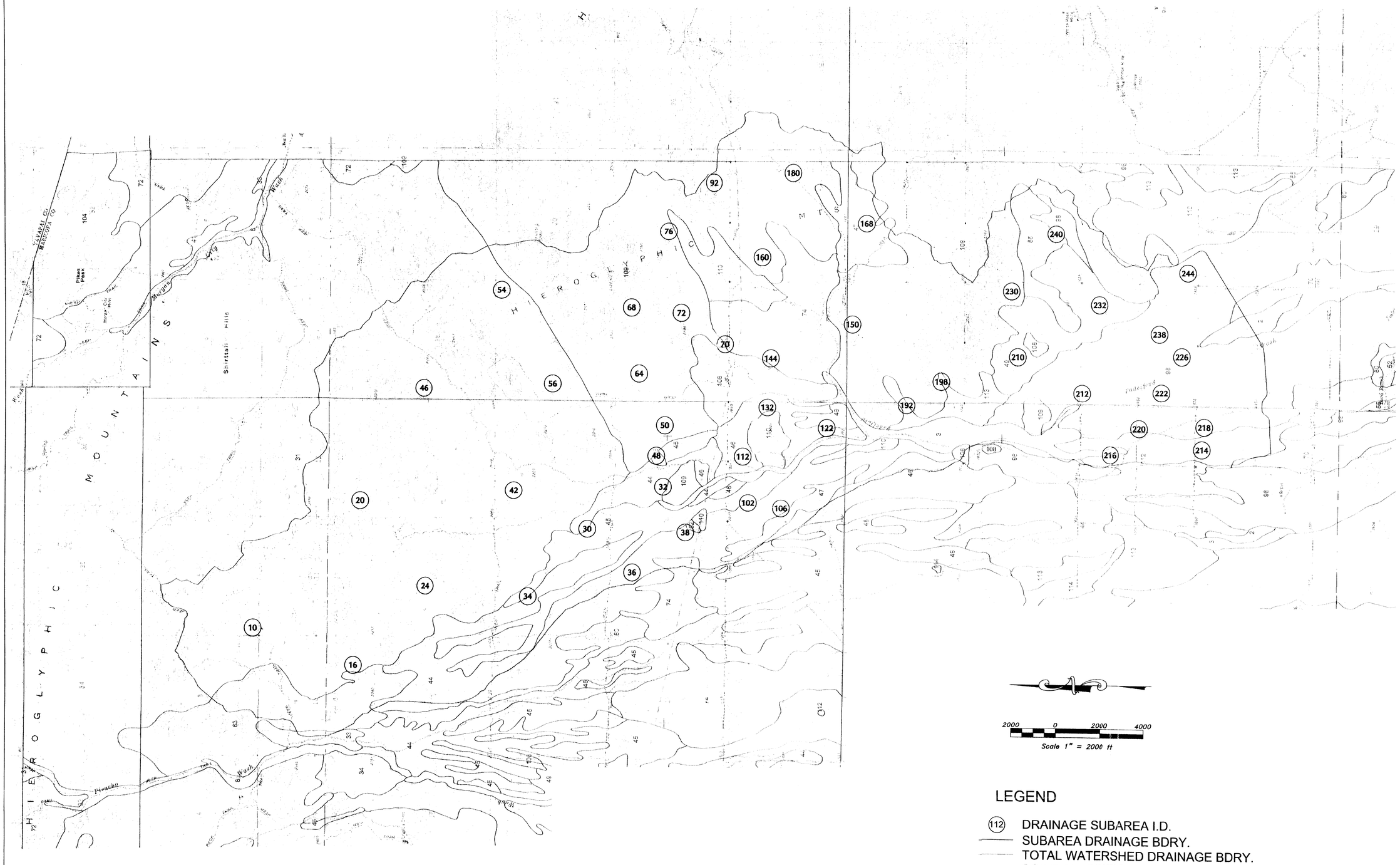
PROJECT TITLE
PADELFORD WASH FLOOD PLAIN DELINEATION STUDY
F.C.D. NO. 99-12

SHEET TITLE
EXHIBIT 1 - WATERSHED MAP
PADELFORD WASH FLOOD PLAIN DELINEATION STUDY

JOB NO.	7158-07	DESIGN	XXX
DWG. ID.	71580TMSTR	DRAWN	XXX
DATE	2/15/00	CHECK	XXX

SCALE
HORIZ. 1"=2000'
VERT. N/A

SHEET 1 OF 1



LEGEND

- (112) DRAINAGE SUBAREA I.D.
- SUBAREA DRAINAGE BDRY.
- TOTAL WATERSHED DRAINAGE BDRY.
- SOILS CLASSIFICATION BDRY.
- 31 SOILS CLASSIFICATION I.D.

TOTAL WATERSHED DRAINAGE BDRY. = 23.523 SQ.ML.

CALL TWO WORKING DAYS BEFORE YOU DIG
263-1100
1-800-STAKE-IT
(OUTSIDE MARICOPA COUNTY)

NO.	DATE	DESCRIPTION	BY

Registered Professional Engineer (Civil) CERTIFICATE NO. 25381 GREGORY A. SCHIELKE Date Signed ARIZONA, U.S.A.

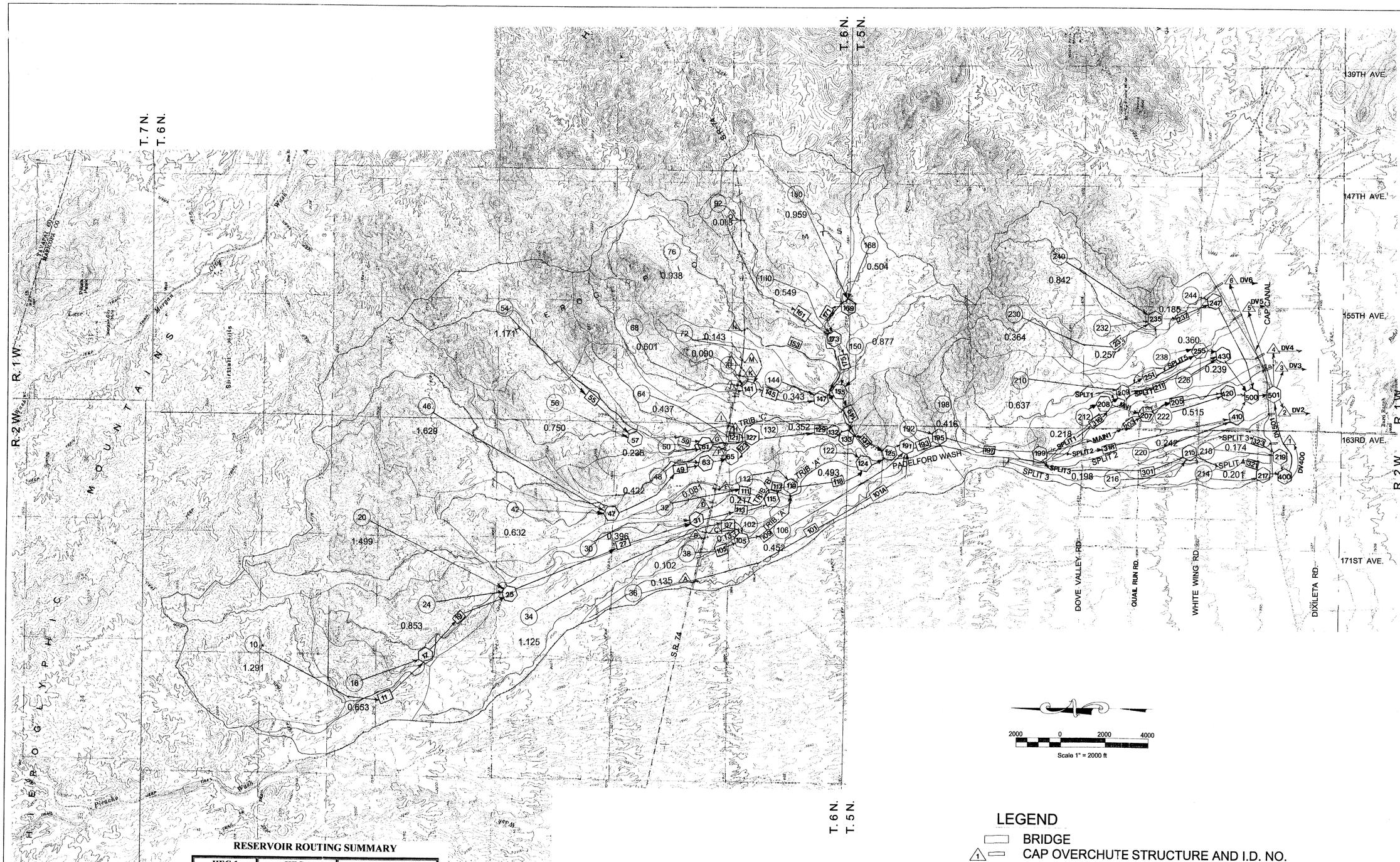
A-N WEST INC.
Consulting Engineers
7600 N. 15th Street, Suite 200
Phoenix, Arizona 85020
(602) 861-2200
phoenix@anwest.com

PROJECT TITLE
PADELFORD WASH FLOOD PLAIN DELINEATION STUDY
F.C.D. NO. 99-12

SHEET TITLE
EXHIBIT 2 - SOILS MAP
PADELFORD WASH FLOOD PLAIN DELINEATION STUDY

JOB NO.	7158-07	DESIGN	GAS	SCALE
DWG. ID.	715807XH02	DRAWN	CMB	HORIZ. 1"=2000'
DATE	9/14/00	CHECK	XXX	VERT. N/A

SHEET 1 OF 1



RESERVOIR ROUTING SUMMARY

HEC-1 INFLOW I.D.	HEC-1 OUTFLOW I.D.	STRUCTURE I.D.
36	DR 36	A
38	DR 38	B
34	DR 34	C
CO31	DR 31	D
32	DR 32	E
CO63	DR 63	F
CO61	DR 61	G
64	DR 64	H AND I
68	DR 68	J
70	DR 70	K AND L
72	DR 72	M
76	DR 76	N
92	DR 92	0
400	DR 400	1
500	DR 501	2 - 6

TOTAL WATERSHED DRAINAGE BDRY. = 23.535 SQ.ML.

LEGEND

- BRIDGE
- CAP OVERCHUTE STRUCTURE AND I.D. NO.
- MINOR S.R. 74 CULVERT STRUCTURE
- SIGNIFICANT S.R. 74 CULVERT AND I.D.
- (112) DRAINAGE SUBAREA I.D.
- 0.867 SUBAREA SIZE SQUARE MILES
- SUBAREA DRAINAGE BDRY.
- TOTAL WATERSHED DRAINAGE BDRY.
- DRAINAGE / FLOWPATHS
- STUDY WASHES
- (173) **COMBINE HYDROGRAPHS AND I.D.NO.**
- [171] **ROUTE HYDROGRAPH AND I.D.NO.**

CALL TWO WORKING DAYS BEFORE YOU DIG
263-1100
1-800-STAKE-IT
(OUTSIDE MARICOPA COUNTY)

NO.	DATE	DESCRIPTION	BY
	2/02/01	REVISED	

Registered Professional Engineer (Civil) CERTIFICATE NO. 15290 GREGORY A. SCHUELKE Date Signed 2-2-01 ARIZONA, U.S.A.

A-N WEST INC.
Consulting Engineers
7600 N. 15th Street, Suite 200
Phoenix, Arizona 85020
(602) 957-2200
phoenix@anwest.com

PROJECT TITLE
PADELFORD WASH FLOOD PLAIN DELINEATION STUDY
F.C.D. NO. 99-12

SHEET TITLE
EXHIBIT 3 - HEC-1 SCHEMATIC MAP
PADELFORD WASH FLOOD PLAIN DELINEATION STUDY

JOB NO.	7158-07	DESIGN	XXX
DWG. ID.	715807MSTR	DRAWN	XXX
DATE	2/15/00	CHECK	XXX

SCALE: HORIZ. 1"=2000' VERT. N/A

SHEET 1 OF 1

Appendix 5. CD: HEC-1 files and WMS 6.1 files