# BUCKEYE AREA DRAINAGE MASTER PLAN

FCD 2004CO58

## EXISTING CONDITIONS HYDROLOGY UPDATE

Prepared For:

Flood Control District of Maricopa County

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Prepared By:

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March 2008

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## ELECTRONIC FILES

Electronic files are contained on a DVD at the back of the report.

# BUCKEYE AREA DRAINAGE MASTER PLAN
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## I. INTRODUCTION

### A. Purpose of Memo

Based on a comparison of observed current conditions to the land use exhibits in the Buckeye/Sun Valley ADMS, there is a significant portion of the area that does not reflect recent land use changes. Most of the area was modeled using either an agriculture or vacant land use and has now changed to a residential or commercial land use. The area affected represents approximately 14% of the land area within the ADMS modeling area defined as Area 1. A more detailed description of the ADMS modeling areas is included later in this report. The District has requested that the existing conditions model be updated to reflect current conditions based on a combination of observed field conditions and 2007 aerial photography. In addition to updating the existing conditions model with land use changes, the models will also be modified to account for Buckeye's 100-year, 2-hour retention requirement. The S-Graph type for each sub-basin was also reviewed and updated based on current land uses.

### B. Update Methodology

To facilitate this and future updates, the computer program DDMSW ver. 3.3.2 is utilized. DDMSW uses HEC-1 ver. 4.1 for the model runs. This will enable future users to update the model without needing specialized, proprietary software such as WMS. The modeling includes updates to the 100-yr 6-hr, 100-yr 24-hr, 10-yr 6-hr, and 10-yr 24-hr models for Area-1 and Area-2. Area-2 is included in this update for use in developing flows for drainage facility design as part of the ADMP, even though no significant land use changes have occurred in Area-2.

The update includes the following elements:

**Land Use Update**

Using the MAG 2005 land use as a starting point, the land use is updated to reflect current conditions based on 2007 aerial photography (Flight date: Oct-Nov 2006) provided by the District. In order to be considered as existing, construction must be underway as evidenced in the aerial photo or by field investigations conducted on January 30, 2007. Land use defaults are provided by the FCDMC. ArcGIS is utilized to determine the land use make-up for each sub-basin.

**Soils and Sub-basin Data**

The existing soils and sub-basin data is also integrated into the DDMSW model to have a complete DDMSW model database.

**Existing Model Conversion & Routing**

The existing HEC-1 model code is converted to work with DDMSW. The existing routing structure remains un-changed except where warranted due to development.

**Retention Basin Update**

Retention basin information, collected from drainage reports, is coded into the HEC-1 using divert statements. The volume provided in the drainage report is reduced to be 80% effective to account for grading differences. Retention in developing areas that did not have a drainage report available will be accounted for using FCDMC criteria by assuming the required

retention volume calculation over the entire developed area. If the developing area from the drainage report was greater than 50% of the sub-basin area, the retention volume specified in the report was used, otherwise, the retention volume equation was used.

## *II.* THE MODELS

### *A. Area 1 – Buckeye Area*

The HEC-1 model for Area 1 covers the area south of the Buckeye Flood Retarding Structures (FRSs) and extends to the Gila River. The area is bounded on the east and west by Dean and Johnson Roads respectively. This watershed has an approximate area of 85 square miles. This is the most complicated of the drainage areas due to the numerous structures within it. To avoid confusion, it should be noted that one of the major structures within Area 1 is the Buckeye Water Conservation and Drainage District (BWCDD) main canal. At the time of the ADMS modeling effort, this canal was referred to as the Buckeye Irrigation District (BIC or BID) Canal. The major structures within the sub-watershed include:

- I-10 Freeway
- State Route 85
- Union Pacific Railroad (UPRR)
- Roosevelt Irrigation District (RID) Canal, and
- Buckeye Irrigation District (BIC or BID) Canal

As part of the ADMS hydrology modeling efforts, the RID and BIC Canals were hydraulically modeled using HEC-RAS. A portion of the ADMS report is included below to describe this analysis:

> *Since the Roosevelt Irrigation District (RID) and Buckeye Water Conservation & Drainage District (BID) canals cross the entire watershed from east to west, the runoff concentrated from basins north of each the RID and BID canal may be intercepted by the canals and overtop the north bank. A joint HEC-1/unsteady flow HEC-RAS model was developed in order to link the sub-basins above the RID to the sub-basins between the RID and BID and below the BID, taking into consideration the effects that the RID and BID have on routing the discharge in Area 1.*

Area 1 was broken into six HEC-1 modeling areas with a naming convention based on divisions East and West of SR85 and the areas between the FRS structures, the Roosevelt Canal, the Buckeye Canal, and the Gila River. For instance, the area West of SR85 and between the Roosevelt Canal and the Buckeye Canal is called "RBW" for Roosevelt – Buckeye – West. The six modeling areas in Area 1 are named, FRW, RBW, BGW, FRE, RBE, and BGE.

### *B. Area 2 - Hassayampa Area*

This area is bounded on the north by Interstate-10, Johnson Road on the east and the Hassayampa River on the south and west. The watershed drains directly into the Hassayampa River. The watershed covers approximately 12 square miles. The predominant land use in this area is natural desert with washes that are incised with steep channel slopes. This area has very minor differences in land use from 2000 to the 2005 MAG land use coverage.

The Hydrology & Hydraulics Modeling Map, **Figure II-1** shows the watersheds for Areas 1 and 2 along with the two HEC-RAS model reaches. Area 1 is further broken down into six modeling areas and Area 2 is modeled as a single watershed for a total of seven HEC-1 modes.

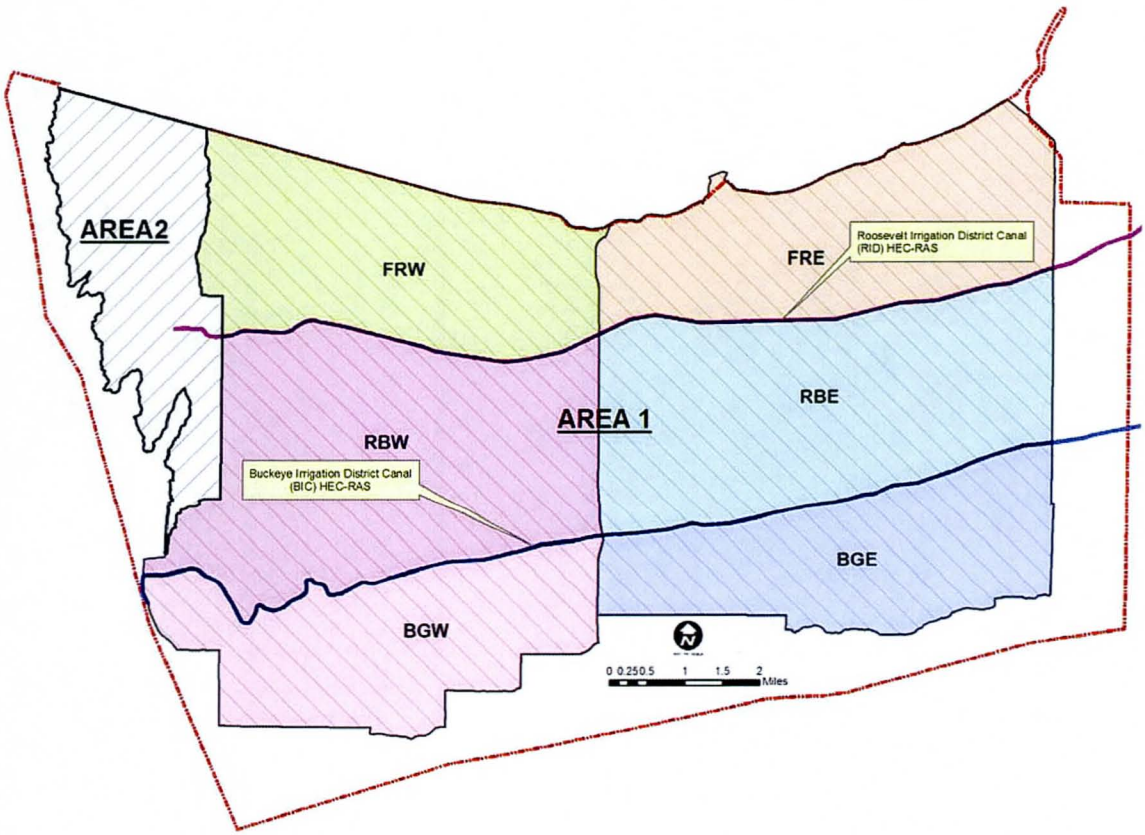


**Figure II-1 Hydrology & Hydraulics Modeling Map**

## *III.* HYDROLOGY UPDATE

### *A. Model Development*

The hydrology is developed by copying sub-basin data from the ADMS hydrology model into DDMSW to form a "base file" for the entire study area. Other modifications include adding appropriate KK record identifiers for the DDMSW update, adding new development retention diversions, and adding comments where needed. The KK record identifiers are used by DDMSW to identify whether a KK record should be updated as a BASIN, ROUTE, COMBINE, DIVERT, etc.

### *B. Land Use Update*

With the assistance of 2007 aerial photography and field investigations, the land use is updated from the MAG 2005 land use to reflect current conditions. ArcGIS is utilized to determine the land use make-up for each sub-basin and the results are imported into DDMSW.

S-Graphs are also revisited and updated accordingly. The dominate land use for a given sub-basin determines the type of S-Graph to be used. The three types of S-graphs used in the area are Agricultural, Desert Rangeland & Phoenix Valley.

In addition, certain sub-basin XKSAT values were hard coded to match those used in the original ADMS models at the request of FCDMC. Staff at FCDMC included the following explanation for this modification:

*Based on Maricopa County Drainage Manual (Hydrology), the soils' XKSAT values should be adjusted based on the vegetation cover percentages for Hydraulic Soil Groups B, C, and D with XKSAT < 0.4 inch/hour. When XKSAT >= 0.4 inches, the XKSAT values should not be adjusted. Since the vegetation cover percentages are based on the land use data such as GIS shape files, the soil GIS shape file must be intersected with the land use GIS coverage to estimate the average vegetation cover over different land uses for each soil type with the sub-basin. For example, consider a simple case where a sub-basin has two soil types (soil X and soil Y) and three land use types, and soil X's XKSAT = 0.2 and soil Y's XKSAT = 0.5. It is assumed that each soil has those three land uses. Before log-averaging the XKSAT values over the two soil types, one should adjust the XKSAT for each of the two soil types based on the vegetation cover. However, the vegetation cover for each soil is from the three land uses, which can be estimated by area-averaging the vegetation cover percentages over the three land uses for each soil. Since soil X's XKSAT =0.2 and is less than 0.4, it should be adjusted to a value say 0.3 based on a certain vegetation cover. Since soil Y's XKSAT = 0.5 and greater than 0.4, it should not be adjusted. The final XKSAT value for this sub-basin should be computed by area-log-averaging 0.3 and 0.5.*

*As can be seen, it is necessary to estimate area percentage of each land use within one soil. This requires the intersection of soil and land use GIS shape files. Within WMS, the computation of XKSAT is based on small grids. The XKSAT estimation process as discussed above is performed for each grid. As long as the grid size is small enough, the XKSAT estimation within WMS does exactly what is required in the Drainage Manual. WMS generates a default grid size called computation step, which is generally small enough for estimating XKSAT. One may perform some sensitive analysis by decreasing the grid size to see if the XKSAT values become insensitive to the grid size.*

*DDMSW does not adjust the XKSAT for each soil type, instead, it area-log-averages the XKSAT values over all soil types first to get an averaged value. Then, depending upon whether or not the averaged value is greater than 0.4, the software will adjust the final XKSAT. The adjustment is based on the averaged vegetation cover for all land uses for the entire sub-basin. It should be noted that WMS adjusts the XKSAT for the individual soil types before the area-log-averaging process while DDMSW adjusts the averaged XKSAT value after the area-log-averaging process. Two software will generate different final XKSAT values when there are a lot of soils with XKSAT > 0.4 inch/hr. For a sub-basin consisting of many soils with XKSAT >= 0.4 inch/hour, WMS will yield a more accurate estimate for the final XKSAT values than DDMSW does. However, since such soils are not very common in Maricopa County, DDMSW still gives good estimates for most areas in Maricopa County. For Sun Valley ADMS/ADMP, WMS should be used for the areas where there are many soils with XKSAT > 0.4 inches/hr and agricultural areas with high vegetation cover percentages.*

### C. Update for Retention

The HEC-1 input models from the ADMS are updated to include diversions to represent the appropriate amount of retention volume stored within each sub-basin. Retention volumes were obtained from a limited number of available drainage reports. For developing areas or areas without a report, volumes were calculated using the equation V=C(P/12)A, where the 'C' value was determined as the average value for the Medium Density Residential (MDR) land use in the drainage manual (0.71), the 100-year, 2-hour rainfall depth, 'P' was determined to be 2.8 inches from the Isopluvial maps in the drainage manual, and 'A' was the anticipated disturbed area in acres for each developed area on a sub-basin basis. The calculated retention amount was reduced by 20% and coded into the HEC-1model as a diversion.

### *D. Update for Routing*

Routing, Storage, and Diversion data from each of the 7 modeling areas was added to the appropriate DDMSW major basin model. No major changes to the ADMS routing reaches were identified, so the DDMSW database was updated using data from the ADMS.

The rainfall, soils, land use, and sub-basin data was entered into individual "Major Basins" within the DDMSW base model. Major Basins were set up for the 7 model areas: BGE, BGW, FRE, FRW, RBE, RBW & Area-2. Each Major Basin contains its own input HEC-1 model that is updated and executed within DDMSW.

After DDMSW updates and runs the HEC-1 models, they are then run in conjunction with the RID/BIC HEC-RAS model to develop a DSS file for both the 100-year 6-hour and 24-hour the 10-year 6-hour and 24-hour storms. This process has been described in the ADMS AREA 1 hydrology report as follows:

> *The HEC-1 and unsteady HEC-RAS models were interconnected by using Data Storage System (DSS) output functions. The combined models were set to update the HEC-1 hydrology and HEC-RAS hydraulics automatically. HEC-1 files were all executed .... Links between hydrology and hydraulic models were built in HEC-1 (ZR, ZW records) and HEC-RAS files via DSS files.*

Tables showing the required retention calculations, land use default parameters, and peak flow comparisons with the ADMS are included in **Appendix A**. Exhibits showing the **Updated Land Use**, **HEC-1 Schematic** and **ADMP & ADMS S-graphs** are shown in Appendix B.

## *IV.* RESULTS

### *A. Modeling Issues Encountered*

There were a number of items that were requested to be hard-coded to match parameters determined for the ADMS models. It should be noted that certain parameters such as Kn values, S-graph types, and XKSAT values were entered as custom values to match the values determined in the ADMS models instead of using those values determined by DDMSW. This was done at the direction of FCDMC to utilize the prior findings from the ADMS hydrologic evaluation.

Other issues to be aware of include hard coding changes that were required due to the use of DDMSW. In order for the original ADMS rating curves to be used in the ADMP update models, the HEC-1 code had to be modified so that DDMSW did not try to update the models. This was accomplished by removing the "Storage" entry from the KK record that DDMSW automatically inserts when a HEC-1 input model is imported into DDMSW. Another modification that was made after the DDMSW update and execution was completed was to change the IT record to match the ADMS IT record. DDMSW automatically changes the model start time and date to be 1JAN99 and 1200, and this needs to be 02JAN94 and 0, to match the ADMS model start time and work correctly with HEC-RAS.

DDMSW uses a single HEC-1 input file for each Major Basin area for each storm duration. For instance, the BGE major basin modeling area has a single HEC-1 input file for both the 100-year, 6-hour storm and the 10-year, 6-hour storm. DDMSW updates the rainfall, unit hydrographs, and basin parameters for the appropriate return period, however, certain ID records and model descriptions at the beginning of the HEC-1 model are required to be adjusted after the DDMSW model updates are completed to distinguish between the two return periods. The last change

that was made was to modify the ZR and ZW records in each major basin model for the 10 year models. This is necessary for the models to run correctly with the HEC-RAS unsteady model.

After the ID, IT, ZR, ZW, and model description notes are modified, the HEC-1 files are then ready to be run with HEC-RAS.

### *B. Model Results*

Many of the HEC-1 stations report a flow that is significantly higher than reported in the ADMS. This is attributable to the change in land use from either Agricultural or Open Desert to a Residential Development condition.

The executed HEC-1 flow results are compared to the original ADMS results in the comparison tables included in **Appendix A**. The DDMSW, HEC-1 and HEC-RAS input and output files are included electronically on a CD at the back of this report.

## *V.* REFERENCES


Flood Control District of Maricopa County, Engineering Division, *Drainage Design Manual for Maricopa County, Arizona Volume I, Hydrology, January 1, 1995.*

Flood Control District of Maricopa County Storm Water Management System Version 3.3.2, Copyright KVL Consultants, Inc. and FCDMC.

Entellus, *Buckeye/Sun Valley ADMS, 2002CO27, Pilot Agricultural Study*, February 2005.

PBS&J, *Buckeye/Sun Valley ADMS, FCD 2002CO27, Technical Data Notebook – Vol III-A: Area 1 Hydrology Report*, August 2006.

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Project Engineering Consultants, Ltd., *Buckeye Candidate Assessment Report*, June 2004

U.S. Army Corps of Engineers, *HEC-1 ver. 4.1, Flood Hydrograph Package, Users Manual, June 1998.*.

URS, *Loop 303 Corridor/White Tanks ADMP Update*, May 2005.

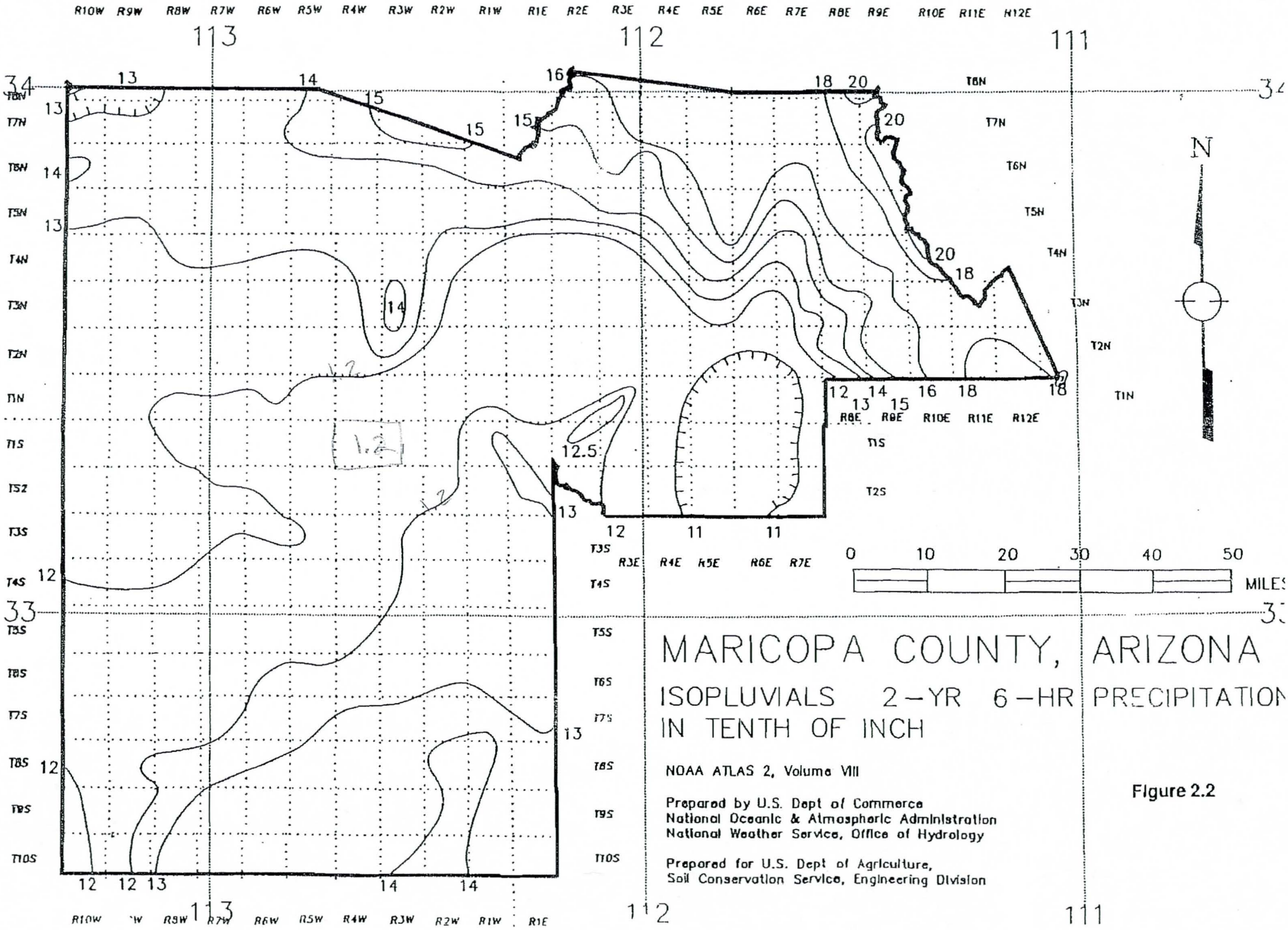
CVL, Inc., Preliminary Drainage Report for Monte Verde, August 16, 2006.

RBF Consulting, Preliminary Drainage Report for Bentridge, August 14, 2006.

RBF Consulting, Final Drainage Report for Riata West, May 10, 2006.

# Appendix A

- Isopluvial Maps
- Table 5.6 – S-Graphs and Kn Values
- Parameter Summary Tables
- Retention Summary Table


MARICOPA COUNTY, ARIZONA
ISOPLUVIALS 2-YR 6-HR PRECIPITATION
IN TENTH OF INCH
NOAA ATLAS 2, Volume VIII
Prepared by U.S. Dept of Commerce
National Oceanic & Atmospheric Administration
National Weather Service, Office of Hydrology
Prepared for U.S. Dept of Agriculture,
Soil Conservation Service, Engineering Division
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MILES
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Figure 2.2

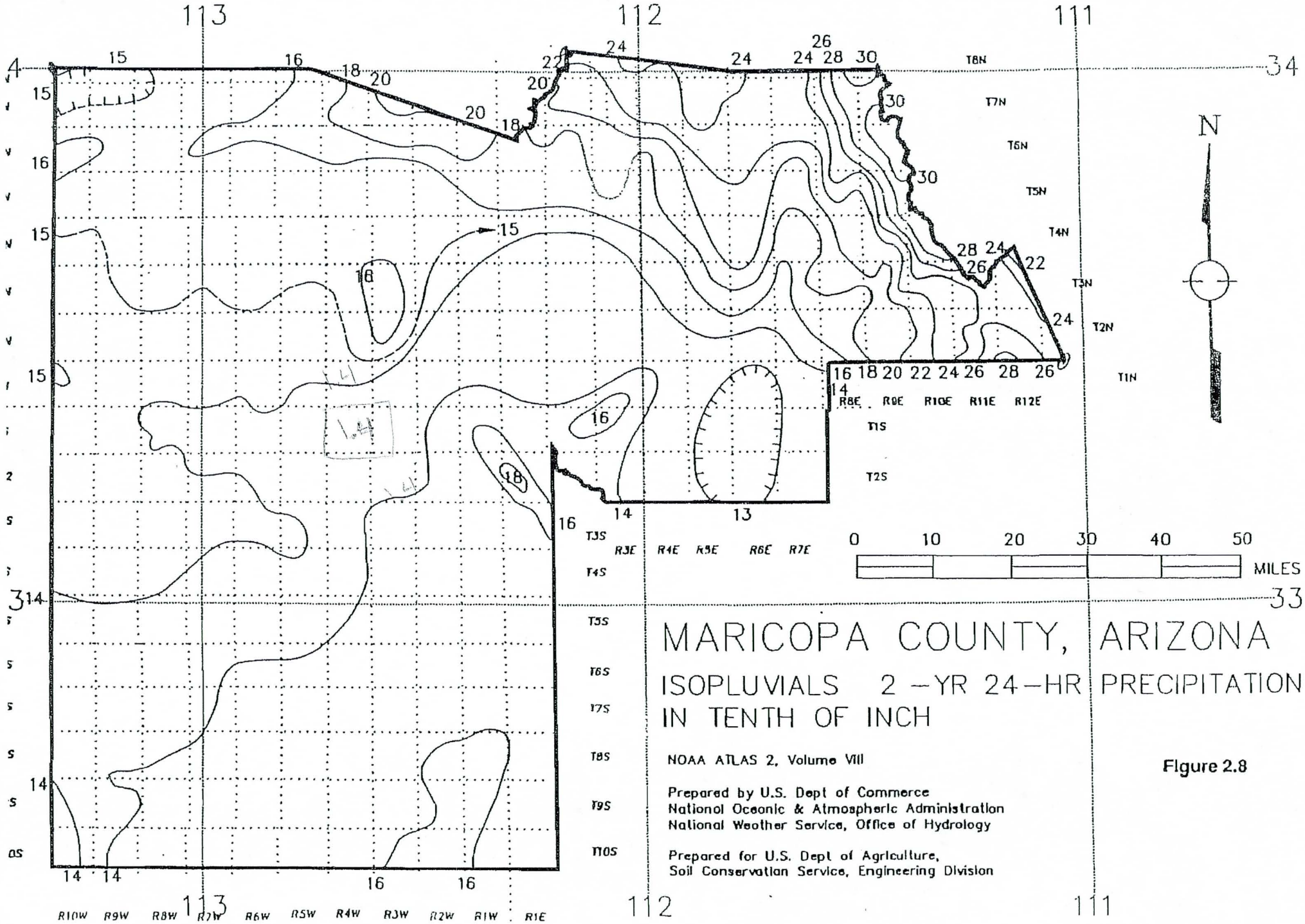
MARICOPA COUNTY, ARIZONA
ISOPLUVIALS 2 –YR 24–HR PRECIPITATION
IN TENTH OF INCH
NOAA ATLAS 2, Volume VIII
Prepared by U.S. Dept of Commerce
National Oceanic & Atmospheric Administration
National Weather Service, Office of Hydrology
Prepared for U.S. Dept of Agriculture,
Soil Conservation Service, Engineering Division
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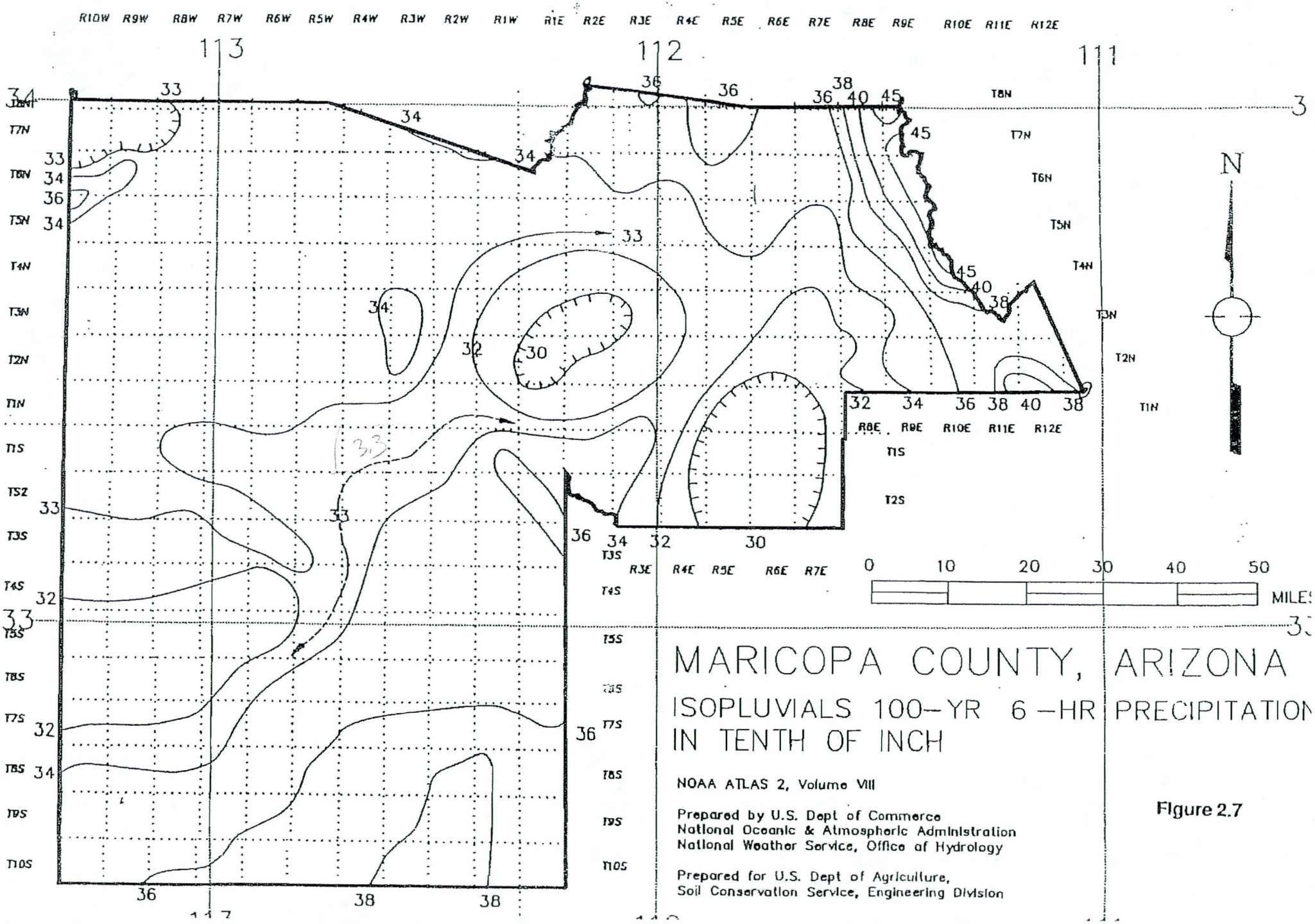
Figure 2.8


R10W R9W R8W R7W R6W R5W R4W R3W R2W R1W R1E R2E R3E R4E R5E R6E R7E R8E R9E R10E R11E R12E
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MILES
MARICOPA COUNTY, ARIZONA
ISOPLUVIALS 100-YR 6-HR PRECIPITATION
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Figure 2.7

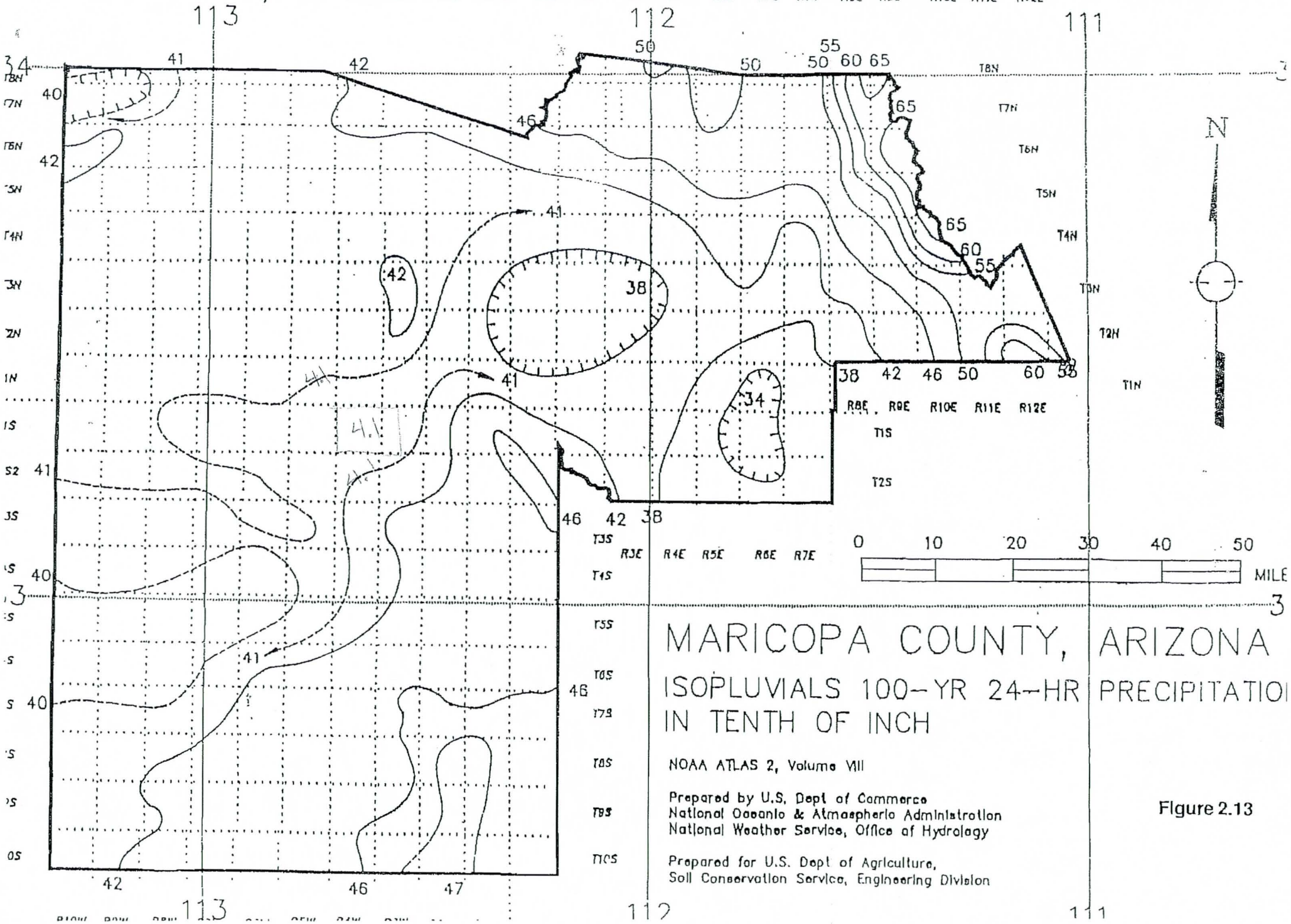
MARICOPA COUNTY, ARIZONA
ISOPLUVIALS 100-YR 24-HR PRECIPITATIO
IN TENTH OF INCH
NOAA ATLAS 2, Volume VIII
Prepared by U.S. Dept of Commerce
National Oceanic & Atmospheric Administration
National Weather Service, Office of Hydrology
Prepared for U.S. Dept of Agriculture,
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Figure 2.13

should be consulted when using S-graphs are contained in Design of Small Dams (USBR, 1987) and the USBR Flood Hydrology Manual (Cudworth, 1989).

**Table 5.6**
**S-GRAPHS AND $K_n$ VALUES**

| S-Graph Type | Description | $K_n$ | | | Description |
|---|---|---|---|---|---|
| | | Min | Avg | Max | |
| Phoenix Valley | Very shallow slopes and/or partially urbanized | 0.015 | --- | 0.15 | variations dependent upon slope, degree of urbanization and connected impervious areas and development of organized drainage improvements; extreme high values may be appropriate in very flat areas with little or no drainage network |
| Phoenix Mountain | Mountain | 0.045 | 0.05 | 0.055 | quite rugged, with sharp ridges and narrow, steep canyons through which watercourses meander around sharp bends, over large boulders, and considerable debris obstruction; ground cover, excluding small areas of rock outcrops, includes many trees and considerable underbrush; no drainage improvements |
| | Foothills | 0.027 | 0.03 | 0.033 | gently rolling, with rounded ridges and moderate side slopes; watercourses meander in fairly straight channels with some boulders and lodged debris; ground cover includes scattered brush, cactus and grasses; no drainage improvements |
| Desert/Rangeland | Gently sloping natural areas including distributary flow areas | 0.020 | 0.025 | 0.03 | variations from minimum to maximum roughness due to degree of definition of watercourses, extent of vegetation, and land surface hydraulic condition |
| Agricultural | Actively cultivated areas with crops | 0.06 | 0.10 | 0.15 | variations from minimum to maximum dependent upon slope, crop type and density |

Note: The majority of $K_n$ data upon which these values are based come from rainfall runoff events of magnitude less than the 100-year event. Therefore, selected $K_n$ values for a given design storm need to be evaluated for the purposes of modeling a particular watershed response to that design storm.

# Parameters Summary Table

- 10 Year, 6 Hour Storm

## BUCKEYE ADMP EXISTING CONDITIONS HYDROLOGY UPDATE - PARAMETERS SUMMARY TABLE
### 10 Year, 6 Hour Storm

**MODEL BGE 10-yr, 6-hr**

| SUB BASIN ADMP | AREA (sq mi) | SLOPE (ft/mi) | Length (ft) | LCA (ft) | IA (in) | DTHETA | PSIF (in) | XKSAT (in/hr) | RTIMP (%) | Tp (hrs) | S-GRAPH TYPE | Kn | Lag (min) | DISCHARGE (cfs) | % INCREASE DISCHARGE | UNIT DISCHARGE (cfs/sq mi) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **90** | 1.055 | 21.5 | 2.05 | 1.02 | 0.87 | 0.150 | 9.70 | 0.080 | 7.00 | 6.5 | Agriculture | 0.171 | 181.9 | 118 | 39% | **112** |
| *90* | 1.055 | 21.5 | 2.05 | 1.02 | 1.00 | 0.152 | 9.53 | 0.075 | 5.87 | 7 | Agriculture | 0.2 | 213 | 85 | | **81** |
| **91** | 1.189 | 21.1 | 5.08 | 1.04 | 0.55 | 0.160 | 8.40 | 0.090 | 15.00 | 6.5 | Phoenix Valley | 0.105 | 159.5 | 276 | 237% | **232** |
| *91* | 1.189 | 21.1 | 5.08 | 1.04 | 1.00 | 0.15 | 8.29 | 0.113 | 5.19 | 7 | Agriculture | 0.2 | 217 | 82 | | **69** |
| **92** | 1.014 | 17.5 | 2.06 | 1.03 | 0.85 | 0.150 | 8.40 | 0.100 | 6.00 | 6.5 | Agriculture | 0.17 | 189.1 | 107 | -39% | **106** |
| *92* | 1.014 | 17.46 | 2.06 | 1.03 | 1.00 | 0.152 | 8.66 | 0.095 | 5.86 | 5.5 | Agriculture | 0.2 | 223 | 174 | | **172** |
| **93** | 0.377 | 17.4 | 1.21 | 0.60 | 0.82 | 0.250 | 4.90 | 0.410 | 7.00 | 5.75 | Agriculture | 0.162 | 120 | 45 | 55% | **119** |
| *93* | 0.377 | 17.39 | 1.21 | 0.60 | 1.00 | 0.245 | 4.88 | 0.41 | 9.38 | 6 | Agriculture | 0.2 | 148 | 29 | | **77** |
| **94** | 0.719 | 22.4 | 1.30 | 0.65 | 0.91 | 0.150 | 7.30 | 0.160 | 4.00 | 6 | Agriculture | 0.182 | 136.2 | 85 | 33% | **118** |
| *94* | 0.719 | 22.37 | 1.30 | 0.65 | 1.00 | 0.15 | 7.30 | 0.157 | 2.20 | 6.25 | Agriculture | 0.2 | 149 | 64 | | **89** |
| **95** | 0.522 | 7.8 | 1.66 | 0.83 | 0.85 | 0.150 | 8.00 | 0.120 | 6.00 | 6.5 | Agriculture | 0.17 | 187.2 | 60 | 67% | **115** |
| *95* | 0.522 | 7.84 | 1.66 | 0.83 | 1.00 | 0.15 | 8.20 | 0.118 | 0.73 | 7 | Agriculture | 0.2 | 220 | 36 | | **69** |
| **96** | 0.914 | 4.5 | 1.32 | 0.66 | 0.89 | 0.150 | 7.30 | 0.160 | 5.00 | 6.5 | Agriculture | 0.177 | 181.7 | 82 | 61% | **90** |
| *96* | 0.914 | 4.55 | 1.32 | 0.66 | 1.00 | 0.15 | 7.20 | 0.171 | 0.59 | 7 | Agriculture | 0.2 | 205 | 51 | | **56** |
| **97** | 0.500 | 6.1 | 1.32 | 0.66 | 0.77 | 0.170 | 6.80 | 0.180 | 9.00 | 5.75 | Agriculture | 0.153 | 148.3 | 75 | 142% | **150** |
| *97* | 0.500 | 6.05 | 1.32 | 0.66 | 1.00 | 0.163 | 6.87 | 0.195 | 0.28 | 6.75 | Agriculture | 0.2 | 195 | 31 | | **62** |
| **98** | 0.388 | 6.7 | 1.50 | 0.75 | 0.53 | 0.160 | 8.80 | 0.080 | 19.00 | 5.25 | Agriculture | 0.102 | 107 | 120 | 50% | **309** |
| *98* | 0.388 | 6.69 | 1.50 | 0.75 | 1.00 | 0.174 | 9.08 | 0.078 | 10.56 | 5.5 | Agriculture | 0.2 | 209 | 80 | | **206** |
| **99** | 0.948 | 3.5 | 2.01 | 1.24 | 0.19 | 0.260 | 6.00 | 0.220 | 7.00 | 4.75 | Phoenix Valley | 0.034 | 54.6 | 485 | 574% | **512** |
| *99* | 0.948 | 3.49 | 2.01 | 1.24 | 1.00 | 0.334 | 6.02 | 0.216 | 0.01 | 5.5 | Phoenix Valley | 0.05 | 80 | 72 | | **76** |
| **100** | 0.582 | 18.8 | 1.70 | 0.85 | 1.00 | 0.230 | 6.20 | 0.250 | 0.00 | 6.75 | Agriculture | 0.199 | 188.7 | 25 | -11% | **43** |
| *100* | 0.582 | 18.83 | 1.70 | 0.85 | 1.00 | 0.228 | 6.24 | 0.251 | 1.19 | 6.75 | Agriculture | 0.2 | 190 | 28 | | **48** |
| **101** | 0.381 | 8.6 | 1.63 | 0.81 | 0.55 | 0.150 | 7.00 | 0.180 | 6.00 | 5.75 | Phoenix Valley | 0.109 | 115.9 | 113 | 319% | **297** |
| *101* | 0.381 | 8.59 | 1.63 | 0.81 | 1.00 | 0.149 | 6.96 | 0.172 | 3.95 | 7 | Agriculture | 0.2 | 213 | 27 | | **71** |
| **4th** | 0.082 | 0.2 | 0.52 | 0.40 | 0.18 | 0.250 | 5.20 | 0.330 | 55.00 | 4.5 | Phoenix Valley | 0.034 | 36.6 | 81 | -25% | **988** |
| *4th* | 0.082 | 0.01 | 0.52 | 0.40 | 0.19 | 0.248 | 5.15 | 0.326 | 55.32 | 4.5 | Phoenix Valley | 0.011 | 24 | 108 | | **1317** |
| **4thS** | 0.145 | 0.1 | 0.74 | 0.50 | 0.18 | 0.220 | 6.40 | 0.200 | 58.00 | 4.75 | Phoenix Valley | 0.034 | 52 | 121 | -20% | **834** |
| *4thS* | 0.145 | 0.01 | 0.74 | 0.50 | 0.18 | 0.203 | 6.47 | 0.204 | 37.61 | 4.5 | Phoenix Valley | 0.011 | 30 | 152 | | **1048** |
| **6th** | 0.057 | 0.2 | 0.46 | 0.17 | 0.20 | 0.150 | 7.60 | 0.120 | 47.00 | 4.25 | Phoenix Valley | 0.039 | 29 | 69 | -17% | **1211** |
| *6th* | 0.057 | 0.01 | 0.46 | 0.17 | 0.21 | 0.148 | 7.57 | 0.12 | 51.54 | 4.5 | Phoenix Valley | 0.011 | 17 | 83 | | **1456** |

# BUCKEYE ADMP EXISTING CONDITIONS HYDROLOGY UPDATE - PARAMETERS SUMMARY TABLE
## 10 Year, 6 Hour Storm

| SUB BASIN ADMP | AREA | SLOPE | Length | LCA | IA | DTHETA | PSIF | XKSAT | RTIMP | Tp | S-GRAPH TYPE | Kn | Lag | DISCHARGE | % INCREASE DISCHARGE | UNIT DISCHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *ADMS* | (sq mi) | (ft/mi) | (ft) | (ft) | (in) | | (in) | (in/hr) | (%) | (hrs) | | | (min) | (cfs) | | (cfs/sq mi) |
| **7th** | 0.127 | 0.2 | 0.66 | 0.33 | 0.21 | 0.260 | 5.30 | 0.310 | 39.00 | 4.5 | Phoenix Valley | 0.037 | 40.5 | 108 | **-29%** | **850** |
| *7th* | 0.127 | 0.01 | 0.66 | 0.33 | 0.25 | 0.261 | 5.11 | 0.312 | 38.17 | 4.5 | Phoenix Valley | 0.011 | 24 | 152 | | **1197** |
| **8th** | 0.079 | 0.2 | 0.60 | 0.31 | 0.23 | 0.160 | 8.80 | 0.070 | 38.00 | 4.5 | Phoenix Valley | 0.044 | 45.4 | 72 | **-38%** | **911** |
| *8th* | 0.079 | 0.01 | 0.60 | 0.31 | 0.24 | 0.15 | 8.77 | 0.074 | 42.70 | 4.5 | Phoenix Valley | 0.011 | 23 | 117 | | **1481** |
| **9thE** | 0.095 | 0.2 | 0.54 | 0.32 | 0.17 | 0.160 | 8.80 | 0.080 | 31.00 | 4.25 | Phoenix Valley | 0.029 | 29.1 | 114 | **-2%** | **1200** |
| *9thE* | 0.095 | 0.01 | 0.54 | 0.32 | 0.17 | 0.154 | 8.73 | 0.083 | 35.40 | 4.5 | Phoenix Valley | 0.011 | 22 | 116 | | **1221** |
| **9thW** | 0.081 | 0.1 | 0.77 | 0.39 | 0.18 | 0.170 | 8.40 | 0.100 | 30.00 | 4.5 | Phoenix Valley | 0.031 | 43.8 | 74 | **-37%** | **914** |
| *9thW* | 0.081 | 0.01 | 0.77 | 0.39 | 0.20 | 0.149 | 8.42 | 0.101 | 29.52 | 4.5 | Phoenix Valley | 0.011 | 29 | 118 | | **1457** |
| **BAYLIS** | 0.016 | 0.3 | 0.30 | 0.08 | 0.15 | 0.160 | 9.70 | 0.070 | 64.00 | 4 | Phoenix Valley | 0.024 | 10.5 | 33 | **-3%** | **2063** |
| *BAYLIS* | 0.016 | 0.01 | 0.30 | 0.08 | 0.10 | 0.15 | 9.70 | 0.069 | 80.00 | 4.25 | Phoenix Valley | 0.011 | 9 | 34 | | **2125** |
| **BELOAT** | 0.047 | 0.2 | 0.44 | 0.25 | 0.26 | 0.160 | 8.80 | 0.060 | 32.00 | 4.5 | Phoenix Valley | 0.047 | 39.7 | 49 | **-25%** | **1043** |
| *BELOAT* | 0.047 | 0 | 0.44 | 0.25 | 0.37 | 0.218 | 9.33 | 0.062 | 7.02 | 4.5 | Phoenix Valley | 0.011 | 19 | 65 | | **1383** |
| **CENTRE** | 0.069 | 0.3 | 0.40 | 0.23 | 0.23 | 0.160 | 7.00 | 0.150 | 41.00 | 4.25 | Phoenix Valley | 0.043 | 31.4 | 71 | **-28%** | **1029** |
| *CENTRE* | 0.069 | 0.01 | 0.40 | 0.23 | 0.25 | 0.153 | 6.97 | 0.147 | 35.73 | 4.5 | Phoenix Valley | 0.011 | 18 | 99 | | **1435** |
| **DRAIN** | 0.116 | 0.2 | 0.59 | 0.26 | 0.29 | 0.150 | 9.70 | 0.060 | 34.00 | 4.75 | Phoenix Valley | 0.058 | 55.6 | 95 | **-4%** | **819** |
| *DRAIN* | 0.116 | 0.01 | 0.59 | 0.26 | 1.00 | 0.15 | 9.66 | 0.071 | 7.35 | 4.5 | Phoenix Valley | 0.011 | 20 | 99 | | **853** |

## MODEL BGW 10-yr, 6-hr

| SUB BASIN ADMP | AREA | SLOPE | Length | LCA | IA | DTHETA | PSIF | XKSAT | RTIMP | Tp | S-GRAPH TYPE | Kn | Lag | DISCHARGE | % INCREASE DISCHARGE | UNIT DISCHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *ADMS* | (sq mi) | (ft/mi) | (ft) | (ft) | (in) | | (in) | (in/hr) | (%) | (hrs) | | | (min) | (cfs) | | (cfs/sq mi) |
| **84** | 0.877 | 13.3 | 1.81 | 0.98 | 0.99 | 0.150 | 9.70 | 0.070 | 0.00 | 7 | Agriculture | 0.199 | 217.9 | 62 | **0%** | **71** |
| *84* | 0.877 | 13.27 | 1.81 | 0.98 | 1.00 | 0.147 | 9.73 | 0.071 | 1.00 | 7 | Agriculture | 0.2 | 219 | 62 | | **71** |
| **85A** | 0.216 | 37.9 | 0.84 | 0.42 | 1.00 | 0.150 | 7.30 | 0.170 | 0.00 | 5.25 | Agriculture | 0.2 | 97.2 | 28 | **-3%** | **130** |
| *85A* | 0.216 | 37.89 | 0.84 | 0.42 | 1.00 | 0.148 | 7.22 | 0.169 | 1.44 | 5.5 | Agriculture | 0.2 | 98 | 29 | | **134** |
| **85B** | 0.745 | 15.6 | 1.47 | 0.73 | 0.93 | 0.250 | 5.70 | 0.300 | 2.00 | 6 | Agriculture | 0.185 | 162.4 | 39 | **34%** | **52** |
| *85B* | 0.745 | 15.68 | 1.47 | 0.73 | 1.00 | 0.247 | 5.67 | 0.297 | 1.99 | 6.5 | Agriculture | 0.2 | 176 | 29 | | **39** |
| **86** | 0.440 | 25.8 | 1.09 | 0.54 | 0.91 | 0.150 | 8.00 | 0.110 | 2.00 | 5.5 | Agriculture | 0.181 | 114.9 | 71 | **16%** | **161** |
| *86* | 0.440 | 25.78 | 1.09 | 0.54 | 1.00 | 0.15 | 8.11 | 0.11 | 6.81 | 6 | Agriculture | 0.2 | 127 | 61 | | **139** |
| **87** | 0.913 | 22.5 | 1.87 | 0.93 | 1.00 | 0.150 | 9.70 | 0.070 | 0.00 | 6.5 | Agriculture | 0.199 | 195.7 | 69 | **-7%** | **76** |
| *87* | 0.913 | 22.48 | 1.87 | 0.93 | 1.00 | 0.142 | 9.84 | 0.066 | 1.13 | 6.75 | Agriculture | 0.2 | 197 | 74 | | **81** |

## BUCKEYE ADMP EXISTING CONDITIONS HYDROLOGY UPDATE - PARAMETERS SUMMARY TABLE
### 10 Year, 6 Hour Storm

| SUB BASIN ADMP | AREA | SLOPE | Length | LCA | IA | DTHETA | PSIF | XKSAT | RTIMP | Tp | S-GRAPH TYPE | Kn | Lag | DISCHARGE | % INCREASE DISCHARGE | UNIT DISCHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *ADMS* | (sq mi) | (ft/mi) | (ft) | (ft) | (in) | | (in) | (in/hr) | (%) | (hrs) | | | (min) | (cfs) | | (cfs/sq mi) |
| **88** | 0.765 | 19.3 | 1.66 | 0.83 | 0.99 | 0.150 | 9.70 | 0.070 | 0.00 | 6.75 | Agriculture | 0.198 | 183.5 | 66 | **0%** | **86** |
| *88* | 0.765 | 19.29 | 1.66 | 0.83 | 1.00 | 0.145 | 9.80 | 0.068 | 0.29 | 6.75 | Agriculture | 0.2 | 185 | 66 | | **86** |
| **89** | 0.963 | 21.2 | 1.79 | 0.90 | 0.99 | 0.150 | 9.70 | 0.070 | 0.00 | 6.5 | Agriculture | 0.199 | 192.3 | 75 | **-1%** | **78** |
| *89* | 0.963 | 21.2 | 1.79 | 0.90 | 1.00 | 0.144 | 9.82 | 0.068 | 0.56 | 6.75 | Agriculture | 0.2 | 193 | 76 | | **79** |
| **102** | 0.520 | 25.7 | 1.48 | 0.74 | 0.99 | 0.150 | 8.40 | 0.100 | 0.00 | 6.25 | Agriculture | 0.197 | 158.5 | 51 | **4%** | **98** |
| *102* | 0.520 | 25.68 | 1.48 | 0.74 | 1.00 | 0.15 | 8.60 | 0.1 | 0.19 | 6.5 | Agriculture | 0.2 | 161 | 49 | | **94** |
| **103** | 0.507 | 22.8 | 1.14 | 0.57 | 0.84 | 0.230 | 6.20 | 0.240 | 3.00 | 5.5 | Agriculture | 0.165 | 111.4 | 68 | **94%** | **134** |
| *103* | 0.507 | 22.77 | 1.14 | 0.57 | 1.00 | 0.218 | 6.32 | 0.244 | 0.67 | 6 | Agriculture | 0.2 | 135 | 35 | | **69** |
| **104** | 1.012 | 13.8 | 1.95 | 0.98 | 0.99 | 0.170 | 6.80 | 0.190 | 0.00 | 7.25 | Agriculture | 0.198 | 221.5 | 42 | **5%** | **42** |
| *104* | 1.012 | 13.83 | 1.95 | 0.98 | 1.00 | 0.175 | 6.76 | 0.192 | 0.05 | 7.25 | Agriculture | 0.2 | 223 | 40 | | **40** |
| **105** | 0.997 | 18.6 | 1.94 | 0.97 | 0.98 | 0.150 | 8.40 | 0.110 | 0.00 | 7 | Agriculture | 0.196 | 205.9 | 64 | **-2%** | **64** |
| *105* | 0.997 | 18.59 | 1.94 | 0.97 | 1.00 | 0.15 | 8.42 | 0.106 | 1.66 | 7 | Agriculture | 0.2 | 210 | 65 | | **65** |
| **106** | 1.209 | 20.8 | 2.21 | 1.11 | 1.00 | 0.150 | 7.60 | 0.150 | 0.00 | 7.5 | Agriculture | 0.2 | 227.5 | 55 | **-5%** | **45** |
| *106* | 1.209 | 20.78 | 2.21 | 1.11 | 1.00 | 0.15 | 7.60 | 0.146 | 0.44 | 7.5 | Agriculture | 0.2 | 227 | 58 | | **48** |
| **107** | 0.484 | 18.4 | 0.98 | 0.49 | 1.00 | 0.170 | 6.80 | 0.210 | 0.00 | 5.5 | Agriculture | 0.2 | 125.3 | 42 | **0%** | **87** |
| *107* | 0.484 | 18.37 | 0.98 | 0.49 | 1.00 | 0.181 | 6.69 | 0.21 | 0.00 | 5.75 | Agriculture | 0.2 | 125 | 42 | | **87** |

### MODEL FRE 10-yr, 6-hr

| SUB BASIN ADMP | AREA | SLOPE | Length | LCA | IA | DTHETA | PSIF | XKSAT | RTIMP | Tp | S-GRAPH TYPE | Kn | Lag | DISCHARGE | % INCREASE DISCHARGE | UNIT DISCHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *ADMS* | (sq mi) | (ft/mi) | (ft) | (ft) | (in) | | (in) | (in/hr) | (%) | (hrs) | | | (min) | (cfs) | | (cfs/sq mi) |
| **6** | 0.318 | 88.2 | 0.50 | 0.35 | 0.35 | 0.350 | 4.80 | 0.240 | 1.00 | 4 | Desert Rangeland | 0.025 | 7.9 | 519 | **87%** | **1632** |
| *6* | 0.318 | 88.18 | 0.50 | 0.35 | 0.33 | 0.359 | 5.26 | 0.239 | 8.06 | 4.25 | Desert Rangeland | 0.05 | 16 | 277 | | **871** |
| **7** | 0.446 | 73 | 0.74 | 0.30 | 0.35 | 0.350 | 3.88 | 0.400 | 1.00 | 4 | Desert Rangeland | 0.026 | 9.4 | 588 | **64%** | **1318** |
| *7* | 0.446 | 73.02 | 0.74 | 0.30 | 0.34 | 0.345 | 4.13 | 0.4 | 4.38 | 4.5 | Desert Rangeland | 0.05 | 18 | 359 | | **805** |
| **8** | 0.414 | 14.8 | 1.22 | 0.56 | 0.37 | 0.320 | 4.10 | 0.480 | 9.00 | 4.25 | Desert Rangeland | 0.04 | 29.9 | 255 | **-3%** | **616** |
| *8* | 0.414 | 14.8 | 1.22 | 0.56 | 0.28 | 0.319 | 4.10 | 0.445 | 23.07 | 4.75 | Desert Rangeland | 0.05 | 37 | 264 | | **638** |
| **9** | 0.612 | 57.1 | 0.79 | 0.41 | 0.31 | 0.320 | 4.00 | 0.510 | 16.00 | 4 | Desert Rangeland | 0.03 | 13.1 | 589 | **22%** | **962** |
| *9* | 0.612 | 57.09 | 0.79 | 0.41 | 0.33 | 0.34 | 3.98 | 0.411 | 7.24 | 4.5 | Desert Rangeland | 0.05 | 22 | 482 | | **788** |
| **10** | 1.174 | 46.3 | 1.77 | 1.27 | 0.29 | 0.280 | 4.15 | 0.400 | 27.00 | 4.5 | Phoenix Valley | 0.044 | 41.6 | 671 | **52%** | **572** |
| *10* | 1.174 | 46.29 | 1.77 | 1.27 | 0.30 | 0.312 | 4.15 | 0.403 | 10.87 | 5 | Phoenix Valley | 0.05 | 47 | 441 | | **376** |

# BUCKEYE ADMP EXISTING CONDITIONS HYDROLOGY UPDATE - PARAMETERS SUMMARY TABLE
## 10 Year, 6 Hour Storm

| SUB BASIN ADMP | AREA | SLOPE | Length | LCA | IA | DTHETA | PSIF | XKSAT | RTIMP | Tp | S-GRAPH TYPE | Kn | Lag | DISCHARGE | % INCREASE DISCHARGE | UNIT DISCHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *ADMS* | (sq mi) | (ft/mi) | (ft) | (ft) | (in) | | (in) | (in/hr) | (%) | (hrs) | | | (min) | (cfs) | | (cfs/sq mi) |
| **11A** | 0.571 | 84 | 0.57 | 0.33 | 0.28 | 0.280 | 5.00 | 0.310 | 23.00 | 4 | Phoenix Valley | 0.044 | 14.5 | 616 | **15%** | **1079** |
| *11A* | 0.571 | 83.95 | 0.57 | 0.33 | 0.32 | 0.356 | 5.20 | 0.244 | 9.66 | 4.5 | Phoenix Valley | 0.05 | 16 | 537 | | **940** |
| **11B** | 0.581 | 41.8 | 1.39 | 0.62 | 0.29 | 0.290 | 4.30 | 0.450 | 18.00 | 4.25 | Phoenix Valley | 0.041 | 27.5 | 462 | **36%** | **795** |
| *11B* | 0.581 | 41.81 | 1.39 | 0.62 | 0.35 | 0.35 | 4.28 | 0.363 | 0.00 | 4.75 | Phoenix Valley | 0.05 | 34 | 339 | | **583** |
| **11C** | 0.343 | 54.3 | 0.99 | 0.31 | 0.33 | 0.330 | 3.95 | 0.400 | 8.00 | 4 | Desert Rangeland | 0.031 | 13.3 | 357 | **17%** | **1041** |
| *11C* | 0.343 | 54.38 | 0.99 | 0.31 | 0.35 | 0.35 | 3.98 | 0.4 | 0.00 | 4.5 | Phoenix Valley | 0.05 | 22 | 305 | | **889** |
| **12** | 0.736 | 83 | 0.96 | 0.41 | 0.26 | 0.260 | 4.45 | 0.430 | 27.00 | 4.25 | Phoenix Valley | 0.047 | 20.5 | 744 | **22%** | **1011** |
| *12* | 0.736 | 83.03 | 0.96 | 0.41 | 0.34 | 0.345 | 4.50 | 0.333 | 3.95 | 4.5 | Phoenix Valley | 0.05 | 22 | 611 | | **830** |
| **13** | 0.501 | 71.2 | 0.52 | 0.26 | 0.25 | 0.250 | 5.10 | 0.310 | 30.00 | 4 | Phoenix Valley | 0.05 | 15 | 571 | **28%** | **1140** |
| *13* | 0.501 | 71.2 | 0.52 | 0.26 | 0.35 | 0.364 | 5.14 | 0.247 | 0.00 | 4.25 | Phoenix Valley | 0.05 | 15 | 445 | | **888** |
| **14A** | 0.692 | 67.9 | 1.33 | 0.71 | 0.26 | 0.260 | 4.25 | 0.480 | 26.00 | 4.25 | Phoenix Valley | 0.047 | 29.7 | 510 | **32%** | **737** |
| *14A* | 0.692 | 67.87 | 1.33 | 0.71 | 0.34 | 0.344 | 4.26 | 0.368 | 4.73 | 4.75 | Phoenix Valley | 0.05 | 32 | 386 | | **558** |
| **14B** | 0.502 | 54.1 | 0.59 | 0.30 | 0.25 | 0.250 | 4.15 | 0.520 | 30.00 | 4.25 | Phoenix Valley | 0.05 | 17.5 | 558 | **48%** | **1112** |
| *14B* | 0.502 | 54 | 0.59 | 0.30 | 0.36 | 0.344 | 4.18 | 0.385 | 0.00 | 4.5 | Desert Rangeland | 0.05 | 17 | 376 | | **749** |
| **20** | 0.665 | 16.6 | 1.57 | 0.79 | 0.42 | 0.250 | 3.95 | 0.400 | 34.00 | 5 | Phoenix Valley | 0.085 | 77.9 | 284 | **1395%** | **427** |
| *20* | 0.665 | 16.56 | 1.57 | 0.79 | 1.00 | 0.252 | 3.97 | 0.479 | 0.02 | 6.5 | Agriculture | 0.02 | 183 | 19 | | **29** |
| **21A** | 0.366 | 39.9 | 1.43 | 0.71 | 0.25 | 0.250 | 4.00 | 0.550 | 45.00 | 4.5 | Phoenix Valley | 0.05 | 35.9 | 323 | **3489%** | **883** |
| *21A* | 0.366 | 39.92 | 1.43 | 0.71 | 1.00 | 0.277 | 4.00 | 0.641 | 0.00 | 6 | Agriculture | 0.02 | 144 | 9 | | **25** |
| **21B** | 0.273 | 24.6 | 1.02 | 0.51 | 0.90 | 0.260 | 4.00 | 0.690 | 3.00 | 5.25 | Agriculture | 0.175 | 107 | 17 | **113%** | **62** |
| *21B* | 0.273 | 24.58 | 1.02 | 0.51 | 1.00 | 0.25 | 4.00 | 0.692 | 0.00 | 5.75 | Agriculture | 0.02 | 122 | 8 | | **29** |
| **22** | 0.557 | 18.1 | 1.54 | 0.77 | 0.99 | 0.250 | 4.00 | 0.550 | 0.00 | 6.25 | Agriculture | 0.198 | 175.5 | 15 | **-6%** | **27** |
| *22* | 0.557 | 18.14 | 1.54 | 0.77 | 1.00 | 0.25 | 4.00 | 0.55 | 0.18 | 6.5 | Agriculture | 0.02 | 178 | 16 | | **29** |
| **23** | 0.524 | 15.9 | 1.32 | 0.66 | 0.25 | 0.250 | 3.95 | 0.400 | 30.00 | 4.5 | Phoenix Valley | 0.05 | 40.4 | 409 | **1678%** | **781** |
| *23* | 0.524 | 15.92 | 1.32 | 0.66 | 1.00 | 0.248 | 3.96 | 0.472 | 0.99 | 6.25 | Agriculture | 0.02 | 161 | 23 | | **44** |
| **24** | 0.489 | 56.2 | 0.53 | 0.27 | 0.30 | 0.250 | 4.60 | 0.370 | 7.00 | 4.25 | Phoenix Valley | 0.051 | 16.3 | 469 | **11%** | **959** |
| *24* | 0.489 | 56.27 | 0.53 | 0.27 | 0.31 | 0.276 | 4.59 | 0.365 | 11.26 | 4.25 | Desert Rangeland | 0.05 | 16 | 423 | | **865** |
| **25** | 0.274 | 10.5 | 1.05 | 0.52 | 0.29 | 0.290 | 4.15 | 0.490 | 18.00 | 4.25 | Phoenix Valley | 0.04 | 29.3 | 206 | **217%** | **752** |
| *25* | 0.274 | 10.49 | 1.05 | 0.52 | 1.00 | 0.285 | 4.14 | 0.39 | 1.29 | 4.75 | Phoenix Valley | 0.05 | 37 | 65 | | **237** |
| **26** | 0.524 | 39.3 | 0.76 | 0.38 | 0.30 | 0.260 | 4.00 | 0.400 | 9.00 | 4.25 | Phoenix Valley | 0.049 | 21.9 | 529 | **-4%** | **1010** |
| *26* | 0.524 | 39.29 | 0.76 | 0.38 | 0.30 | 0.26 | 4.05 | 0.4 | 13.80 | 4.5 | Phoenix Valley | 0.05 | 22 | 551 | | **1052** |

## BUCKEYE ADMP EXISTING CONDITIONS HYDROLOGY UPDATE - PARAMETERS SUMMARY TABLE
### 10 Year, 6 Hour Storm

| SUB BASIN ADMP ADMS | AREA (sq mi) | SLOPE (ft/mi) | Length (ft) | LCA (ft) | IA (in) | DTHETA | PSIF (in) | XKSAT (in/hr) | RTIMP (%) | Tp (hrs) | S-GRAPH TYPE | Kn | Lag (min) | DISCHARGE (cfs) | % INCREASE DISCHARGE | UNIT DISCHARGE (cfs/sq mi) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **83** | 0.675 | 64.7 | 1.72 | 0.93 | 0.25 | 0.250 | 5.40 | 0.270 | 30.00 | 4.5 | Phoenix Valley | 0.05 | 39 | 532 | **49%** | **788** |
| *83* | 0.675 | 64.69 | 1.72 | 0.93 | 0.34 | 0.375 | 5.44 | 0.214 | 2.80 | 4.75 | Desert Rangeland | 0.05 | 39 | 356 | | **527** |

**MODEL FRW 10-yr, 6-hr**

| SUB BASIN ADMP ADMS | AREA (sq mi) | SLOPE (ft/mi) | Length (ft) | LCA (ft) | IA (in) | DTHETA | PSIF (in) | XKSAT (in/hr) | RTIMP (%) | Tp (hrs) | S-GRAPH TYPE | Kn | Lag (min) | DISCHARGE (cfs) | % INCREASE DISCHARGE | UNIT DISCHARGE (cfs/sq mi) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1** | 1.626 | 34.9 | 2.61 | 1.54 | 0.54 | 0.320 | 4.30 | 0.400 | 1.00 | 5.25 | Desert Rangeland | 0.079 | 98.3 | 164 | **-54%** | **101** |
| *1* | 1.626 | 34.86 | 2.61 | 1.54 | 0.35 | 0.329 | 4.33 | 0.398 | 5.88 | 5 | Desert Rangeland | 0.05 | 62 | 358 | | **220** |
| **2** | 1.233 | 45.9 | 2.02 | 0.86 | 0.36 | 0.330 | 3.95 | 0.440 | 9.00 | 4.25 | Desert Rangeland | 0.035 | 30 | 552 | **39%** | **448** |
| *2* | 1.233 | 45.95 | 2.02 | 0.86 | 0.34 | 0.339 | 3.99 | 0.443 | 5.58 | 4.75 | Desert Rangeland | 0.05 | 43 | 398 | | **323** |
| **3** | 1.648 | 39.2 | 2.04 | 1.39 | 0.32 | 0.320 | 4.00 | 0.490 | 13.00 | 4.5 | Desert Rangeland | 0.033 | 35.2 | 576 | **611%** | **350** |
| *3* | 1.648 | 39.22 | 2.04 | 1.39 | 1.00 | 0.298 | 4.03 | 0.546 | 4.13 | 5 | Desert Rangeland | 0.05 | 53 | 81 | | **49** |
| **4** | 0.549 | 40.7 | 1.38 | 0.74 | 0.32 | 0.320 | 3.95 | 0.400 | 14.00 | 4.25 | Desert Rangeland | 0.032 | 23 | 475 | **59%** | **865** |
| *4* | 0.549 | 40.65 | 1.38 | 0.74 | 0.31 | 0.332 | 4.02 | 0.485 | 14.55 | 4.75 | Desert Rangeland | 0.05 | 36 | 298 | | **543** |
| **5A** | 1.172 | 49 | 1.75 | 1.16 | 0.32 | 0.310 | 4.30 | 0.440 | 19.00 | 4.25 | Desert Rangeland | 0.038 | 34.2 | 533 | **37%** | **455** |
| *5A* | 1.172 | 49.05 | 1.75 | 1.16 | 0.33 | 0.342 | 4.33 | 0.387 | 5.98 | 4.75 | Desert Rangeland | 0.05 | 45 | 390 | | **333** |
| **5B** | 0.576 | 38.7 | 1.73 | 1.08 | 0.36 | 0.350 | 4.50 | 0.320 | 1.00 | 4.25 | Desert Rangeland | 0.028 | 25.5 | 417 | **49%** | **724** |
| *5B* | 0.576 | 38.66 | 1.73 | 1.08 | 0.32 | 0.336 | 4.61 | 0.319 | 10.55 | 4.75 | Desert Rangeland | 0.05 | 46 | 280 | | **486** |
| **15A** | 0.588 | 34.6 | 1.45 | 0.48 | 0.37 | 0.330 | 4.40 | 0.390 | 4.00 | 4.25 | Desert Rangeland | 0.036 | 23 | 432 | **39%** | **735** |
| *15A* | 0.588 | 34.58 | 1.45 | 0.48 | 0.36 | 0.324 | 4.42 | 0.391 | 2.37 | 4.5 | Desert Rangeland | 0.05 | 32 | 310 | | **527** |
| **15B** | 0.816 | 11 | 1.63 | 0.82 | 1.00 | 0.250 | 4.10 | 0.540 | 0.00 | 6.75 | Agriculture | 0.2 | 203.9 | 12 | **-8%** | **15** |
| *15B* | 0.816 | 11.02 | 1.63 | 0.82 | 1.00 | 0.249 | 4.10 | 0.541 | 0.37 | 7 | Agriculture | 0.2 | 204 | 13 | | **16** |
| **16** | 0.951 | 25 | 2.00 | 1.37 | 0.28 | 0.250 | 4.35 | 0.440 | 47.00 | 4.75 | Phoenix Valley | 0.048 | 55 | 576 | **2%** | **606** |
| *16* | 0.951 | 24.99 | 2.00 | 1.37 | 0.21 | 0.25 | 4.40 | 0.438 | 45.68 | 5 | Phoenix Valley | 0.05 | 57 | 563 | | **592** |
| **17** | 0.607 | 16.9 | 1.43 | 0.71 | 0.25 | 0.250 | 4.00 | 0.550 | 30.00 | 4.5 | Phoenix Valley | 0.05 | 42.3 | 403 | **1915%** | **664** |
| *17* | 0.607 | 16.84 | 1.43 | 0.71 | 1.00 | 0.25 | 4.02 | 0.465 | 0.17 | 6.25 | Agriculture | 0.02 | 169 | 20 | | **33** |
| **18** | 0.796 | 31 | 1.81 | 0.75 | 0.25 | 0.250 | 4.15 | 0.520 | 30.00 | 4.5 | Phoenix Valley | 0.05 | 42.1 | 494 | **3193%** | **621** |
| *18* | 0.796 | 30.99 | 1.81 | 0.75 | 1.00 | 0.291 | 4.13 | 0.479 | 0.12 | 6.25 | Agriculture | 0.02 | 168 | 15 | | **19** |

## BUCKEYE ADMP EXISTING CONDITIONS HYDROLOGY UPDATE - PARAMETERS SUMMARY TABLE
### 10 Year, 6 Hour Storm

| SUB BASIN ADMP | AREA | SLOPE | Length | LCA | IA | DTHETA | PSIF | XKSAT | RTIMP | Tp | S-GRAPH TYPE | Kn | Lag | DISCHARGE | % INCREASE DISCHARGE | UNIT DISCHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *ADMS* | (sq mi) | (ft/mi) | (ft) | (ft) | (in) | | (in) | (in/hr) | (%) | (hrs) | | | (min) | (cfs) | | (cfs/sq mi) |
| **19** | 0.536 | 18.5 | 1.51 | 0.76 | 0.94 | 0.260 | 3.95 | 0.440 | 0.00 | 6 | Agriculture | 0.184 | 160.4 | 26 | **18%** | **49** |
| *19* | 0.536 | 18.49 | 1.51 | 0.76 | 1.00 | 0.249 | 3.96 | 0.435 | 0.57 | 6.5 | Agriculture | 0.02 | 174 | 22 | | **41** |

**MODEL RBE 10-yr, 6-hr**

| SUB BASIN ADMP | AREA | SLOPE | Length | LCA | IA | DTHETA | PSIF | XKSAT | RTIMP | Tp | S-GRAPH TYPE | Kn | Lag | DISCHARGE | % INCREASE DISCHARGE | UNIT DISCHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *ADMS* | (sq mi) | (ft/mi) | (ft) | (ft) | (in) | | (in) | (in/hr) | (%) | (hrs) | | | (min) | (cfs) | | (cfs/sq mi) |
| **34** | 0.637 | 19.5 | 1.23 | 0.62 | 0.94 | 0.250 | 4.00 | 0.570 | 2.00 | 5.75 | Agriculture | 0.187 | 138.2 | 28 | **22%** | **44** |
| *34* | 0.637 | 19.48 | 1.23 | 0.62 | 1.00 | 0.245 | 3.99 | 0.565 | 2.07 | 6 | Agriculture | 0.2 | 148 | 23 | | **36** |
| **35** | 1.504 | 33.6 | 1.96 | 0.98 | 0.96 | 0.250 | 3.95 | 0.490 | 2.00 | 6.5 | Agriculture | 0.191 | 180.8 | 32 | **-3%** | **21** |
| *35* | 1.504 | 33.61 | 1.96 | 0.98 | 1.00 | 0.25 | 3.98 | 0.486 | 3.32 | 6.75 | Agriculture | 0.2 | 190 | 33 | | **22** |
| **36** | 0.684 | 36.6 | 1.85 | 0.93 | 0.73 | 0.250 | 3.95 | 0.400 | 6.00 | 5.5 | Agriculture | 0.143 | 127.7 | 83 | **177%** | **121** |
| *36* | 0.684 | 36.67 | 1.85 | 0.93 | 1.00 | 0.258 | 3.97 | 0.455 | 5.10 | 6.5 | Agriculture | 0.2 | 178 | 30 | | **44** |
| **37** | 1.421 | 30.1 | 2.36 | 1.18 | 0.67 | 0.250 | 4.10 | 0.610 | 13.00 | 6 | Agriculture | 0.133 | 148 | 116 | **582%** | **82** |
| *37* | 1.421 | 30.11 | 2.36 | 1.18 | 1.00 | 0.25 | 4.12 | 0.457 | 0.00 | 6.75 | Agriculture | 0.2 | 222 | 17 | | **12** |
| **38** | 0.542 | 20.7 | 1.40 | 0.70 | 0.94 | 0.250 | 3.95 | 0.470 | 1.00 | 5.75 | Agriculture | 0.187 | 150.3 | 29 | **26%** | **54** |
| *38* | 0.542 | 20.72 | 1.40 | 0.70 | 1.00 | 0.249 | 3.96 | 0.466 | 1.07 | 6.25 | Agriculture | 0.2 | 161 | 23 | | **42** |
| **39** | 0.725 | 25.2 | 1.63 | 0.82 | 0.90 | 0.260 | 4.30 | 0.470 | 2.00 | 5.75 | Agriculture | 0.176 | 153.3 | 35 | **59%** | **48** |
| *39* | 0.725 | 25.14 | 1.63 | 0.82 | 1.00 | 0.249 | 4.31 | 0.47 | 1.59 | 6.5 | Agriculture | 0.2 | 174 | 22 | | **30** |
| **40** | 0.976 | 31.3 | 1.83 | 0.91 | 0.96 | 0.250 | 4.20 | 0.530 | 1.00 | 6.25 | Agriculture | 0.191 | 173.5 | 20 | **33%** | **20** |
| *40* | 0.976 | 31.23 | 1.83 | 0.91 | 1.00 | 0.249 | 4.21 | 0.525 | 0.74 | 6.75 | Agriculture | 0.2 | 182 | 15 | | **15** |
| **46** | 1.381 | 25.2 | 1.79 | 0.89 | 0.56 | 0.250 | 4.15 | 0.570 | 17.00 | 5.5 | Phoenix Valley | 0.11 | 102.4 | 257 | **818%** | **186** |
| *46* | 1.381 | 25.18 | 1.79 | 0.89 | 1.00 | 0.258 | 4.19 | 0.469 | 2.56 | 6.75 | Agriculture | 0.2 | 186 | 28 | | **20** |
| **47** | 0.617 | 24.6 | 1.46 | 0.73 | 0.43 | 0.250 | 4.45 | 0.470 | 24.00 | 5 | Phoenix Valley | 0.085 | 68.2 | 263 | **1152%** | **426** |
| *47* | 0.617 | 24.6 | 1.46 | 0.73 | 1.00 | 0.271 | 4.50 | 0.411 | 0.10 | 6.25 | Agriculture | 0.2 | 161 | 21 | | **34** |
| **48** | 0.500 | 16.5 | 1.10 | 0.55 | 0.98 | 0.250 | 4.35 | 0.450 | 1.00 | 5.75 | Agriculture | 0.196 | 136.9 | 26 | **0%** | **52** |
| *48* | 0.500 | 16.43 | 1.10 | 0.55 | 1.00 | 0.25 | 4.37 | 0.445 | 1.37 | 6 | Agriculture | 0.2 | 139 | 26 | | **52** |

## BUCKEYE ADMP EXISTING CONDITIONS HYDROLOGY UPDATE - PARAMETERS SUMMARY TABLE
### 10 Year, 6 Hour Storm

| SUB BASIN ADMP | AREA | SLOPE | Length | LCA | IA | DTHETA | PSIF | XKSAT | RTIMP | Tp | S-GRAPH TYPE | Kn | Lag | DISCHARGE | % INCREASE DISCHARGE | UNIT DISCHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *ADMS* | (sq mi) | (ft/mi) | (ft) | (ft) | (in) | | (in) | (in/hr) | (%) | (hrs) | | | (min) | (cfs) | | (cfs/sq mi) |
| **49** | 1.009 | 23.5 | 1.96 | 0.98 | 0.46 | 0.260 | 3.95 | 0.400 | 18.00 | 5.25 | Phoenix Valley | 0.086 | 87.1 | 300 | **1264%** | **297** |
| *49* | 1.009 | 23.51 | 1.96 | 0.98 | 1.00 | 0.25 | 3.95 | 0.417 | 0.66 | 7 | Agriculture | 0.2 | 202 | 22 | | **22** |
| **50** | 1.002 | 26.7 | 1.98 | 0.99 | 0.91 | 0.250 | 4.20 | 0.490 | 3.00 | 6.25 | Agriculture | 0.18 | 179.3 | 35 | **67%** | **35** |
| *50* | 1.002 | 26.73 | 1.98 | 0.99 | 1.00 | 0.251 | 4.18 | 0.488 | 2.40 | 6.75 | Agriculture | 0.2 | 199 | 21 | | **21** |
| **51** | 1.004 | 23 | 1.96 | 0.98 | 0.88 | 0.250 | 4.40 | 0.560 | 3.00 | 6.25 | Agriculture | 0.173 | 176 | 32 | **146%** | **32** |
| *51* | 1.004 | 22.98 | 1.96 | 0.98 | 1.00 | 0.25 | 4.40 | 0.563 | 1.52 | 7 | Agriculture | 0.2 | 203 | 13 | | **13** |
| **56A** | 0.411 | 30.3 | 1.19 | 0.59 | 0.69 | 0.260 | 3.95 | 0.460 | 15.00 | 5 | Agriculture | 0.129 | 84.9 | 96 | **96%** | **234** |
| *56A* | 0.411 | 30.31 | 1.19 | 0.59 | 1.00 | 0.25 | 3.97 | 0.455 | 18.06 | 5.75 | Agriculture | 0.2 | 132 | 49 | | **119** |
| **56B** | 0.334 | 43.7 | 0.73 | 0.37 | 0.15 | 0.250 | 4.00 | 0.620 | 54.00 | 4 | Phoenix Valley | 0.021 | 9 | 612 | **189%** | **1832** |
| *56B* | 0.334 | 43.7 | 0.73 | 0.37 | 0.10 | 0.25 | 4.00 | 0.524 | 80.00 | 5.5 | Phoenix Valley | 0.2 | 85 | 212 | | **635** |
| **57** | 0.489 | 19.1 | 0.68 | 0.34 | 1.00 | 0.250 | 4.25 | 0.530 | 0.00 | 5.25 | Agriculture | 0.2 | 94.3 | 25 | **-19%** | **51** |
| *57* | 0.489 | 19.18 | 0.68 | 0.34 | 1.00 | 0.25 | 4.26 | 0.53 | 1.42 | 5.5 | Agriculture | 0.2 | 94 | 31 | | **63** |
| **58** | 0.190 | 16 | 0.50 | 0.25 | 0.29 | 0.310 | 4.30 | 0.550 | 21.00 | 4 | Phoenix Valley | 0.026 | 10 | 258 | **932%** | **1358** |
| *58* | 0.190 | 15.93 | 0.50 | 0.25 | 1.00 | 0.25 | 4.29 | 0.552 | 11.15 | 5.25 | Agriculture | 0.2 | 77 | 25 | | **132** |
| **65** | 0.376 | 11 | 0.82 | 0.41 | 0.99 | 0.250 | 4.60 | 0.410 | 1.00 | 5.5 | Agriculture | 0.198 | 119.5 | 23 | **-4%** | **61** |
| *65* | 0.376 | 10.93 | 0.82 | 0.41 | 1.00 | 0.247 | 4.71 | 0.411 | 1.76 | 5.75 | Agriculture | 0.2 | 121 | 24 | | **64** |
| **66** | 0.294 | 19.2 | 0.73 | 0.36 | 0.81 | 0.260 | 4.35 | 0.390 | 10.00 | 5 | Agriculture | 0.158 | 78.1 | 61 | **97%** | **207** |
| *66* | 0.294 | 19.24 | 0.73 | 0.36 | 1.00 | 0.249 | 4.47 | 0.385 | 6.04 | 5.5 | Agriculture | 0.2 | 99 | 31 | | **105** |
| **67** | 0.472 | 25.7 | 0.82 | 0.41 | 0.25 | 0.250 | 4.30 | 0.390 | 30.00 | 4.25 | Phoenix Valley | 0.047 | 24.1 | 525 | **200%** | **1112** |
| *67* | 0.472 | 25.73 | 0.82 | 0.41 | 0.26 | 0.262 | 4.33 | 0.393 | 26.59 | 5.75 | Phoenix Valley | 0.2 | 102 | 175 | | **371** |
| **69** | 0.137 | 17.3 | 0.11 | 0.06 | 0.18 | 0.270 | 4.50 | 0.400 | 53.00 | 4.25 | Phoenix Valley | 0.2 | 24.9 | 168 | **1%** | **1226** |
| *69* | 0.137 | 17.52 | 0.11 | 0.06 | 0.18 | 0.264 | 4.50 | 0.395 | 49.22 | 4.5 | Phoenix Valley | 0.2 | 25 | 167 | | **1219** |
| **70** | 0.141 | 1.5 | 0.68 | 0.34 | 0.46 | 0.250 | 4.45 | 0.510 | 24.00 | 4.75 | Agriculture | 0.09 | 68.8 | 49 | **880%** | **348** |
| *70* | 0.141 | 1.48 | 0.68 | 0.34 | 1.00 | 0.25 | 4.40 | 0.512 | 0.00 | 6 | Agriculture | 0.2 | 152 | 5 | | **35** |
| **71** | 0.155 | 14.4 | 0.34 | 0.17 | 0.93 | 0.250 | 4.80 | 0.410 | 3.00 | 4.5 | Agriculture | 0.184 | 54 | 26 | **30%** | **168** |
| *71* | 0.155 | 14.51 | 0.34 | 0.17 | 1.00 | 0.243 | 4.91 | 0.414 | 2.61 | 5 | Agriculture | 0.2 | 59 | 20 | | **129** |

## BUCKEYE ADMP EXISTING CONDITIONS HYDROLOGY UPDATE - PARAMETERS SUMMARY TABLE
### 10 Year, 6 Hour Storm

| SUB BASIN ADMP | AREA | SLOPE | Length | LCA | IA | DTHETA | PSIF | XKSAT | RTIMP | Tp | S-GRAPH TYPE | Kn | Lag | DISCHARGE | % INCREASE DISCHARGE | UNIT DISCHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *ADMS* | (sq mi) | (ft/mi) | (ft) | (ft) | (in) | | (in) | (in/hr) | (%) | (hrs) | | | (min) | (cfs) | | (cfs/sq mi) |
| **72** | 0.086 | 7.7 | 0.13 | 0.06 | 0.59 | 0.300 | 4.45 | 0.420 | 6.00 | 4 | Agriculture | 0.095 | 14.7 | 62 | **148%** | **721** |
| *72* | 0.086 | 7.71 | 0.13 | 0.06 | 1.00 | 0.23 | 4.47 | 0.424 | 7.94 | 4.5 | Agriculture | 0.2 | 32 | 25 | | **291** |

### MODEL RBW 10-yr, 6-hr

| SUB BASIN ADMP | AREA | SLOPE | Length | LCA | IA | DTHETA | PSIF | XKSAT | RTIMP | Tp | S-GRAPH TYPE | Kn | Lag | DISCHARGE | % INCREASE DISCHARGE | UNIT DISCHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *ADMS* | (sq mi) | (ft/mi) | (ft) | (ft) | (in) | | (in) | (in/hr) | (%) | (hrs) | | | (min) | (cfs) | | (cfs/sq mi) |
| **27** | 0.241 | 14.6 | 0.82 | 0.41 | 1.00 | 0.250 | 3.95 | 0.570 | 0.00 | 5.5 | Agriculture | 0.2 | 114.4 | 10 | **-17%** | **41** |
| *27* | 0.241 | 14.59 | 0.82 | 0.41 | 1.00 | 0.246 | 3.98 | 0.567 | 1.42 | 5.75 | Agriculture | 0.2 | 115 | 12 | | **50** |
| **28** | 0.335 | 16.7 | 1.02 | 0.51 | 0.97 | 0.250 | 4.15 | 0.470 | 1.00 | 5.5 | Agriculture | 0.195 | 128.3 | 19 | **19%** | **57** |
| *28* | 0.335 | 16.68 | 1.02 | 0.51 | 1.00 | 0.249 | 4.18 | 0.467 | 0.54 | 5.75 | Agriculture | 0.2 | 132 | 16 | | **48** |
| **29** | 0.999 | 22.9 | 1.47 | 0.73 | 1.00 | 0.250 | 3.95 | 0.550 | 0.00 | 6 | Agriculture | 0.2 | 163.2 | 12 | **-8%** | **12** |
| *29* | 0.999 | 22.92 | 1.47 | 0.73 | 1.00 | 0.25 | 3.98 | 0.548 | 0.00 | 6.25 | Agriculture | 0.2 | 163 | 13 | | **13** |
| **30** | 0.983 | 21.9 | 1.55 | 0.78 | 0.99 | 0.250 | 4.00 | 0.470 | 0.00 | 6 | Agriculture | 0.197 | 169.6 | 19 | **-57%** | **19** |
| *30* | 0.983 | 21.93 | 1.55 | 0.78 | 1.00 | 0.25 | 4.03 | 0.469 | 8.73 | 6.5 | Agriculture | 0.2 | 172 | 44 | | **45** |
| **31** | 1.079 | 26.4 | 1.93 | 0.97 | 0.99 | 0.250 | 4.00 | 0.460 | 0.00 | 6.75 | Agriculture | 0.197 | 193.3 | 18 | **-10%** | **17** |
| *31* | 1.079 | 26.4 | 1.93 | 0.97 | 1.00 | 0.249 | 4.02 | 0.456 | 0.85 | 6.75 | Agriculture | 0.2 | 196 | 20 | | **19** |
| **32** | 0.896 | 24.3 | 1.84 | 0.92 | 0.98 | 0.250 | 4.00 | 0.520 | 1.00 | 6.5 | Agriculture | 0.197 | 189 | 18 | **6%** | **20** |
| *32* | 0.896 | 24.34 | 1.84 | 0.92 | 1.00 | 0.249 | 4.00 | 0.515 | 1.15 | 6.75 | Agriculture | 0.2 | 192 | 17 | | **19** |
| **33** | 1.002 | 29.3 | 1.84 | 0.92 | 0.91 | 0.260 | 3.95 | 0.440 | 1.00 | 6.25 | Agriculture | 0.175 | 162 | 37 | **76%** | **37** |
| *33* | 1.002 | 29.3 | 1.84 | 0.92 | 1.00 | 0.249 | 3.96 | 0.44 | 0.53 | 6.75 | Agriculture | 0.2 | 185 | 21 | | **21** |
| **41** | 1.202 | 24 | 1.54 | 0.77 | 1.00 | 0.250 | 3.95 | 0.470 | 0.00 | 6 | Agriculture | 0.2 | 168 | 19 | **0%** | **16** |
| *41* | 1.202 | 23.99 | 1.54 | 0.77 | 1.00 | 0.25 | 3.97 | 0.474 | 0.00 | 6.25 | Agriculture | 0.2 | 168 | 19 | | **16** |
| **42** | 0.778 | 22.8 | 1.56 | 0.78 | 1.00 | 0.250 | 4.25 | 0.450 | 0.00 | 6 | Agriculture | 0.2 | 171.3 | 19 | **-5%** | **24** |
| *42* | 0.778 | 22.73 | 1.56 | 0.78 | 1.00 | 0.25 | 4.28 | 0.452 | 0.47 | 6.5 | Agriculture | 0.2 | 172 | 20 | | **26** |
| **43** | 1.002 | 20.8 | 1.92 | 0.96 | 0.99 | 0.250 | 3.95 | 0.430 | 1.00 | 6.75 | Agriculture | 0.198 | 202.1 | 22 | **10%** | **22** |
| *43* | 1.002 | 20.85 | 1.92 | 0.96 | 1.00 | 0.25 | 3.96 | 0.425 | 0.66 | 7 | Agriculture | 0.2 | 204 | 20 | | **20** |
| **44** | 1.007 | 22.4 | 1.97 | 0.98 | 0.96 | 0.260 | 4.10 | 0.490 | 0.00 | 6.5 | Agriculture | 0.189 | 193.6 | 17 | **-37%** | **17** |
| *44* | 1.007 | 22.43 | 1.97 | 0.98 | 1.00 | 0.25 | 4.14 | 0.485 | 5.22 | 7 | Agriculture | 0.2 | 205 | 27 | | **27** |
| **45A** | 1.003 | 25.1 | 1.97 | 0.99 | 0.94 | 0.260 | 4.00 | 0.440 | 0.00 | 6.25 | Agriculture | 0.183 | 184.1 | 26 | **44%** | **26** |

## BUCKEYE ADMP EXISTING CONDITIONS HYDROLOGY UPDATE - PARAMETERS SUMMARY TABLE
### 10 Year, 6 Hour Storm

| SUB BASIN ADMP | AREA | SLOPE | Length | LCA | IA | DTHETA | PSIF | XKSAT | RTIMP | Tp | S-GRAPH TYPE | Kn | Lag | DISCHARGE | % INCREASE DISCHARGE | UNIT DISCHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *ADMS* | (sq mi) | (ft/mi) | (ft) | (ft) | (in) | | (in) | (in/hr) | (%) | (hrs) | | | (min) | (cfs) | | (cfs/sq mi) |
| *45A* | 1.003 | 25.14 | 1.97 | 0.99 | 1.00 | 0.25 | 3.99 | 0.441 | 0.24 | 6.75 | Agriculture | 0.2 | 201 | 18 | [illegible] | **18** |
| **45B** | 0.140 | 8.7 | 0.52 | 0.26 | 0.68 | 0.260 | 4.00 | 0.420 | 18.00 | 4.75 | Agriculture | 0.13 | 58 | 50 | **56%** | **357** |
| *45B* | 0.140 | 8.59 | 0.52 | 0.26 | 1.00 | 0.25 | 3.97 | 0.417 | 29.71 | 5.25 | Agriculture | 0.2 | 89 | 32 | | **229** |
| **52A** | 0.313 | 7 | 0.92 | 0.57 | 1.00 | 0.250 | 3.95 | 0.440 | 0.00 | 6.25 | Agriculture | 0.2 | 155.7 | 14 | **0%** | **45** |
| *52A* | 0.313 | 6.91 | 0.92 | 0.57 | 1.00 | 0.25 | 3.97 | 0.439 | 0.36 | 6.25 | Agriculture | 0.2 | 156 | 14 | | **45** |
| **52B** | 0.495 | 32.5 | 0.71 | 0.32 | 0.97 | 0.250 | 4.10 | 0.530 | 1.00 | 5 | Agriculture | 0.193 | 81.7 | 38 | **23%** | **77** |
| *52B* | 0.495 | 32.56 | 0.71 | 0.32 | 1.00 | 0.251 | 4.09 | 0.53 | 0.35 | 5.25 | Agriculture | 0.2 | 85 | 31 | | **63** |
| **53** | 0.339 | 24 | 0.91 | 0.46 | 0.99 | 0.250 | 4.00 | 0.440 | 1.00 | 5.25 | Agriculture | 0.198 | 112 | 23 | **15%** | **68** |
| *53* | 0.339 | 23.93 | 0.91 | 0.46 | 1.00 | 0.25 | 4.00 | 0.444 | 0.00 | 5.75 | Agriculture | 0.2 | 113 | 20 | | **59** |
| **54** | 0.386 | 12.3 | 1.20 | 0.60 | 0.98 | 0.250 | 4.00 | 0.450 | 1.00 | 6 | Agriculture | 0.197 | 155.4 | 19 | **12%** | **49** |
| *54* | 0.386 | 12.35 | 1.20 | 0.60 | 1.00 | 0.25 | 4.00 | 0.447 | 0.00 | 6.25 | Agriculture | 0.2 | 157 | 17 | | **44** |
| **55** | 0.263 | 12.8 | 0.97 | 0.48 | 1.00 | 0.250 | 4.10 | 0.450 | 0.00 | 5.5 | Agriculture | 0.2 | 132.7 | 13 | **0%** | **49** |
| *55* | 0.263 | 12.83 | 0.97 | 0.48 | 1.00 | 0.25 | 4.13 | 0.446 | 0.00 | 5.75 | Agriculture | 0.2 | 133 | 13 | | **49** |
| **59** | 0.252 | 49.4 | 0.50 | 0.17 | 0.75 | 0.270 | 4.10 | 0.500 | 11.00 | 4.5 | Agriculture | 0.141 | 37.9 | 94 | **119%** | **373** |
| *59* | 0.252 | 49.34 | 0.50 | 0.17 | 1.00 | 0.23 | 4.17 | 0.497 | 8.09 | 4.75 | Agriculture | 0.2 | 53 | 43 | | **171** |
| **60A** | 0.412 | 27.5 | 1.07 | 0.46 | 0.85 | 0.250 | 4.00 | 0.540 | 13.00 | 5.25 | Agriculture | 0.17 | 99.6 | 61 | **205%** | **148** |
| *60A* | 0.412 | 27.51 | 1.07 | 0.46 | 1.00 | 0.249 | 4.04 | 0.541 | 0.79 | 5.75 | Agriculture | 0.2 | 117 | 20 | | **49** |
| **60B** | 0.574 | 22.7 | 1.03 | 0.35 | 0.86 | 0.260 | 4.15 | 0.550 | 3.00 | 5.25 | Agriculture | 0.169 | 91.2 | 56 | **81%** | **98** |
| *60B* | 0.574 | 22.68 | 1.03 | 0.35 | 1.00 | 0.249 | 4.16 | 0.551 | 3.25 | 5.5 | Agriculture | 0.2 | 108 | 31 | | **54** |
| **61** | 0.508 | 23 | 0.90 | 0.45 | 0.76 | 0.250 | 3.92 | 0.460 | 8.00 | 5 | Agriculture | 0.152 | 85.6 | 96 | **182%** | **189** |
| *61* | 0.508 | 23 | 0.90 | 0.45 | 1.00 | 0.248 | 3.97 | 0.464 | 2.23 | 5.75 | Agriculture | 0.2 | 113 | 34 | | **67** |
| **62** | 0.572 | 21.5 | 0.98 | 0.49 | 0.94 | 0.250 | 4.20 | 0.440 | 3.00 | 5.5 | Agriculture | 0.187 | 113.8 | 44 | **52%** | **77** |
| *62* | 0.572 | 21.54 | 0.98 | 0.49 | 1.00 | 0.249 | 4.20 | 0.444 | 0.47 | 5.75 | Agriculture | 0.2 | 122 | 29 | | **51** |
| **63** | 0.499 | 20.3 | 0.95 | 0.47 | 0.97 | 0.250 | 4.15 | 0.400 | 1.00 | 5.5 | Agriculture | 0.195 | 116.7 | 36 | **-49%** | **72** |
| *63* | 0.499 | 20.27 | 0.95 | 0.47 | 1.00 | 0.25 | 4.19 | 0.398 | 20.75 | 5.75 | Agriculture | 0.2 | 120 | 71 | | **142** |
| **64** | 0.415 | 18 | 0.89 | 0.45 | 0.98 | 0.250 | 4.35 | 0.450 | 0.00 | 5.5 | Agriculture | 0.196 | 115.1 | 24 | **0%** | **58** |
| *64* | 0.415 | 17.94 | 0.89 | 0.45 | 1.00 | 0.248 | 4.36 | 0.445 | 1.18 | 5.75 | Agriculture | 0.2 | 117 | 24 | | **58** |

## BUCKEYE ADMP EXISTING CONDITIONS HYDROLOGY UPDATE - PARAMETERS SUMMARY TABLE
### 10 Year, 6 Hour Storm

| SUB BASIN ADMP | AREA | SLOPE | Length | LCA | IA | DTHETA | PSIF | XKSAT | RTIMP | Tp | S-GRAPH TYPE | Kn | Lag | DISCHARGE | % INCREASE DISCHARGE | UNIT DISCHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *ADMS* | (sq mi) | (ft/mi) | (ft) | (ft) | (in) | | (in) | (in/hr) | (%) | (hrs) | | | (min) | (cfs) | | (cfs/sq mi) |
| **68** | 0.413 | 45.6 | 0.96 | 0.33 | 0.52 | 0.290 | 4.35 | 0.370 | 4.00 | 4.5 | Desert Rangeland | 0.084 | 37.8 | 203 | **-37%** | **492** |
| *68* | 0.413 | 45.58 | 0.96 | 0.33 | 0.37 | 0.334 | 4.37 | 0.374 | 0.00 | 4.5 | Desert Rangeland | 0.05 | 22 | 324 | | **785** |

### MODEL AREA 2 10-yr, 6-hr

| SUB BASIN ADMP | AREA | SLOPE | Length | LCA | IA | DTHETA | PSIF | XKSAT | RTIMP | Tp | S-GRAPH TYPE | Kn | Lag | DISCHARGE | % INCREASE DISCHARGE | UNIT DISCHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *ADMS* | (sq mi) | (%) | (ft) | (ft) | (in) | | (in) | (in/hr) | (%) | (hrs) | | | (min) | (cfs) | | (cfs/sq mi) |
| **A1** | 1.628 | 33 | 2.96 | 1.73 | 0.35 | 0.350 | 4.45 | 0.340 | 0.00 | 4.42 | Desert Rangeland | 0.025 | 34.5 | 570 | **N/A** | **350** |
| *A1* | 1.630 | 32.98 | 2.96 | 1.73 | 0.34 | 0.347 | 4.50 | 0.339 | 2.15 | N/A | Desert Rangeland | 0.05 | 69 | N/A | | **N/A** |
| **B1** | 0.300 | 57.2 | 1.34 | 0.66 | 0.35 | 0.350 | 4.60 | 0.320 | 0.00 | 4.08 | Desert Rangeland | 0.025 | 15.9 | 316 | **N/A** | **1053** |
| *B1* | 0.300 | 57.24 | 1.34 | 0.66 | 0.35 | 0.35 | 4.62 | 0.315 | 0.00 | N/A | Desert Rangeland | 0.05 | 31 | N/A | | **N/A** |
| **C1** | 0.947 | 41.6 | 2.65 | 1.06 | 0.35 | 0.350 | 4.65 | 0.310 | 0.00 | 4.25 | Desert Rangeland | 0.025 | 26.3 | 537 | **N/A** | **567** |
| *C1* | 0.950 | 41.6 | 2.65 | 1.06 | 0.35 | 0.35 | 4.67 | 0.311 | 0.00 | N/A | Desert Rangeland | 0.05 | 52 | N/A | | **N/A** |
| **D1** | 0.687 | 41.1 | 2.05 | 0.98 | 0.35 | 0.350 | 4.65 | 0.320 | 0.00 | 4.25 | Desert Rangeland | 0.026 | 24.1 | 477 | **N/A** | **694** |
| *D1* | 0.690 | 41.1 | 2.05 | 0.98 | 0.35 | 0.35 | 4.64 | 0.317 | 0.00 | N/A | Desert Rangeland | 0.05 | 46 | N/A | | **N/A** |
| **E1** | 1.466 | 27.9 | 3.19 | 1.81 | 0.35 | 0.350 | 4.35 | 0.360 | 0.00 | 4.42 | Desert Rangeland | 0.025 | 37.2 | 486 | **N/A** | **332** |
| *E1* | 1.470 | 27.95 | 3.19 | 1.81 | 0.34 | 0.347 | 4.36 | 0.364 | 2.08 | N/A | Desert Rangeland | 0.05 | 75 | N/A | | **N/A** |
| **E2-a2** | 1.223 | 27.5 | 2.97 | 1.67 | 0.41 | 0.340 | 4.40 | 0.350 | 1.00 | 4.75 | Desert Rangeland | 0.043 | 60.6 | 274 | **N/A** | **224** |
| *E2-a2* | 1.220 | 27.48 | 2.97 | 1.67 | 0.35 | 0.343 | 4.46 | 0.354 | 2.29 | N/A | Desert Rangeland | 0.05 | 70 | N/A | | **N/A** |
| **E3-a2** | 0.943 | 25.9 | 2.72 | 0.99 | 0.78 | 0.270 | 4.25 | 0.440 | 1.00 | 6.33 | Desert Rangeland | 0.145 | 163.9 | 502 | **N/A** | **532** |
| *E3-a2* | 0.940 | 25.93 | 2.72 | 0.99 | 0.40 | 0.306 | 4.25 | 0.444 | 1.59 | N/A | Desert Rangeland | 0.05 | 56 | N/A | | **N/A** |
| **E4** | 0.740 | 29 | 2.00 | 1.24 | 0.56 | 0.300 | 4.15 | 0.420 | 1.00 | 5.25 | Desert Rangeland | 0.089 | 95.5 | 113 | **N/A** | **153** |
| *E4* | 0.740 | 28.98 | 2.00 | 1.24 | 0.39 | 0.324 | 4.19 | 0.421 | 0.00 | N/A | Desert Rangeland | 0.05 | 53 | N/A | | **N/A** |

# Parameters Summary Table

- 10 Year, 24 Hour Storm

# BUCKEYE ADMP EXISTING CONDITIONS HYDROLOGY UPDATE - PARAMETERS SUMMARY TABLE
## 10 Year, 24 Hour Storm

**MODEL BGE 10-yr, 24-hr**

| SUB BASIN ADMP | AREA | SLOPE | Length | LCA | IA | DTHETA | PSIF | XKSAT | RTIMP | Tp | S-GRAPH TYPE | Kn | Lag | DISCHARGE | % INCREASE DISCHARGE | UNIT DISCHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *ADMS* | (sq mi) | (ft/mi) | (ft) | (ft) | (in) | | (in) | (in/hr) | (%) | (hrs) | | | (min) | (cfs) | | (cfs/sq mi) |
| **90** | 1.055 | 21.5 | 2.05 | 1.02 | 0.87 | 0.150 | 9.7 | 0.080 | 7.00 | 14.5 | Agriculture | 0.171 | 181.9 | 101 | **53%** | **96** |
| *90* | 1.055 | 21.5 | 2.05 | 1.02 | 1 | 0.152 | 9.53 | 0.075 | 5.87 | 15.25 | Agriculture | 0.2 | 213 | 66 | | **63** |
| **91** | 1.189 | 21.1 | 5.08 | 1.04 | 0.55 | 0.160 | 8.4 | 0.090 | 15.00 | 14.5 | Phoenix Valley | 0.105 | 159.5 | 234 | **255%** | **197** |
| *91* | 1.189 | 21.1 | 5.08 | 1.04 | 1 | 0.15 | 8.29 | 0.113 | 5.19 | 15.25 | Agriculture | 0.2 | 217 | 66 | | **56** |
| **92** | 1.014 | 17.5 | 2.06 | 1.03 | 0.85 | 0.150 | 8.4 | 0.100 | 6.00 | 14.5 | Agriculture | 0.17 | 189.1 | 91 | **-32%** | **90** |
| *92* | 1.014 | 17.46 | 2.06 | 1.03 | 1 | 0.152 | 8.66 | 0.095 | 5.86 | 13.5 | Agriculture | 0.2 | 223 | 134 | | **132** |
| **93** | 0.377 | 17.4 | 1.21 | 0.60 | 0.82 | 0.250 | 4.9 | 0.410 | 7.00 | 13.75 | Agriculture | 0.162 | 120 | 30 | **67%** | **80** |
| *93* | 0.377 | 17.39 | 1.21 | 0.60 | 1 | 0.245 | 4.88 | 0.41 | 9.38 | 14.25 | Agriculture | 0.2 | 148 | 18 | | **48** |
| **94** | 0.719 | 22.4 | 1.30 | 0.65 | 0.91 | 0.150 | 7.3 | 0.160 | 4.00 | 14 | Agriculture | 0.182 | 136.2 | 71 | **48%** | **99** |
| *94* | 0.719 | 22.37 | 1.30 | 0.65 | 1 | 0.15 | 7.3 | 0.157 | 2.2 | 14.25 | Agriculture | 0.2 | 149 | 48 | | **67** |
| **95** | 0.522 | 7.8 | 1.66 | 0.83 | 0.85 | 0.150 | 8 | 0.120 | 6.00 | 14.5 | Agriculture | 0.17 | 187.2 | 47 | **88%** | **90** |
| *95* | 0.522 | 7.84 | 1.66 | 0.83 | 1 | 0.15 | 8.2 | 0.118 | 0.73 | 15.25 | Agriculture | 0.2 | 220 | 25 | | **48** |
| **96** | 0.914 | 4.5 | 1.32 | 0.66 | 0.89 | 0.150 | 7.3 | 0.160 | 5.00 | 14.5 | Agriculture | 0.177 | 181.7 | 72 | **80%** | **79** |
| *96* | 0.914 | 4.55 | 1.32 | 0.66 | 1 | 0.15 | 7.2 | 0.171 | 0.59 | 15 | Agriculture | 0.2 | 205 | 40 | | **44** |
| **97** | 0.500 | 6.1 | 1.32 | 0.66 | 0.77 | 0.170 | 6.8 | 0.180 | 9.00 | 13.75 | Agriculture | 0.153 | 148.3 | 57 | **171%** | **114** |
| *97* | 0.500 | 6.05 | 1.32 | 0.66 | 1 | 0.163 | 6.87 | 0.195 | 0.28 | 15 | Agriculture | 0.2 | 195 | 21 | | **42** |
| **98** | 0.388 | 6.7 | 1.50 | 0.75 | 0.53 | 0.160 | 8.8 | 0.080 | 19.00 | 13.25 | Agriculture | 0.102 | 107 | 94 | **68%** | **242** |
| *98* | 0.388 | 6.69 | 1.50 | 0.75 | 1 | 0.174 | 9.08 | 0.078 | 10.56 | 13.5 | Agriculture | 0.2 | 209 | 56 | | **144** |
| **99** | 0.948 | 3.5 | 2.01 | 1.24 | 0.19 | 0.260 | 6 | 0.220 | 7.00 | 12.75 | Phoenix Valley | 0.034 | 54.6 | 391 | **502%** | **412** |
| *99* | 0.948 | 3.49 | 2.01 | 1.24 | 1 | 0.334 | 6.02 | 0.216 | 0.01 | 13.5 | Phoenix Valley | 0.05 | 80 | 65 | | **69** |
| **100** | 0.582 | 18.8 | 1.70 | 0.85 | 1 | 0.230 | 6.2 | 0.250 | 0.00 | 14.25 | Agriculture | 0.199 | 188.7 | 19 | **6%** | **33** |
| *100* | 0.582 | 18.83 | 1.70 | 0.85 | 1 | 0.228 | 6.24 | 0.251 | 1.19 | 14.75 | Agriculture | 0.2 | 190 | 18 | | **31** |
| **101** | 0.381 | 8.6 | 1.63 | 0.81 | 0.55 | 0.150 | 7 | 0.180 | 6.00 | 13.75 | Phoenix Valley | 0.109 | 115.9 | 82 | **332%** | **215** |
| *101* | 0.381 | 8.59 | 1.63 | 0.81 | 1 | 0.149 | 6.96 | 0.172 | 3.95 | 15.25 | Agriculture | 0.2 | 213 | 19 | | **50** |
| **4th** | 0.082 | 0.2 | 0.52 | 0.40 | 0.18 | 0.250 | 5.2 | 0.330 | 55.00 | 12.5 | Phoenix Valley | 0.034 | 36.6 | 58 | **-23%** | **707** |
| *4th* | 0.082 | 0.01 | 0.52 | 0.40 | 0.192 | 0.248 | 5.15 | 0.326 | 55.32 | 12.5 | Phoenix Valley | 0.011 | 24 | 75 | | **915** |
| **4thS** | 0.145 | 0.1 | 0.74 | 0.50 | 0.18 | 0.220 | 6.4 | 0.200 | 58.00 | 12.75 | Phoenix Valley | 0.034 | 52 | 88 | **-17%** | **607** |
| *4thS* | 0.145 | 0.01 | 0.74 | 0.50 | 0.181 | 0.203 | 6.47 | 0.204 | 37.61 | 12.5 | Phoenix Valley | 0.011 | 30 | 106 | | **731** |
| **6th** | 0.057 | 0.2 | 0.46 | 0.17 | 0.2 | 0.150 | 7.6 | 0.120 | 47.00 | 12.25 | Phoenix Valley | 0.039 | 29 | 50 | **-14%** | **877** |
| *6th* | 0.057 | 0.01 | 0.46 | 0.17 | 0.206 | 0.148 | 7.57 | 0.12 | 51.54 | 12.5 | Phoenix Valley | 0.011 | 17 | 58 | | **1018** |

# BUCKEYE ADMP EXISTING CONDITIONS HYDROLOGY UPDATE - PARAMETERS SUMMARY TABLE
## 10 Year, 24 Hour Storm

| SUB BASIN ADMP | AREA | SLOPE | Length | LCA | IA | DTHETA | PSIF | XKSAT | RTIMP | Tp | S-GRAPH TYPE | Kn | Lag | DISCHARGE | % INCREASE DISCHARGE | UNIT DISCHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *ADMS* | (sq mi) | (ft/mi) | (ft) | (ft) | (in) | | (in) | (in/hr) | (%) | (hrs) | | | (min) | (cfs) | | (cfs/sq mi) |
| **7th** | 0.127 | 0.2 | 0.66 | 0.33 | 0.21 | 0.260 | 5.3 | 0.310 | 39.00 | 12.5 | Phoenix Valley | 0.037 | 40.5 | 77 | -26% | **606** |
| *7th* | 0.127 | 0.01 | 0.66 | 0.33 | 0.252 | 0.261 | 5.11 | 0.312 | 38.17 | 12.5 | Phoenix Valley | 0.011 | 24 | 104 | | **819** |
| **8th** | 0.079 | 0.2 | 0.60 | 0.31 | 0.23 | 0.160 | 8.8 | 0.070 | 38.00 | 12.5 | Phoenix Valley | 0.044 | 45.4 | 53 | -37% | **671** |
| *8th* | 0.079 | 0.01 | 0.60 | 0.31 | 0.241 | 0.15 | 8.77 | 0.074 | 42.7 | 12.5 | Phoenix Valley | 0.011 | 23 | 84 | | **1063** |
| **9thE** | 0.095 | 0.2 | 0.54 | 0.32 | 0.17 | 0.160 | 8.8 | 0.080 | 31.00 | 12.25 | Phoenix Valley | 0.029 | 29.1 | 84 | 1% | **884** |
| *9thE* | 0.095 | 0.01 | 0.54 | 0.32 | 0.173 | 0.154 | 8.73 | 0.083 | 35.4 | 12.5 | Phoenix Valley | 0.011 | 22 | 83 | | **874** |
| **9thW** | 0.081 | 0.1 | 0.77 | 0.39 | 0.18 | 0.170 | 8.4 | 0.100 | 30.00 | 12.5 | Phoenix Valley | 0.031 | 43.8 | 54 | -36% | **667** |
| *9thW* | 0.081 | 0.01 | 0.77 | 0.39 | 0.197 | 0.149 | 8.42 | 0.101 | 29.52 | 12.5 | Phoenix Valley | 0.011 | 29 | 84 | | **1037** |
| **BAYLIS** | 0.016 | 0.3 | 0.30 | 0.08 | 0.15 | 0.160 | 9.7 | 0.070 | 64.00 | 12 | Phoenix Valley | 0.024 | 10.5 | 24 | -4% | **1500** |
| *BAYLIS* | 0.016 | 0.01 | 0.30 | 0.08 | 0.1 | 0.15 | 9.7 | 0.069 | 80 | 12.25 | Phoenix Valley | 0.011 | 9 | 25 | | **1563** |
| **BELOAT** | 0.047 | 0.2 | 0.44 | 0.25 | 0.26 | 0.160 | 8.8 | 0.060 | 32.00 | 12.5 | Phoenix Valley | 0.047 | 39.7 | 36 | -23% | **766** |
| *BELOAT* | 0.047 | 0 | 0.44 | 0.25 | 0.37 | 0.218 | 9.33 | 0.062 | 7.02 | 12.5 | Phoenix Valley | 0.011 | 19 | 47 | | **1000** |
| **CENTRE** | 0.069 | 0.3 | 0.40 | 0.23 | 0.23 | 0.160 | 7 | 0.150 | 41.00 | 12.25 | Phoenix Valley | 0.043 | 31.4 | 53 | -23% | **768** |
| *CENTRE* | 0.069 | 0.01 | 0.40 | 0.23 | 0.248 | 0.153 | 6.97 | 0.147 | 35.73 | 12.5 | Phoenix Valley | 0.011 | 18 | 69 | | **1000** |
| **DRAIN** | 0.116 | 0.2 | 0.59 | 0.26 | 0.29 | 0.150 | 9.7 | 0.060 | 34.00 | 12.75 | Phoenix Valley | 0.058 | 55.6 | 71 | -3% | **612** |
| *DRAIN* | 0.116 | 0.01 | 0.59 | 0.26 | 1 | 0.15 | 9.66 | 0.071 | 7.35 | 12.5 | Phoenix Valley | 0.011 | 20 | 73 | | **629** |

## MODEL BGW 10-yr, 24-hr

| SUB BASIN ADMP | AREA | SLOPE | Length | LCA | IA | DTHETA | PSIF | XKSAT | RTIMP | Tp | S-GRAPH TYPE | Kn | Lag | DISCHARGE | % INCREASE DISCHARGE | UNIT DISCHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *ADMS* | (sq mi) | (ft/mi) | (ft) | (ft) | (in) | | (in) | (in/hr) | (%) | (hrs) | | | (min) | (cfs) | | (cfs/sq mi) |
| **84** | 0.877 | 13.3 | 1.81 | 0.98 | 0.99 | 0.150 | 9.7 | 0.070 | 0.00 | 15 | Agriculture | 0.199 | 217.9 | 51 | 6% | **58** |
| *84* | 0.877 | 13.27 | 1.81 | 0.98 | 1 | 0.147 | 9.73 | 0.071 | 1 | 15.25 | Agriculture | 0.2 | 219 | 48 | | **55** |
| **85A** | 0.216 | 37.9 | 0.84 | 0.42 | 1 | 0.150 | 7.3 | 0.170 | 0.00 | 13.25 | Agriculture | 0.2 | 97.2 | 22 | 0% | **102** |
| *85A* | 0.216 | 37.89 | 0.84 | 0.42 | 1 | 0.148 | 7.22 | 0.169 | 1.44 | 13.5 | Agriculture | 0.2 | 98 | 22 | | **102** |
| **85B** | 0.745 | 15.6 | 1.47 | 0.73 | 0.93 | 0.250 | 5.7 | 0.300 | 2.00 | 14.25 | Agriculture | 0.185 | 162.4 | 34 | 55% | **46** |
| *85B* | 0.745 | 15.68 | 1.47 | 0.73 | 1 | 0.247 | 5.67 | 0.297 | 1.99 | 14.5 | Agriculture | 0.2 | 176 | 22 | | **30** |
| **86** | 0.440 | 25.8 | 1.09 | 0.54 | 0.91 | 0.150 | 8 | 0.110 | 2.00 | 13.5 | Agriculture | 0.181 | 114.9 | 55 | 25% | **125** |
| *86* | 0.440 | 25.78 | 1.09 | 0.54 | 1 | 0.15 | 8.11 | 0.11 | 6.81 | 13.75 | Agriculture | 0.2 | 127 | 44 | | **100** |
| **87** | 0.913 | 22.5 | 1.87 | 0.93 | 1 | 0.150 | 9.7 | 0.070 | 0.00 | 14.5 | Agriculture | 0.199 | 195.7 | 58 | 2% | **64** |
| *87* | 0.913 | 22.48 | 1.87 | 0.93 | 1 | 0.142 | 9.84 | 0.066 | 1.13 | 15 | Agriculture | 0.2 | 197 | 57 | | **62** |

## BUCKEYE ADMP EXISTING CONDITIONS HYDROLOGY UPDATE - PARAMETERS SUMMARY TABLE
### 10 Year, 24 Hour Storm

| SUB BASIN ADMP | AREA | SLOPE | Length | LCA | IA | DTHETA | PSIF | XKSAT | RTIMP | Tp | S-GRAPH TYPE | Kn | Lag | DISCHARGE | % INCREASE DISCHARGE | UNIT DISCHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *ADMS* | (sq mi) | (ft/mi) | (ft) | (ft) | (in) | | (in) | (in/hr) | (%) | (hrs) | | | (min) | (cfs) | | (cfs/sq mi) |
| **88** | 0.765 | 19.3 | 1.66 | 0.83 | 0.99 | 0.150 | 9.7 | 0.070 | 0.00 | 14.75 | Agriculture | 0.198 | 183.5 | 54 | **10%** | **71** |
| *88* | 0.765 | 19.29 | 1.66 | 0.83 | 1 | 0.145 | 9.8 | 0.068 | 0.29 | 14.75 | Agriculture | 0.2 | 185 | 49 | | **64** |
| **89** | 0.963 | 21.2 | 1.79 | 0.90 | 0.99 | 0.150 | 9.7 | 0.070 | 0.00 | 14.5 | Agriculture | 0.199 | 192.3 | 64 | **7%** | **66** |
| *89* | 0.963 | 21.2 | 1.79 | 0.90 | 1 | 0.144 | 9.82 | 0.068 | 0.56 | 15 | Agriculture | 0.2 | 193 | 60 | | **62** |
| **102** | 0.520 | 25.7 | 1.48 | 0.74 | 0.99 | 0.150 | 8.4 | 0.100 | 0.00 | 14 | Agriculture | 0.197 | 158.5 | 39 | **11%** | **75** |
| *102* | 0.520 | 25.68 | 1.48 | 0.74 | 1 | 0.15 | 8.6 | 0.1 | 0.19 | 14.25 | Agriculture | 0.2 | 161 | 35 | | **67** |
| **103** | 0.507 | 22.8 | 1.14 | 0.57 | 0.84 | 0.230 | 6.2 | 0.240 | 3.00 | 13.5 | Agriculture | 0.165 | 111.4 | 50 | **117%** | **99** |
| *103* | 0.507 | 22.77 | 1.14 | 0.57 | 1 | 0.218 | 6.32 | 0.244 | 0.67 | 14 | Agriculture | 0.2 | 135 | 23 | | **45** |
| **104** | 1.012 | 13.8 | 1.95 | 0.98 | 0.99 | 0.170 | 6.8 | 0.190 | 0.00 | 15 | Agriculture | 0.198 | 221.5 | 41 | **17%** | **41** |
| *104* | 1.012 | 13.83 | 1.95 | 0.98 | 1 | 0.175 | 6.76 | 0.192 | 0.05 | 15 | Agriculture | 0.2 | 223 | 35 | | **35** |
| **105** | 0.997 | 18.6 | 1.94 | 0.97 | 0.98 | 0.150 | 8.4 | 0.110 | 0.00 | 15 | Agriculture | 0.196 | 205.9 | 56 | **8%** | **56** |
| *105* | 0.997 | 18.59 | 1.94 | 0.97 | 1 | 0.15 | 8.42 | 0.106 | 1.66 | 15.25 | Agriculture | 0.2 | 210 | 52 | | **52** |
| **106** | 1.209 | 20.8 | 2.21 | 1.11 | 1 | 0.150 | 7.6 | 0.150 | 0.00 | 15 | Agriculture | 0.2 | 227.5 | 52 | **4%** | **43** |
| *106* | 1.209 | 20.78 | 2.21 | 1.11 | 1 | 0.15 | 7.6 | 0.146 | 0.44 | 15.5 | Agriculture | 0.2 | 227 | 50 | | **41** |
| **107** | 0.484 | 18.4 | 0.98 | 0.49 | 1 | 0.170 | 6.8 | 0.210 | 0.00 | 13.5 | Agriculture | 0.2 | 125.3 | 32 | **10%** | **66** |
| *107* | 0.484 | 18.37 | 0.98 | 0.49 | 1 | 0.181 | 6.69 | 0.21 | 0 | 13.75 | Agriculture | 0.2 | 125 | 29 | | **60** |

**MODEL FRE 10-yr, 24-hr**

| SUB BASIN ADMP | AREA | SLOPE | Length | LCA | IA | DTHETA | PSIF | XKSAT | RTIMP | Tp | S-GRAPH TYPE | Kn | Lag | DISCHARGE | % INCREASE DISCHARGE | UNIT DISCHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *ADMS* | (sq mi) | (ft/mi) | (ft) | (ft) | (in) | | (in) | (in/hr) | (%) | (hrs) | | | (min) | (cfs) | | (cfs/sq mi) |
| **6** | 0.318 | 88.2 | 0.50 | 0.35 | 0.35 | 0.350 | 4.8 | 0.240 | 1.00 | 12 | Desert Rangeland | 0.025 | 7.9 | 356 | **95%** | **1119** |
| *6* | 0.318 | 88.18 | 0.50 | 0.35 | 0.327 | 0.359 | 5.26 | 0.239 | 8.06 | 12.25 | Desert Rangeland | 0.05 | 16 | 183 | | **575** |
| **7** | 0.446 | 73 | 0.74 | 0.30 | 0.35 | 0.350 | 3.88 | 0.400 | 1.00 | 12 | Desert Rangeland | 0.026 | 9.4 | 382 | **72%** | **857** |
| *7* | 0.446 | 73.02 | 0.74 | 0.30 | 0.336 | 0.345 | 4.13 | 0.4 | 4.38 | 12.5 | Desert Rangeland | 0.05 | 18 | 222 | | **498** |
| **8** | 0.414 | 14.8 | 1.22 | 0.56 | 0.37 | 0.320 | 4.1 | 0.480 | 9.00 | 12.25 | Desert Rangeland | 0.04 | 29.9 | 164 | **-4%** | **396** |
| *8* | 0.414 | 14.8 | 1.22 | 0.56 | 0.277 | 0.319 | 4.1 | 0.445 | 23.07 | 12.75 | Desert Rangeland | 0.05 | 37 | 171 | | **413** |
| **9** | 0.612 | 57.1 | 0.79 | 0.41 | 0.31 | 0.320 | 4 | 0.510 | 16.00 | 12 | Desert Rangeland | 0.03 | 13.1 | 411 | **27%** | **672** |
| *9* | 0.612 | 57.09 | 0.79 | 0.41 | 0.327 | 0.34 | 3.98 | 0.411 | 7.24 | 12.5 | Desert Rangeland | 0.05 | 22 | 323 | | **528** |
| **10** | 1.174 | 46.3 | 1.77 | 1.27 | 0.29 | 0.280 | 4.15 | 0.400 | 27.00 | 12.5 | Phoenix Valley | 0.044 | 41.6 | 577 | **55%** | **491** |
| *10* | 1.174 | 46.29 | 1.77 | 1.27 | 0.299 | 0.312 | 4.15 | 0.403 | 10.87 | 13 | Phoenix Valley | 0.05 | 47 | 373 | | **318** |

# BUCKEYE ADMP EXISTING CONDITIONS HYDROLOGY UPDATE - PARAMETERS SUMMARY TABLE
## 10 Year, 24 Hour Storm

| SUB BASIN ADMP | AREA | SLOPE | Length | LCA | IA | DTHETA | PSIF | XKSAT | RTIMP | Tp | S-GRAPH TYPE | Kn | Lag | DISCHARGE | % INCREASE DISCHARGE | UNIT DISCHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *ADMS* | (sq mi) | (ft/mi) | (ft) | (ft) | (in) | | (in) | (in/hr) | (%) | (hrs) | | | (min) | (cfs) | | (cfs/sq mi) |
| **11A** | 0.571 | 84 | 0.57 | 0.33 | 0.28 | 0.280 | 5 | 0.310 | 23.00 | 12 | Phoenix Valley | 0.044 | 14.5 | 442 | **21%** | **774** |
| *11A* | 0.571 | 83.95 | 0.57 | 0.33 | 0.32 | 0.356 | 5.2 | 0.244 | 9.66 | 12.5 | Phoenix Valley | 0.05 | 16 | 366 | | **641** |
| **11B** | 0.581 | 41.8 | 1.39 | 0.62 | 0.29 | 0.290 | 4.3 | 0.450 | 18.00 | 12.25 | Phoenix Valley | 0.041 | 27.5 | 322 | **45%** | **554** |
| *11B* | 0.581 | 41.81 | 1.39 | 0.62 | 0.35 | 0.35 | 4.28 | 0.363 | 0 | 12.75 | Phoenix Valley | 0.05 | 34 | 222 | | **382** |
| **11C** | 0.343 | 54.3 | 0.99 | 0.31 | 0.33 | 0.330 | 3.95 | 0.400 | 8.00 | 12 | Desert Rangeland | 0.031 | 13.3 | 237 | **26%** | **691** |
| *11C* | 0.343 | 54.38 | 0.99 | 0.31 | 0.35 | 0.35 | 3.98 | 0.4 | 0 | 12.5 | Phoenix Valley | 0.05 | 22 | 188 | | **548** |
| **12** | 0.736 | 83 | 0.96 | 0.41 | 0.26 | 0.260 | 4.45 | 0.430 | 27.00 | 12.25 | Phoenix Valley | 0.047 | 20.5 | 569 | **28%** | **773** |
| *12* | 0.736 | 83.03 | 0.96 | 0.41 | 0.338 | 0.345 | 4.5 | 0.333 | 3.95 | 12.5 | Phoenix Valley | 0.05 | 22 | 446 | | **606** |
| **13** | 0.501 | 71.2 | 0.52 | 0.26 | 0.25 | 0.250 | 5.1 | 0.310 | 30.00 | 12 | Phoenix Valley | 0.05 | 15 | 400 | **39%** | **798** |
| *13* | 0.501 | 71.2 | 0.52 | 0.26 | 0.35 | 0.364 | 5.14 | 0.247 | 0 | 12.25 | Phoenix Valley | 0.05 | 15 | 287 | | **573** |
| **14A** | 0.692 | 67.9 | 1.33 | 0.71 | 0.26 | 0.260 | 4.25 | 0.480 | 26.00 | 12.25 | Phoenix Valley | 0.047 | 29.7 | 378 | **38%** | **546** |
| *14A* | 0.692 | 67.87 | 1.33 | 0.71 | 0.335 | 0.344 | 4.26 | 0.368 | 4.73 | 12.75 | Phoenix Valley | 0.05 | 32 | 273 | | **395** |
| **14B** | 0.502 | 54.1 | 0.59 | 0.30 | 0.25 | 0.250 | 4.15 | 0.520 | 30.00 | 12.25 | Phoenix Valley | 0.05 | 17.5 | 374 | **62%** | **745** |
| *14B* | 0.502 | 54 | 0.59 | 0.30 | 0.36 | 0.344 | 4.18 | 0.385 | 0 | 12.5 | Desert Rangeland | 0.05 | 17 | 231 | | **460** |
| **20** | 0.665 | 16.6 | 1.57 | 0.79 | 0.42 | 0.250 | 3.95 | 0.400 | 34.00 | 13 | Phoenix Valley | 0.085 | 77.9 | 212 | **1827%** | **319** |
| *20* | 0.665 | 16.56 | 1.57 | 0.79 | 1 | 0.252 | 3.97 | 0.479 | 0.02 | 14.5 | Agriculture | 0.02 | 183 | 11 | | **17** |
| **21A** | 0.366 | 39.9 | 1.43 | 0.71 | 0.25 | 0.250 | 4 | 0.550 | 45.00 | 12.5 | Phoenix Valley | 0.05 | 35.9 | 223 | **7333%** | **609** |
| *21A* | 0.366 | 39.92 | 1.43 | 0.71 | 1 | 0.277 | 4 | 0.641 | 0 | 14 | Agriculture | 0.02 | 144 | 3 | | **8** |
| **21B** | 0.273 | 24.6 | 1.02 | 0.51 | 0.9 | 0.260 | 4 | 0.690 | 3.00 | 13.25 | Agriculture | 0.175 | 107 | 10 | **400%** | **37** |
| *21B* | 0.273 | 24.58 | 1.02 | 0.51 | 1 | 0.25 | 4 | 0.692 | 0 | 13.75 | Agriculture | 0.02 | 122 | 2 | | **7** |
| **22** | 0.557 | 18.1 | 1.54 | 0.77 | 0.99 | 0.250 | 4 | 0.550 | 0.00 | 14.25 | Agriculture | 0.198 | 175.5 | 10 | **43%** | **18** |
| *22* | 0.557 | 18.14 | 1.54 | 0.77 | 1 | 0.25 | 4 | 0.55 | 0.18 | 14.5 | Agriculture | 0.02 | 178 | 7 | | **13** |
| **23** | 0.524 | 15.9 | 1.32 | 0.66 | 0.25 | 0.250 | 3.95 | 0.400 | 30.00 | 12.5 | Phoenix Valley | 0.05 | 40.4 | 285 | **2275%** | **544** |
| *23* | 0.524 | 15.92 | 1.32 | 0.66 | 1 | 0.248 | 3.96 | 0.472 | 0.99 | 14.5 | Agriculture | 0.02 | 161 | 12 | | **23** |
| **24** | 0.489 | 56.2 | 0.53 | 0.27 | 0.3 | 0.250 | 4.6 | 0.370 | 7.00 | 12.25 | Phoenix Valley | 0.051 | 16.3 | 314 | **15%** | **642** |
| *24* | 0.489 | 56.27 | 0.53 | 0.27 | 0.312 | 0.276 | 4.59 | 0.365 | 11.26 | 12.25 | Desert Rangeland | 0.05 | 16 | 273 | | **558** |
| **25** | 0.274 | 10.5 | 1.05 | 0.52 | 0.29 | 0.290 | 4.15 | 0.490 | 18.00 | 12.25 | Phoenix Valley | 0.04 | 29.3 | 137 | **281%** | **500** |
| *25* | 0.274 | 10.49 | 1.05 | 0.52 | 1 | 0.285 | 4.14 | 0.39 | 1.29 | 12.75 | Phoenix Valley | 0.05 | 37 | 36 | | **131** |
| **26** | 0.524 | 39.3 | 0.76 | 0.38 | 0.3 | 0.260 | 4 | 0.400 | 9.00 | 12.25 | Phoenix Valley | 0.049 | 21.9 | 360 | **-1%** | **687** |
| *26* | 0.524 | 39.29 | 0.76 | 0.38 | 0.304 | 0.26 | 4.05 | 0.4 | 13.8 | 12.5 | Phoenix Valley | 0.05 | 22 | 362 | | **691** |

## BUCKEYE ADMP EXISTING CONDITIONS HYDROLOGY UPDATE - PARAMETERS SUMMARY TABLE
### 10 Year, 24 Hour Storm

| SUB BASIN ADMP | AREA | SLOPE | Length | LCA | IA | DTHETA | PSIF | XKSAT | RTIMP | Tp | S-GRAPH TYPE | Kn | Lag | DISCHARGE | % INCREASE DISCHARGE | UNIT DISCHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *ADMS* | (sq mi) | (ft/mi) | (ft) | (ft) | (in) | | (in) | (in/hr) | (%) | (hrs) | | | (min) | (cfs) | | (cfs/sq mi) |
| **83** | 0.675 | 64.7 | 1.72 | 0.93 | 0.25 | 0.250 | 5.4 | 0.270 | 30.00 | 12.5 | Phoenix Valley | 0.05 | 39 | 398 | **57%** | **590** |
| *83* | 0.675 | 64.69 | 1.72 | 0.93 | 0.341 | 0.375 | 5.44 | 0.214 | 2.8 | 12.75 | Desert Rangeland | 0.05 | 39 | 254 | | **376** |

**MODEL FRW 10-yr, 24-hr**

| SUB BASIN ADMP | AREA | SLOPE | Length | LCA | IA | DTHETA | PSIF | XKSAT | RTIMP | Tp | S-GRAPH TYPE | Kn | Lag | DISCHARGE | % INCREASE DISCHARGE | UNIT DISCHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *ADMS* | (sq mi) | (ft/mi) | (ft) | (ft) | (in) | | (in) | (in/hr) | (%) | (hrs) | | | (min) | (cfs) | | (cfs/sq mi) |
| **1** | 1.626 | 34.9 | 2.61 | 1.54 | 0.54 | 0.320 | 4.3 | 0.400 | 1.00 | 13.25 | Desert Rangeland | 0.079 | 98.3 | 181 | **-47%** | **111** |
| *1* | 1.626 | 34.86 | 2.61 | 1.54 | 0.347 | 0.329 | 4.33 | 0.398 | 5.88 | 13 | Desert Rangeland | 0.05 | 62 | 344 | | **212** |
| **2** | 1.233 | 45.9 | 2.02 | 0.86 | 0.36 | 0.330 | 3.95 | 0.440 | 9.00 | 12.25 | Desert Rangeland | 0.035 | 30 | 510 | **45%** | **414** |
| *2* | 1.233 | 45.95 | 2.02 | 0.86 | 0.338 | 0.339 | 3.99 | 0.443 | 5.58 | 12.75 | Desert Rangeland | 0.05 | 43 | 351 | | **285** |
| **3** | 1.648 | 39.2 | 2.04 | 1.39 | 0.32 | 0.320 | 4 | 0.490 | 13.00 | 12.5 | Desert Rangeland | 0.033 | 35.2 | 576 | **620%** | **350** |
| *3* | 1.648 | 39.22 | 2.04 | 1.39 | 1 | 0.298 | 4.03 | 0.546 | 4.13 | 13 | Desert Rangeland | 0.05 | 53 | 80 | | **49** |
| **4** | 0.549 | 40.7 | 1.38 | 0.74 | 0.32 | 0.320 | 3.95 | 0.400 | 14.00 | 12.25 | Desert Rangeland | 0.032 | 23 | 327 | **70%** | **596** |
| *4* | 0.549 | 40.65 | 1.38 | 0.74 | 0.306 | 0.332 | 4.02 | 0.485 | 14.55 | 12.75 | Desert Rangeland | 0.05 | 36 | 192 | | **350** |
| **5A** | 1.172 | 49 | 1.75 | 1.16 | 0.32 | 0.310 | 4.3 | 0.440 | 19.00 | 12.25 | Desert Rangeland | 0.038 | 34.2 | 466 | **38%** | **398** |
| *5A* | 1.172 | 49.05 | 1.75 | 1.16 | 0.333 | 0.342 | 4.33 | 0.387 | 5.98 | 12.75 | Desert Rangeland | 0.05 | 45 | 338 | | **288** |
| **5B** | 0.576 | 38.7 | 1.73 | 1.08 | 0.36 | 0.350 | 4.5 | 0.320 | 1.00 | 12.25 | Desert Rangeland | 0.028 | 25.5 | 292 | **54%** | **507** |
| *5B* | 0.576 | 38.66 | 1.73 | 1.08 | 0.318 | 0.336 | 4.61 | 0.319 | 10.55 | 12.75 | Desert Rangeland | 0.05 | 46 | 190 | | **330** |
| **15A** | 0.588 | 34.6 | 1.45 | 0.48 | 0.37 | 0.330 | 4.4 | 0.390 | 4.00 | 12.25 | Desert Rangeland | 0.036 | 23 | 299 | **46%** | **509** |
| *15A* | 0.588 | 34.58 | 1.45 | 0.48 | 0.358 | 0.324 | 4.42 | 0.391 | 2.37 | 12.5 | Desert Rangeland | 0.05 | 32 | 205 | | **349** |
| **15B** | 0.816 | 11 | 1.63 | 0.82 | 1 | 0.250 | 4.1 | 0.540 | 0.00 | 14.75 | Agriculture | 0.2 | 203.9 | 11 | **22%** | **13** |
| *15B* | 0.816 | 11.02 | 1.63 | 0.82 | 1 | 0.249 | 4.1 | 0.541 | 0.37 | 15 | Agriculture | 0.2 | 204 | 9 | | **11** |
| **16** | 0.951 | 25 | 2.00 | 1.37 | 0.28 | 0.250 | 4.35 | 0.440 | 47.00 | 12.75 | Phoenix Valley | 0.048 | 55 | 461 | **5%** | **485** |
| *16* | 0.951 | 24.99 | 2.00 | 1.37 | 0.208 | 0.25 | 4.4 | 0.438 | 45.68 | 13 | Phoenix Valley | 0.05 | 57 | 437 | | **460** |
| **17** | 0.607 | 16.9 | 1.43 | 0.71 | 0.25 | 0.250 | 4 | 0.550 | 30.00 | 12.5 | Phoenix Valley | 0.05 | 42.3 | 285 | **2275%** | **470** |
| *17* | 0.607 | 16.84 | 1.43 | 0.71 | 1 | 0.25 | 4.02 | 0.465 | 0.17 | 14.5 | Agriculture | 0.02 | 169 | 12 | | **20** |
| **18** | 0.796 | 31 | 1.81 | 0.75 | 0.25 | 0.250 | 4.15 | 0.520 | 30.00 | 12.5 | Phoenix Valley | 0.05 | 42.1 | 379 | **3345%** | **476** |
| *18* | 0.796 | 30.99 | 1.81 | 0.75 | 1 | 0.291 | 4.13 | 0.479 | 0.12 | 14.5 | Agriculture | 0.02 | 168 | 11 | | **14** |

## BUCKEYE ADMP EXISTING CONDITIONS HYDROLOGY UPDATE - PARAMETERS SUMMARY TABLE
### 10 Year, 24 Hour Storm

| SUB BASIN ADMP | AREA | SLOPE | Length | LCA | IA | DTHETA | PSIF | XKSAT | RTIMP | Tp | S-GRAPH TYPE | Kn | Lag | DISCHARGE | % INCREASE DISCHARGE | UNIT DISCHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *ADMS* | (sq mi) | (ft/mi) | (ft) | (ft) | (in) | | (in) | (in/hr) | (%) | (hrs) | | | (min) | (cfs) | | (cfs/sq mi) |
| **19** | 0.536 | 18.5 | 1.51 | 0.76 | 0.94 | 0.260 | 3.95 | 0.440 | 0.00 | 14 | Agriculture | 0.184 | 160.4 | 19 | **46%** | **35** |
| *19* | 0.536 | 18.49 | 1.51 | 0.76 | 1 | 0.249 | 3.96 | 0.435 | 0.57 | 14.5 | Agriculture | 0.02 | 174 | 13 | | **24** |

**MODEL RBE 10-yr, 24-hr**

| SUB BASIN ADMP | AREA | SLOPE | Length | LCA | IA | DTHETA | PSIF | XKSAT | RTIMP | Tp | S-GRAPH TYPE | Kn | Lag | DISCHARGE | % INCREASE DISCHARGE | UNIT DISCHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *ADMS* | (sq mi) | (ft/mi) | (ft) | (ft) | (in) | | (in) | (in/hr) | (%) | (hrs) | | | (min) | (cfs) | | (cfs/sq mi) |
| **34** | 0.637 | 19.5 | 1.23 | 0.62 | 0.94 | 0.250 | 4 | 0.570 | 2.00 | 13.75 | Agriculture | 0.187 | 138.2 | 21 | **62%** | **33** |
| *34* | 0.637 | 19.48 | 1.23 | 0.62 | 1 | 0.245 | 3.99 | 0.565 | 2.07 | 14.25 | Agriculture | 0.2 | 148 | 13 | | **20** |
| **35** | 1.504 | 33.6 | 1.96 | 0.98 | 0.96 | 0.250 | 3.95 | 0.490 | 2.00 | 14.5 | Agriculture | 0.191 | 180.8 | 43 | **30%** | **29** |
| *35* | 1.504 | 33.61 | 1.96 | 0.98 | 1 | 0.25 | 3.98 | 0.486 | 3.32 | 14.75 | Agriculture | 0.2 | 190 | 33 | | **22** |
| **36** | 0.684 | 36.6 | 1.85 | 0.93 | 0.73 | 0.250 | 3.95 | 0.400 | 6.00 | 13.5 | Agriculture | 0.143 | 127.7 | 65 | **210%** | **95** |
| *36* | 0.684 | 36.67 | 1.85 | 0.93 | 1 | 0.258 | 3.97 | 0.455 | 5.1 | 14.75 | Agriculture | 0.2 | 178 | 21 | | **31** |
| **37** | 1.421 | 30.1 | 2.36 | 1.18 | 0.67 | 0.250 | 4.1 | 0.610 | 13.00 | 14 | Agriculture | 0.133 | 148 | 109 | **474%** | **77** |
| *37* | 1.421 | 30.11 | 2.36 | 1.18 | 1 | 0.25 | 4.12 | 0.457 | 0 | 14.75 | Agriculture | 0.2 | 222 | 19 | | **13** |
| **38** | 0.542 | 20.7 | 1.40 | 0.70 | 0.94 | 0.250 | 3.95 | 0.470 | 1.00 | 14 | Agriculture | 0.187 | 150.3 | 21 | **62%** | **39** |
| *38* | 0.542 | 20.72 | 1.40 | 0.70 | 1 | 0.249 | 3.96 | 0.466 | 1.07 | 14.5 | Agriculture | 0.2 | 161 | 13 | | **24** |
| **39** | 0.725 | 25.2 | 1.63 | 0.82 | 0.9 | 0.260 | 4.3 | 0.470 | 2.00 | 13.75 | Agriculture | 0.176 | 153.3 | 28 | **87%** | **39** |
| *39* | 0.725 | 25.14 | 1.63 | 0.82 | 1 | 0.249 | 4.31 | 0.47 | 1.59 | 14.5 | Agriculture | 0.2 | 174 | 15 | | **21** |
| **40** | 0.976 | 31.3 | 1.83 | 0.91 | 0.96 | 0.250 | 4.2 | 0.530 | 1.00 | 14.25 | Agriculture | 0.191 | 173.5 | 22 | **69%** | **23** |
| *40* | 0.976 | 31.23 | 1.83 | 0.91 | 1 | 0.249 | 4.21 | 0.525 | 0.74 | 14.75 | Agriculture | 0.2 | 182 | 13 | | **13** |
| **46** | 1.381 | 25.2 | 1.79 | 0.89 | 0.56 | 0.250 | 4.15 | 0.570 | 17.00 | 13.5 | Phoenix Valley | 0.11 | 102.4 | 239 | **754%** | **173** |
| *46* | 1.381 | 25.18 | 1.79 | 0.89 | 1 | 0.258 | 4.19 | 0.469 | 2.56 | 14.75 | Agriculture | 0.2 | 186 | 28 | | **20** |
| **47** | 0.617 | 24.6 | 1.46 | 0.73 | 0.43 | 0.250 | 4.45 | 0.470 | 24.00 | 13 | Phoenix Valley | 0.085 | 68.2 | 189 | **1475%** | **306** |
| *47* | 0.617 | 24.6 | 1.46 | 0.73 | 1 | 0.271 | 4.5 | 0.411 | 0.1 | 14.25 | Agriculture | 0.2 | 161 | 12 | | **19** |
| **48** | 0.500 | 16.5 | 1.10 | 0.55 | 0.98 | 0.250 | 4.35 | 0.450 | 1.00 | 13.75 | Agriculture | 0.196 | 136.9 | 17 | **21%** | **34** |
| *48* | 0.500 | 16.43 | 1.10 | 0.55 | 1 | 0.25 | 4.37 | 0.445 | 1.37 | 14 | Agriculture | 0.2 | 139 | 14 | | **28** |

## BUCKEYE ADMP EXISTING CONDITIONS HYDROLOGY UPDATE - PARAMETERS SUMMARY TABLE
### 10 Year, 24 Hour Storm

| SUB BASIN ADMP | AREA | SLOPE | Length | LCA | IA | DTHETA | PSIF | XKSAT | RTIMP | Tp | S-GRAPH TYPE | Kn | Lag | DISCHARGE | % INCREASE DISCHARGE | UNIT DISCHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *ADMS* | (sq mi) | (ft/mi) | (ft) | (ft) | (in) | | (in) | (in/hr) | (%) | (hrs) | | | (min) | (cfs) | | (cfs/sq mi) |
| **49** | 1.009 | 23.5 | 1.96 | 0.98 | 0.46 | 0.260 | 3.95 | 0.400 | 18.00 | 13.25 | Phoenix Valley | 0.086 | 87.1 | 255 | **1114%** | **253** |
| *49* | 1.009 | 23.51 | 1.96 | 0.98 | 1 | 0.25 | 3.95 | 0.417 | 0.66 | 15 | Agriculture | 0.2 | 202 | 21 | | **21** |
| **50** | 1.002 | 26.7 | 1.98 | 0.99 | 0.91 | 0.250 | 4.2 | 0.490 | 3.00 | 14.5 | Agriculture | 0.18 | 179.3 | 35 | **84%** | **35** |
| *50* | 1.002 | 26.73 | 1.98 | 0.99 | 1 | 0.251 | 4.18 | 0.488 | 2.4 | 15 | Agriculture | 0.2 | 199 | 19 | | **19** |
| **51** | 1.004 | 23 | 1.96 | 0.98 | 0.88 | 0.250 | 4.4 | 0.560 | 3.00 | 14.25 | Agriculture | 0.173 | 176 | 30 | **173%** | **30** |
| *51* | 1.004 | 22.98 | 1.96 | 0.98 | 1 | 0.25 | 4.4 | 0.563 | 1.52 | 15 | Agriculture | 0.2 | 203 | 11 | | **11** |
| **56A** | 0.411 | 30.3 | 1.19 | 0.59 | 0.69 | 0.260 | 3.95 | 0.460 | 15.00 | 13 | Agriculture | 0.129 | 84.9 | 66 | **100%** | **161** |
| *56A* | 0.411 | 30.31 | 1.19 | 0.59 | 1 | 0.25 | 3.97 | 0.455 | 18.06 | 14 | Agriculture | 0.2 | 132 | 33 | | **80** |
| **56B** | 0.334 | 43.7 | 0.73 | 0.37 | 0.15 | 0.250 | 4 | 0.620 | 54.00 | 12 | Phoenix Valley | 0.021 | 9 | 419 | **176%** | **1254** |
| *56B* | 0.334 | 43.7 | 0.73 | 0.37 | 0.1 | 0.25 | 4 | 0.524 | 80 | 13.5 | Phoenix Valley | 0.2 | 85 | 152 | | **455** |
| **57** | 0.489 | 19.1 | 0.68 | 0.34 | 1 | 0.250 | 4.25 | 0.530 | 0.00 | 13.25 | Agriculture | 0.2 | 94.3 | 15 | **7%** | **31** |
| *57* | 0.489 | 19.18 | 0.68 | 0.34 | 1 | 0.25 | 4.26 | 0.53 | 1.42 | 13.5 | Agriculture | 0.2 | 94 | 14 | | **29** |
| **58** | 0.190 | 16 | 0.50 | 0.25 | 0.29 | 0.310 | 4.3 | 0.550 | 21.00 | 12 | Phoenix Valley | 0.026 | 10 | 167 | **1013%** | **879** |
| *58* | 0.190 | 15.93 | 0.50 | 0.25 | 1 | 0.25 | 4.29 | 0.552 | 11.15 | 13.25 | Agriculture | 0.2 | 77 | 15 | | **79** |
| **65** | 0.376 | 11 | 0.82 | 0.41 | 0.99 | 0.250 | 4.6 | 0.410 | 1.00 | 13.5 | Agriculture | 0.198 | 119.5 | 15 | **15%** | **40** |
| *65* | 0.376 | 10.93 | 0.82 | 0.41 | 1 | 0.247 | 4.71 | 0.411 | 1.76 | 13.75 | Agriculture | 0.2 | 121 | 13 | | **35** |
| **66** | 0.294 | 19.2 | 0.73 | 0.36 | 0.81 | 0.260 | 4.35 | 0.390 | 10.00 | 13 | Agriculture | 0.158 | 78.1 | 42 | **121%** | **143** |
| *66* | 0.294 | 19.24 | 0.73 | 0.36 | 1 | 0.249 | 4.47 | 0.385 | 6.04 | 13.5 | Agriculture | 0.2 | 99 | 19 | | **65** |
| **67** | 0.472 | 25.7 | 0.82 | 0.41 | 0.25 | 0.250 | 4.3 | 0.390 | 30.00 | 12.25 | Phoenix Valley | 0.047 | 24.1 | 361 | **203%** | **765** |
| *67* | 0.472 | 25.73 | 0.82 | 0.41 | 0.261 | 0.262 | 4.33 | 0.393 | 26.59 | 13.75 | Phoenix Valley | 0.2 | 102 | 119 | | **252** |
| **69** | 0.137 | 17.3 | 0.11 | 0.06 | 0.18 | 0.270 | 4.5 | 0.400 | 53.00 | 12.25 | Phoenix Valley | 0.2 | 24.9 | 118 | **4%** | **861** |
| *69* | 0.137 | 17.52 | 0.11 | 0.06 | 0.176 | 0.264 | 4.5 | 0.395 | 49.22 | 12.5 | Phoenix Valley | 0.2 | 25 | 114 | | **832** |
| **70** | 0.141 | 1.5 | 0.68 | 0.34 | 0.46 | 0.250 | 4.45 | 0.510 | 24.00 | 12.75 | Agriculture | 0.09 | 68.8 | 34 | **1600%** | **241** |
| *70* | 0.141 | 1.48 | 0.68 | 0.34 | 1 | 0.25 | 4.4 | 0.512 | 0 | 14 | Agriculture | 0.2 | 152 | 2 | | **14** |
| **71** | 0.155 | 14.4 | 0.34 | 0.17 | 0.93 | 0.250 | 4.8 | 0.410 | 3.00 | 12.5 | Agriculture | 0.184 | 54 | 18 | **64%** | **116** |
| *71* | 0.155 | 14.51 | 0.34 | 0.17 | 1 | 0.243 | 4.91 | 0.414 | 2.61 | 13 | Agriculture | 0.2 | 59 | 11 | | **71** |

## BUCKEYE ADMP EXISTING CONDITIONS HYDROLOGY UPDATE - PARAMETERS SUMMARY TABLE
### 10 Year, 24 Hour Storm

| SUB BASIN ADMP | AREA | SLOPE | Length | LCA | IA | DTHETA | PSIF | XKSAT | RTIMP | Tp | S-GRAPH TYPE | Kn | Lag | DISCHARGE | % INCREASE DISCHARGE | UNIT DISCHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *ADMS* | (sq mi) | (ft/mi) | (ft) | (ft) | (in) | | (in) | (in/hr) | (%) | (hrs) | | | (min) | (cfs) | | (cfs/sq mi) |
| **72** | 0.086 | 7.7 | 0.13 | 0.06 | 0.59 | 0.300 | 4.45 | 0.420 | 6.00 | 12 | Agriculture | 0.095 | 14.7 | 42 | **163%** | **488** |
| *72* | 0.086 | 7.71 | 0.13 | 0.06 | 1 | 0.23 | 4.47 | 0.424 | 7.94 | 12.5 | Agriculture | 0.2 | 32 | 16 | | **186** |

**MODEL RBW 10-yr, 24-hr**

| SUB BASIN ADMP | AREA | SLOPE | Length | LCA | IA | DTHETA | PSIF | XKSAT | RTIMP | Tp | S-GRAPH TYPE | Kn | Lag | DISCHARGE | % INCREASE DISCHARGE | UNIT DISCHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *ADMS* | (sq mi) | (ft/mi) | (ft) | (ft) | (in) | | (in) | (in/hr) | (%) | (hrs) | | | (min) | (cfs) | | (cfs/sq mi) |
| **27** | 0.241 | 14.6 | 0.82 | 0.41 | 1 | 0.250 | 3.95 | 0.570 | 0.00 | 13.5 | Agriculture | 0.2 | 114.4 | 6 | **0%** | **25** |
| *27* | 0.241 | 14.59 | 0.82 | 0.41 | 1 | 0.246 | 3.98 | 0.567 | 1.42 | 13.75 | Agriculture | 0.2 | 115 | 6 | | **25** |
| **28** | 0.335 | 16.7 | 1.02 | 0.51 | 0.97 | 0.250 | 4.15 | 0.470 | 1.00 | 13.5 | Agriculture | 0.195 | 128.3 | 13 | **44%** | **39** |
| *28* | 0.335 | 16.68 | 1.02 | 0.51 | 1 | 0.249 | 4.18 | 0.467 | 0.54 | 14 | Agriculture | 0.2 | 132 | 9 | | **27** |
| **29** | 0.999 | 22.9 | 1.47 | 0.73 | 1 | 0.250 | 3.95 | 0.550 | 0.00 | 14 | Agriculture | 0.2 | 163.2 | 17 | **31%** | **17** |
| *29* | 0.999 | 22.92 | 1.47 | 0.73 | 1 | 0.25 | 3.98 | 0.548 | 0 | 14.25 | Agriculture | 0.2 | 163 | 13 | | **13** |
| **30** | 0.983 | 21.9 | 1.55 | 0.78 | 0.99 | 0.250 | 4 | 0.470 | 0.00 | 14 | Agriculture | 0.197 | 169.6 | 23 | **-41%** | **23** |
| *30* | 0.983 | 21.93 | 1.55 | 0.78 | 1 | 0.25 | 4.03 | 0.469 | 8.73 | 14.5 | Agriculture | 0.2 | 172 | 39 | | **40** |
| **31** | 1.079 | 26.4 | 1.93 | 0.97 | 0.99 | 0.250 | 4 | 0.460 | 0.00 | 14.75 | Agriculture | 0.197 | 193.3 | 23 | **15%** | **21** |
| *31* | 1.079 | 26.4 | 1.93 | 0.97 | 1 | 0.249 | 4.02 | 0.456 | 0.85 | 15 | Agriculture | 0.2 | 196 | 20 | | **19** |
| **32** | 0.896 | 24.3 | 1.84 | 0.92 | 0.98 | 0.250 | 4 | 0.520 | 1.00 | 14.5 | Agriculture | 0.197 | 189 | 19 | **36%** | **21** |
| *32* | 0.896 | 24.34 | 1.84 | 0.92 | 1 | 0.249 | 4 | 0.515 | 1.15 | 14.75 | Agriculture | 0.2 | 192 | 14 | | **16** |
| **33** | 1.002 | 29.3 | 1.84 | 0.92 | 0.91 | 0.260 | 3.95 | 0.440 | 1.00 | 14.25 | Agriculture | 0.175 | 162 | 39 | **86%** | **39** |
| *33* | 1.002 | 29.3 | 1.84 | 0.92 | 1 | 0.249 | 3.96 | 0.44 | 0.53 | 14.75 | Agriculture | 0.2 | 185 | 21 | | **21** |
| **41** | 1.202 | 24 | 1.54 | 0.77 | 1 | 0.250 | 3.95 | 0.470 | 0.00 | 14 | Agriculture | 0.2 | 168 | 27 | **23%** | **22** |
| *41* | 1.202 | 23.99 | 1.54 | 0.77 | 1 | 0.25 | 3.97 | 0.474 | 0 | 14.25 | Agriculture | 0.2 | 168 | 22 | | **18** |
| **42** | 0.778 | 22.8 | 1.56 | 0.78 | 1 | 0.250 | 4.25 | 0.450 | 0.00 | 14 | Agriculture | 0.2 | 171.3 | 17 | **13%** | **22** |
| *42* | 0.778 | 22.73 | 1.56 | 0.78 | 1 | 0.25 | 4.28 | 0.452 | 0.47 | 14.5 | Agriculture | 0.2 | 172 | 15 | | **19** |
| **43** | 1.002 | 20.8 | 1.92 | 0.96 | 0.99 | 0.250 | 3.95 | 0.430 | 1.00 | 14.75 | Agriculture | 0.198 | 202.1 | 25 | **25%** | **25** |
| *43* | 1.002 | 20.85 | 1.92 | 0.96 | 1 | 0.25 | 3.96 | 0.425 | 0.66 | 15 | Agriculture | 0.2 | 204 | 20 | | **20** |
| **44** | 1.007 | 22.4 | 1.97 | 0.98 | 0.96 | 0.260 | 4.1 | 0.490 | 0.00 | 14.5 | Agriculture | 0.189 | 193.6 | 21 | **-16%** | **21** |
| *44* | 1.007 | 22.43 | 1.97 | 0.98 | 1 | 0.25 | 4.14 | 0.485 | 5.22 | 15 | Agriculture | 0.2 | 205 | 25 | | **25** |
| **45A** | 1.003 | 25.1 | 1.97 | 0.99 | 0.94 | 0.260 | 4 | 0.440 | 0.00 | 14.25 | Agriculture | 0.183 | 184.1 | 29 | **61%** | **29** |
| *45A* | 1.003 | 25.14 | 1.97 | 0.99 | 1 | 0.25 | 3.99 | 0.441 | 0.24 | 15 | Agriculture | 0.2 | 201 | 18 | | **18** |

## BUCKEYE ADMP EXISTING CONDITIONS HYDROLOGY UPDATE - PARAMETERS SUMMARY TABLE
### 10 Year, 24 Hour Storm

| SUB BASIN ADMP | AREA | SLOPE | Length | LCA | IA | DTHETA | PSIF | XKSAT | RTIMP | Tp | S-GRAPH TYPE | Kn | Lag | DISCHARGE | % INCREASE DISCHARGE | UNIT DISCHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *ADMS* | (sq mi) | (ft/mi) | (ft) | (ft) | (in) | | (in) | (in/hr) | (%) | (hrs) | | | (min) | (cfs) | | (cfs/sq mi) |
| **45B** | 0.140 | 8.7 | 0.52 | 0.26 | 0.68 | 0.260 | 4 | 0.420 | 18.00 | 12.75 | Agriculture | 0.13 | 58 | 35 | **52%** | **250** |
| *45B* | 0.140 | 8.59 | 0.52 | 0.26 | 1 | 0.25 | 3.97 | 0.417 | 29.71 | 13.25 | Agriculture | 0.2 | 89 | 23 | | **164** |
| **52A** | 0.313 | 7 | 0.92 | 0.57 | 1 | 0.250 | 3.95 | 0.440 | 0.00 | 14.25 | Agriculture | 0.2 | 155.7 | 9 | **13%** | **29** |
| *52A* | 0.313 | 6.91 | 0.92 | 0.57 | 1 | 0.25 | 3.97 | 0.439 | 0.36 | 14.25 | Agriculture | 0.2 | 156 | 8 | | **26** |
| **52B** | 0.495 | 32.5 | 0.71 | 0.32 | 0.97 | 0.250 | 4.1 | 0.530 | 1.00 | 13 | Agriculture | 0.193 | 81.7 | 24 | **60%** | **48** |
| *52B* | 0.495 | 32.56 | 0.71 | 0.32 | 1 | 0.251 | 4.09 | 0.53 | 0.35 | 13.25 | Agriculture | 0.2 | 85 | 15 | | **30** |
| **53** | 0.339 | 24 | 0.91 | 0.46 | 0.99 | 0.250 | 4 | 0.440 | 1.00 | 13.25 | Agriculture | 0.198 | 112 | 16 | **45%** | **47** |
| *53* | 0.339 | 23.93 | 0.91 | 0.46 | 1 | 0.25 | 4 | 0.444 | 0 | 13.75 | Agriculture | 0.2 | 113 | 11 | | **32** |
| **54** | 0.386 | 12.3 | 1.20 | 0.60 | 0.98 | 0.250 | 4 | 0.450 | 1.00 | 14 | Agriculture | 0.197 | 155.4 | 13 | **44%** | **34** |
| *54* | 0.386 | 12.35 | 1.20 | 0.60 | 1 | 0.25 | 4 | 0.447 | 0 | 14.25 | Agriculture | 0.2 | 157 | 9 | | **23** |
| **55** | 0.263 | 12.8 | 0.97 | 0.48 | 1 | 0.250 | 4.1 | 0.450 | 0.00 | 13.5 | Agriculture | 0.2 | 132.7 | 8 | **14%** | **30** |
| *55* | 0.263 | 12.83 | 0.97 | 0.48 | 1 | 0.25 | 4.13 | 0.446 | 0 | 13.75 | Agriculture | 0.2 | 133 | 7 | | **27** |
| **59** | 0.252 | 49.4 | 0.50 | 0.17 | 0.75 | 0.270 | 4.1 | 0.500 | 11.00 | 12.5 | Agriculture | 0.141 | 37.9 | 61 | **135%** | **242** |
| *59* | 0.252 | 49.34 | 0.50 | 0.17 | 1 | 0.23 | 4.17 | 0.497 | 8.09 | 12.75 | Agriculture | 0.2 | 53 | 26 | | **103** |
| **60A** | 0.412 | 27.5 | 1.07 | 0.46 | 0.85 | 0.250 | 4 | 0.540 | 13.00 | 13.25 | Agriculture | 0.17 | 99.6 | 41 | **310%** | **100** |
| *60A* | 0.412 | 27.51 | 1.07 | 0.46 | 1 | 0.249 | 4.04 | 0.541 | 0.79 | 13.75 | Agriculture | 0.2 | 117 | 10 | | **24** |
| **60B** | 0.574 | 22.7 | 1.03 | 0.35 | 0.86 | 0.260 | 4.15 | 0.550 | 3.00 | 13.25 | Agriculture | 0.169 | 91.2 | 36 | **100%** | **63** |
| *60B* | 0.574 | 22.68 | 1.03 | 0.35 | 1 | 0.249 | 4.16 | 0.551 | 3.25 | 13.5 | Agriculture | 0.2 | 108 | 18 | | **31** |
| **61** | 0.508 | 23 | 0.90 | 0.45 | 0.76 | 0.250 | 3.92 | 0.460 | 8.00 | 13 | Agriculture | 0.152 | 85.6 | 65 | **242%** | **128** |
| *61* | 0.508 | 23 | 0.90 | 0.45 | 1 | 0.248 | 3.97 | 0.464 | 2.23 | 13.75 | Agriculture | 0.2 | 113 | 19 | | **37** |
| **62** | 0.572 | 21.5 | 0.98 | 0.49 | 0.94 | 0.250 | 4.2 | 0.440 | 3.00 | 13.5 | Agriculture | 0.187 | 113.8 | 33 | **94%** | **58** |
| *62* | 0.572 | 21.54 | 0.98 | 0.49 | 1 | 0.249 | 4.2 | 0.444 | 0.47 | 13.75 | Agriculture | 0.2 | 122 | 17 | | **30** |
| **63** | 0.499 | 20.3 | 0.95 | 0.47 | 0.97 | 0.250 | 4.15 | 0.400 | 1.00 | 13.5 | Agriculture | 0.195 | 116.7 | 25 | **-49%** | **50** |
| *63* | 0.499 | 20.27 | 0.95 | 0.47 | 1 | 0.25 | 4.19 | 0.398 | 20.75 | 13.75 | Agriculture | 0.2 | 120 | 49 | | **98** |
| **64** | 0.415 | 18 | 0.89 | 0.45 | 0.98 | 0.250 | 4.35 | 0.450 | 0.00 | 13.5 | Agriculture | 0.196 | 115.1 | 16 | **23%** | **39** |
| *64* | 0.415 | 17.94 | 0.89 | 0.45 | 1 | 0.248 | 4.36 | 0.445 | 1.18 | 13.75 | Agriculture | 0.2 | 117 | 13 | | **31** |

## BUCKEYE ADMP EXISTING CONDITIONS HYDROLOGY UPDATE - PARAMETERS SUMMARY TABLE
### 10 Year, 24 Hour Storm

| SUB BASIN ADMP | AREA | SLOPE | Length | LCA | IA | DTHETA | PSIF | XKSAT | RTIMP | Tp | S-GRAPH TYPE | Kn | Lag | DISCHARGE | % INCREASE DISCHARGE | UNIT DISCHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *ADMS* | (sq mi) | (ft/mi) | (ft) | (ft) | (in) | | (in) | (in/hr) | (%) | (hrs) | | | (min) | (cfs) | | (cfs/sq mi) |
| **68** | 0.413 | 45.6 | 0.96 | 0.33 | 0.52 | 0.290 | 4.35 | 0.370 | 4.00 | 12.5 | Desert Rangeland | 0.084 | 37.8 | 136 | -33% | **329** |
| *68* | 0.413 | 45.58 | 0.96 | 0.33 | 0.374 | 0.334 | 4.37 | 0.374 | 0 | 12.5 | Desert Rangeland | 0.05 | 22 | 203 | | **492** |

**MODEL AREA 2 10-yr, 24-hr**

| SUB BASIN ADMP | AREA | SLOPE | Length | LCA | IA | DTHETA | PSIF | XKSAT | RTIMP | Tp | S-GRAPH TYPE | Kn | Lag | DISCHARGE | % INCREASE DISCHARGE | UNIT DISCHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *ADMS* | (sq mi) | (%) | (ft) | (ft) | (in) | | (in) | (in/hr) | (%) | (hrs) | | | (min) | (cfs) | | (cfs/sq mi) |
| **A1** | 1.628 | 33 | 2.96 | 1.73 | 0.35 | 0.350 | 4.45 | 0.340 | 0.00 | 12.42 | Desert Rangeland | 0.025 | 34.5 | 595 | N/A | **365** |
| *A1* | 1.630 | 32.98 | 2.96 | 1.73 | 0.343 | 0.347 | 4.498 | 0.339 | 2.145 | N/A | Desert Rangeland | 0.05 | 69 | N/A | | **N/A** |
| **B1** | 0.300 | 57.2 | 1.34 | 0.66 | 0.35 | 0.350 | 4.6 | 0.320 | 0.00 | 12.08 | Desert Rangeland | 0.025 | 15.9 | 211 | N/A | **703** |
| *B1* | 0.300 | 57.24 | 1.34 | 0.66 | 0.35 | 0.35 | 4.624 | 0.315 | 0 | N/A | Desert Rangeland | 0.05 | 31 | N/A | | **N/A** |
| **C1** | 0.947 | 41.6 | 2.65 | 1.06 | 0.35 | 0.350 | 4.65 | 0.310 | 0.00 | 12.25 | Desert Rangeland | 0.025 | 26.3 | 462 | N/A | **488** |
| *C1* | 0.950 | 41.6 | 2.65 | 1.06 | 0.35 | 0.35 | 4.669 | 0.311 | 0 | N/A | Desert Rangeland | 0.05 | 52 | N/A | | **N/A** |
| **D1** | 0.687 | 41.1 | 2.05 | 0.98 | 0.35 | 0.350 | 4.65 | 0.320 | 0.00 | 12.25 | Desert Rangeland | 0.026 | 24.1 | 356 | N/A | **518** |
| *D1* | 0.690 | 41.1 | 2.05 | 0.98 | 0.35 | 0.35 | 4.642 | 0.317 | 0 | N/A | Desert Rangeland | 0.05 | 46 | N/A | | **N/A** |
| **E1** | 1.466 | 27.9 | 3.19 | 1.81 | 0.35 | 0.350 | 4.35 | 0.360 | 0.00 | 12.42 | Desert Rangeland | 0.025 | 37.2 | 491 | N/A | **335** |
| *E1* | 1.470 | 27.95 | 3.19 | 1.81 | 0.343 | 0.347 | 4.362 | 0.364 | 2.082 | N/A | Desert Rangeland | 0.05 | 75 | N/A | | **N/A** |
| **E2-a2** | 1.223 | 27.5 | 2.97 | 1.67 | 0.41 | 0.340 | 4.4 | 0.350 | 1.00 | 12.75 | Desert Rangeland | 0.043 | 60.6 | 258 | N/A | **211** |
| *E2-a2* | 1.220 | 27.48 | 2.97 | 1.67 | 0.348 | 0.343 | 4.461 | 0.354 | 2.288 | N/A | Desert Rangeland | 0.05 | 70 | N/A | | **N/A** |
| **E3-a2** | 0.943 | 25.9 | 2.72 | 0.99 | 0.78 | 0.270 | 4.25 | 0.440 | 1.00 | 14.33 | Desert Rangeland | 0.145 | 163.9 | 497 | N/A | **527** |
| *E3-a2* | 0.940 | 25.93 | 2.72 | 0.99 | 0.402 | 0.306 | 4.245 | 0.444 | 1.589 | N/A | Desert Rangeland | 0.05 | 56 | N/A | | **N/A** |
| **E4** | 0.740 | 29 | 2.00 | 1.24 | 0.56 | 0.300 | 4.15 | 0.420 | 1.00 | 13.25 | Desert Rangeland | 0.089 | 95.5 | 87 | N/A | **118** |
| *E4* | 0.740 | 28.98 | 2.00 | 1.24 | 0.389 | 0.324 | 4.185 | 0.421 | 0 | N/A | Desert Rangeland | 0.05 | 53 | N/A | | **N/A** |

# Parameters Summary Table

- 100 Year, 6 Hour Storm

## BUCKEYE ADMP EXISTING CONDITIONS HYDROLOGY UPDATE - PARAMETERS SUMMARY TABLE
### 100 Year, 6 Hour Storm

**MODEL BGE 100-yr, 6-hr**

| SUB BASIN ADMP | AREA | SLOPE | Length | LCA | IA | DTHETA | PSIF | XKSAT | RTIMP | Tp | S-GRAPH TYPE | Kn | Lag | DISCHARGE | % INCREASE DISCHARGE | UNIT DISCHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *ADMS* | (sq mi) | (ft/mi) | (ft) | (ft) | (in) | | (in) | (in/hr) | (%) | (hrs) | | | (min) | (cfs) | | (cfs/sq mi) |
| **90** | 1.055 | 21.5 | 2.05 | 1.02 | 0.87 | 0.150 | 9.7 | 0.080 | 7.00 | 6.5 | Agriculture | 0.171 | 181.9 | 303 | **25%** | **287** |
| *90* | 1.055 | 21.5 | 2.05 | 1.02 | 1 | 0.152 | 9.53 | 0.075 | 5.87 | 7.25 | Agriculture | 0.2 | 213 | 242 | | **229** |
| **91** | 1.189 | 21.1 | 5.08 | 1.04 | 0.55 | 0.160 | 8.4 | 0.090 | 15.00 | 6.5 | Phoenix Valley | 0.105 | 159.5 | 567 | **128%** | **477** |
| *91* | 1.189 | 21.1 | 5.08 | 1.04 | 1 | 0.15 | 8.29 | 0.113 | 5.19 | 7.25 | Agriculture | 0.2 | 217 | 249 | | **209** |
| **92** | 1.014 | 17.5 | 2.06 | 1.03 | 0.85 | 0.150 | 8.4 | 0.100 | 6.00 | 6.5 | Agriculture | 0.17 | 189.1 | 276 | **-45%** | **272** |
| *92* | 1.014 | 17.46 | 2.06 | 1.03 | 1 | 0.152 | 8.66 | 0.095 | 5.86 | 5.5 | Agriculture | 0.2 | 223 | 505 | | **498** |
| **93** | 0.377 | 17.4 | 1.21 | 0.60 | 0.82 | 0.250 | 4.9 | 0.410 | 7.00 | 5.75 | Agriculture | 0.162 | 120 | 126 | **25%** | **334** |
| *93* | 0.377 | 17.39 | 1.21 | 0.60 | 1 | 0.245 | 4.88 | 0.41 | 9.38 | 6 | Agriculture | 0.2 | 148 | 101 | | **268** |
| **94** | 0.719 | 22.4 | 1.30 | 0.65 | 0.91 | 0.150 | 7.3 | 0.160 | 4.00 | 5.75 | Agriculture | 0.182 | 136.2 | 244 | **16%** | **339** |
| *94* | 0.719 | 22.37 | 1.30 | 0.65 | 1 | 0.15 | 7.3 | 0.157 | 2.2 | 6.25 | Agriculture | 0.2 | 149 | 211 | | **293** |
| **95** | 0.522 | 7.8 | 1.66 | 0.83 | 0.85 | 0.150 | 8 | 0.120 | 6.00 | 6.5 | Agriculture | 0.17 | 187.2 | 147 | **34%** | **282** |
| *95* | 0.522 | 7.84 | 1.66 | 0.83 | 1 | 0.15 | 8.2 | 0.118 | 0.73 | 7.25 | Agriculture | 0.2 | 220 | 110 | | **211** |
| **96** | 0.914 | 4.5 | 1.32 | 0.66 | 0.89 | 0.150 | 7.3 | 0.160 | 5.00 | 6.5 | Agriculture | 0.177 | 181.7 | 234 | **29%** | **256** |
| *96* | 0.914 | 4.55 | 1.32 | 0.66 | 1 | 0.15 | 7.2 | 0.171 | 0.59 | 7 | Agriculture | 0.2 | 205 | 182 | | **199** |
| **97** | 0.500 | 6.1 | 1.32 | 0.66 | 0.77 | 0.170 | 6.8 | 0.180 | 9.00 | 5.75 | Agriculture | 0.153 | 148.3 | 177 | **59%** | **354** |
| *97* | 0.500 | 6.05 | 1.32 | 0.66 | 1 | 0.163 | 6.87 | 0.195 | 0.28 | 6.75 | Agriculture | 0.2 | 195 | 111 | | **222** |
| **98** | 0.388 | 6.7 | 1.50 | 0.75 | 0.53 | 0.160 | 8.8 | 0.080 | 19.00 | 5.25 | Agriculture | 0.102 | 107 | 236 | **16%** | **608** |
| *98* | 0.388 | 6.69 | 1.50 | 0.75 | 1 | 0.174 | 9.08 | 0.078 | 10.56 | 5.5 | Agriculture | 0.2 | 209 | 203 | | **523** |
| **99** | 0.948 | 3.5 | 2.01 | 1.24 | 0.19 | 0.260 | 6 | 0.220 | 7.00 | 4.75 | Phoenix Valley | 0.034 | 54.6 | 1001 | **113%** | **1056** |
| *99* | 0.948 | 3.49 | 2.01 | 1.24 | 1 | 0.334 | 6.02 | 0.216 | 0.01 | 5.5 | Phoenix Valley | 0.05 | 80 | 470 | | **496** |
| **100** | 0.582 | 18.8 | 1.70 | 0.85 | 1 | 0.230 | 6.2 | 0.250 | 0.00 | 6.75 | Agriculture | 0.199 | 188.7 | 117 | **0%** | **201** |
| *100* | 0.582 | 18.83 | 1.70 | 0.85 | 1 | 0.228 | 6.24 | 0.251 | 1.19 | 6.75 | Agriculture | 0.2 | 190 | 117 | | **201** |
| **101** | 0.381 | 8.6 | 1.63 | 0.81 | 0.55 | 0.150 | 7 | 0.180 | 6.00 | 5.75 | Phoenix Valley | 0.109 | 115.9 | 240 | **189%** | **630** |
| *101* | 0.381 | 8.59 | 1.63 | 0.81 | 1 | 0.149 | 6.96 | 0.172 | 3.95 | 7 | Agriculture | 0.2 | 213 | 83 | | **218** |
| **4th** | 0.082 | 0.2 | 0.52 | 0.40 | 0.18 | 0.250 | 5.2 | 0.330 | 55.00 | 4.5 | Phoenix Valley | 0.034 | 36.6 | 141 | **-23%** | **1720** |
| *4th* | 0.082 | 0.01 | 0.52 | 0.40 | 0.192 | 0.248 | 5.15 | 0.326 | 55.32 | 4.5 | Phoenix Valley | 0.011 | 24 | 184 | | **2244** |
| **4thS** | 0.145 | 0.1 | 0.74 | 0.50 | 0.18 | 0.220 | 6.4 | 0.200 | 58.00 | 4.75 | Phoenix Valley | 0.034 | 52 | 207 | **-23%** | **1428** |
| *4thS* | 0.145 | 0.01 | 0.74 | 0.50 | 0.181 | 0.203 | 6.47 | 0.204 | 37.61 | 4.5 | Phoenix Valley | 0.011 | 30 | 269 | | **1855** |
| **6th** | 0.057 | 0.2 | 0.46 | 0.17 | 0.2 | 0.150 | 7.6 | 0.120 | 47.00 | 4.25 | Phoenix Valley | 0.039 | 29 | 116 | **-14%** | **2035** |
| *6th* | 0.057 | 0.01 | 0.46 | 0.17 | 0.206 | 0.148 | 7.57 | 0.12 | 51.54 | 4.5 | Phoenix Valley | 0.011 | 17 | 135 | | **2368** |

# BUCKEYE ADMP EXISTING CONDITIONS HYDROLOGY UPDATE - PARAMETERS SUMMARY TABLE
## 100 Year, 6 Hour Storm

| SUB BASIN ADMP | AREA | SLOPE | Length | LCA | IA | DTHETA | PSIF | XKSAT | RTIMP | Tp | S-GRAPH TYPE | Kn | Lag | DISCHARGE | % INCREASE DISCHARGE | UNIT DISCHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *ADMS* | (sq mi) | (ft/mi) | (ft) | (ft) | (in) | | (in) | (in/hr) | (%) | (hrs) | | | (min) | (cfs) | | (cfs/sq mi) |
| **7th** | 0.127 | 0.2 | 0.66 | 0.33 | 0.21 | 0.260 | 5.3 | 0.310 | 39.00 | 4.5 | Phoenix Valley | 0.037 | 40.5 | 198 | **-27%** | **1559** |
| *7th* | 0.127 | 0.01 | 0.66 | 0.33 | 0.252 | 0.261 | 5.11 | 0.312 | 38.17 | 4.5 | Phoenix Valley | 0.011 | 24 | 272 | | **2142** |
| **8th** | 0.079 | 0.2 | 0.60 | 0.31 | 0.23 | 0.160 | 8.8 | 0.070 | 38.00 | 4.5 | Phoenix Valley | 0.044 | 45.4 | 123 | **-36%** | **1557** |
| *8th* | 0.079 | 0.01 | 0.60 | 0.31 | 0.241 | 0.15 | 8.77 | 0.074 | 42.7 | 4.5 | Phoenix Valley | 0.011 | 23 | 193 | | **2443** |
| **9thE** | 0.095 | 0.2 | 0.54 | 0.32 | 0.17 | 0.160 | 8.8 | 0.080 | 31.00 | 4.25 | Phoenix Valley | 0.029 | 29.1 | 193 | **-1%** | **2032** |
| *9thE* | 0.095 | 0.01 | 0.54 | 0.32 | 0.173 | 0.154 | 8.73 | 0.083 | 35.4 | 4.5 | Phoenix Valley | 0.011 | 22 | 194 | | **2042** |
| **9thW** | 0.081 | 0.1 | 0.77 | 0.39 | 0.18 | 0.170 | 8.4 | 0.100 | 30.00 | 4.5 | Phoenix Valley | 0.031 | 43.8 | 128 | **-35%** | **1580** |
| *9thW* | 0.081 | 0.01 | 0.77 | 0.39 | 0.197 | 0.149 | 8.42 | 0.101 | 29.52 | 4.5 | Phoenix Valley | 0.011 | 29 | 196 | | **2420** |
| **BAYLIS** | 0.016 | 0.3 | 0.30 | 0.08 | 0.15 | 0.160 | 9.7 | 0.070 | 64.00 | 4 | Phoenix Valley | 0.024 | 10.5 | 53 | **-2%** | **3313** |
| *BAYLIS* | 0.016 | 0.01 | 0.30 | 0.08 | 0.1 | 0.15 | 9.7 | 0.069 | 80 | 4.25 | Phoenix Valley | 0.011 | 9 | 54 | | **3375** |
| **BELOAT** | 0.047 | 0.2 | 0.44 | 0.25 | 0.26 | 0.160 | 8.8 | 0.060 | 32.00 | 4.5 | Phoenix Valley | 0.047 | 39.7 | 82 | **-27%** | **1745** |
| *BELOAT* | 0.047 | 0 | 0.44 | 0.25 | 0.37 | 0.218 | 9.33 | 0.062 | 7.02 | 4.5 | Phoenix Valley | 0.011 | 19 | 113 | | **2404** |
| **CENTRE** | 0.069 | 0.3 | 0.40 | 0.23 | 0.23 | 0.160 | 7 | 0.150 | 41.00 | 4.25 | Phoenix Valley | 0.043 | 31.4 | 124 | **-25%** | **1797** |
| *CENTRE* | 0.069 | 0.01 | 0.40 | 0.23 | 0.248 | 0.153 | 6.97 | 0.147 | 35.73 | 4.5 | Phoenix Valley | 0.011 | 18 | 166 | | **2406** |
| **DRAIN** | 0.116 | 0.2 | 0.59 | 0.26 | 0.29 | 0.150 | 9.7 | 0.060 | 34.00 | 4.75 | Phoenix Valley | 0.058 | 55.6 | 163 | **-37%** | **1405** |
| *DRAIN* | 0.116 | 0.01 | 0.59 | 0.26 | 1 | 0.15 | 9.66 | 0.071 | 7.35 | 4.5 | Phoenix Valley | 0.011 | 20 | 257 | | **2216** |

## MODEL BGW 100-yr, 6-hr

| SUB BASIN ADMP | AREA | SLOPE | Length | LCA | IA | DTHETA | PSIF | XKSAT | RTIMP | Tp | S-GRAPH TYPE | Kn | Lag | DISCHARGE | % INCREASE DISCHARGE | UNIT DISCHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *ADMS* | (sq mi) | (ft/mi) | (ft) | (ft) | (in) | | (in) | (in/hr) | (%) | (hrs) | | | (min) | (cfs) | | (cfs/sq mi) |
| **84** | 0.877 | 13.3 | 1.81 | 0.98 | 0.99 | 0.150 | 9.7 | 0.070 | 0.00 | 7 | Agriculture | 0.199 | 217.9 | 192 | **0%** | **219** |
| *84* | 0.877 | 13.27 | 1.81 | 0.98 | 1 | 0.147 | 9.73 | 0.071 | 1 | 7.25 | Agriculture | 0.2 | 219 | 192 | | **219** |
| **85A** | 0.216 | 37.9 | 0.84 | 0.42 | 1 | 0.150 | 7.3 | 0.170 | 0.00 | 5.25 | Agriculture | 0.2 | 97.2 | 98 | **-1%** | **454** |
| *85A* | 0.216 | 37.89 | 0.84 | 0.42 | 1 | 0.148 | 7.22 | 0.169 | 1.44 | 5.5 | Agriculture | 0.2 | 98 | 99 | | **458** |
| **85B** | 0.745 | 15.6 | 1.47 | 0.73 | 0.93 | 0.250 | 5.7 | 0.300 | 2.00 | 6.25 | Agriculture | 0.185 | 162.4 | 165 | **11%** | **221** |
| *85B* | 0.745 | 15.68 | 1.47 | 0.73 | 1 | 0.247 | 5.67 | 0.297 | 1.99 | 6.5 | Agriculture | 0.2 | 176 | 149 | | **200** |
| **86** | 0.440 | 25.8 | 1.09 | 0.54 | 0.91 | 0.150 | 8 | 0.110 | 2.00 | 5.5 | Agriculture | 0.181 | 114.9 | 191 | **11%** | **434** |
| *86* | 0.440 | 25.78 | 1.09 | 0.54 | 1 | 0.15 | 8.11 | 0.11 | 6.81 | 6 | Agriculture | 0.2 | 127 | 172 | | **391** |
| **87** | 0.913 | 22.5 | 1.87 | 0.93 | 1 | 0.150 | 9.7 | 0.070 | 0.00 | 6.5 | Agriculture | 0.199 | 195.7 | 220 | **-2%** | **241** |
| *87* | 0.913 | 22.48 | 1.87 | 0.93 | 1 | 0.142 | 9.84 | 0.066 | 1.13 | 7 | Agriculture | 0.2 | 197 | 225 | | **246** |

## BUCKEYE ADMP EXISTING CONDITIONS HYDROLOGY UPDATE - PARAMETERS SUMMARY TABLE
### 100 Year, 6 Hour Storm

| SUB BASIN ADMP | AREA | SLOPE | Length | LCA | IA | DTHETA | PSIF | XKSAT | RTIMP | Tp | S-GRAPH TYPE | Kn | Lag | DISCHARGE | % INCREASE DISCHARGE | UNIT DISCHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *ADMS* | (sq mi) | (ft/mi) | (ft) | (ft) | (in) | | (in) | (in/hr) | (%) | (hrs) | | | (min) | (cfs) | | (cfs/sq mi) |
| **88** | 0.765 | 19.3 | 1.66 | 0.83 | 0.99 | 0.150 | 9.7 | 0.070 | 0.00 | 6.75 | Agriculture | 0.198 | 183.5 | 200 | **1%** | **261** |
| *88* | 0.765 | 19.29 | 1.66 | 0.83 | 1 | 0.145 | 9.8 | 0.068 | 0.29 | 6.75 | Agriculture | 0.2 | 185 | 199 | | **260** |
| **89** | 0.963 | 21.2 | 1.79 | 0.90 | 0.99 | 0.150 | 9.7 | 0.070 | 0.00 | 6.5 | Agriculture | 0.199 | 192.3 | 238 | **0%** | **247** |
| *89* | 0.963 | 21.2 | 1.79 | 0.90 | 1 | 0.144 | 9.82 | 0.068 | 0.56 | 7 | Agriculture | 0.2 | 193 | 239 | | **248** |
| **102** | 0.520 | 25.7 | 1.48 | 0.74 | 0.99 | 0.150 | 8.4 | 0.100 | 0.00 | 6.25 | Agriculture | 0.197 | 158.5 | 155 | **2%** | **298** |
| *102* | 0.520 | 25.68 | 1.48 | 0.74 | 1 | 0.15 | 8.6 | 0.1 | 0.19 | 6.5 | Agriculture | 0.2 | 161 | 152 | | **292** |
| **103** | 0.507 | 22.8 | 1.14 | 0.57 | 0.84 | 0.230 | 6.2 | 0.240 | 3.00 | 5.5 | Agriculture | 0.165 | 111.4 | 196 | **32%** | **387** |
| *103* | 0.507 | 22.77 | 1.14 | 0.57 | 1 | 0.218 | 6.32 | 0.244 | 0.67 | 6.25 | Agriculture | 0.2 | 135 | 149 | | **294** |
| **104** | 1.012 | 13.8 | 1.95 | 0.98 | 0.99 | 0.170 | 6.8 | 0.190 | 0.00 | 7 | Agriculture | 0.198 | 221.5 | 176 | **2%** | **174** |
| *104* | 1.012 | 13.83 | 1.95 | 0.98 | 1 | 0.175 | 6.76 | 0.192 | 0.05 | 7.25 | Agriculture | 0.2 | 223 | 173 | | **171** |
| **105** | 0.997 | 18.6 | 1.94 | 0.97 | 0.98 | 0.150 | 8.4 | 0.110 | 0.00 | 7 | Agriculture | 0.196 | 205.9 | 214 | **0%** | **215** |
| *105* | 0.997 | 18.59 | 1.94 | 0.97 | 1 | 0.15 | 8.42 | 0.106 | 1.66 | 7.25 | Agriculture | 0.2 | 210 | 213 | | **214** |
| **106** | 1.209 | 20.8 | 2.21 | 1.11 | 1 | 0.150 | 7.6 | 0.150 | 0.00 | 7 | Agriculture | 0.2 | 227.5 | 215 | **-1%** | **178** |
| *106* | 1.209 | 20.78 | 2.21 | 1.11 | 1 | 0.15 | 7.6 | 0.146 | 0.44 | 7.5 | Agriculture | 0.2 | 227 | 218 | | **180** |
| **107** | 0.484 | 18.4 | 0.98 | 0.49 | 1 | 0.170 | 6.8 | 0.210 | 0.00 | 5.75 | Agriculture | 0.2 | 125.3 | 163 | **1%** | **337** |
| *107* | 0.484 | 18.37 | 0.98 | 0.49 | 1 | 0.181 | 6.69 | 0.21 | 0 | 6 | Agriculture | 0.2 | 125 | 162 | | **335** |

### MODEL FRE 100-yr, 6-hr

| SUB BASIN ADMP | AREA | SLOPE | Length | LCA | IA | DTHETA | PSIF | XKSAT | RTIMP | Tp | S-GRAPH TYPE | Kn | Lag | DISCHARGE | % INCREASE DISCHARGE | UNIT DISCHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *ADMS* | (sq mi) | (ft/mi) | (ft) | (ft) | (in) | | (in) | (in/hr) | (%) | (hrs) | | | (min) | (cfs) | | (cfs/sq mi) |
| **6** | 0.318 | 88.2 | 0.50 | 0.35 | 0.35 | 0.350 | 4.8 | 0.240 | 1.00 | 4 | Desert Rangeland | 0.025 | 7.9 | 961 | **65%** | **3022** |
| *6* | 0.318 | 88.18 | 0.50 | 0.35 | 0.327 | 0.359 | 5.26 | 0.239 | 8.06 | 4.25 | Desert Rangeland | 0.05 | 16 | 583 | | **1833** |
| **7** | 0.446 | 73 | 0.74 | 0.30 | 0.35 | 0.350 | 3.88 | 0.400 | 1.00 | 4 | Desert Rangeland | 0.026 | 9.4 | 1211 | **65%** | **2715** |
| *7* | 0.446 | 73.02 | 0.74 | 0.30 | 0.336 | 0.345 | 4.13 | 0.4 | 4.38 | 4.5 | Desert Rangeland | 0.05 | 18 | 734 | | **1646** |
| **8** | 0.414 | 14.8 | 1.22 | 0.56 | 0.37 | 0.320 | 4.1 | 0.480 | 9.00 | 4.25 | Desert Rangeland | 0.04 | 29.9 | 554 | **9%** | **1338** |
| *8* | 0.414 | 14.8 | 1.22 | 0.56 | 0.277 | 0.319 | 4.1 | 0.445 | 23.07 | 4.75 | Desert Rangeland | 0.05 | 37 | 508 | | **1227** |
| **9** | 0.612 | 57.1 | 0.79 | 0.41 | 0.31 | 0.320 | 4 | 0.510 | 16.00 | 4 | Desert Rangeland | 0.03 | 13.1 | 1236 | **23%** | **2020** |
| *9* | 0.612 | 57.09 | 0.79 | 0.41 | 0.327 | 0.34 | 3.98 | 0.411 | 7.24 | 4.5 | Desert Rangeland | 0.05 | 22 | 1005 | | **1642** |
| **10** | 1.174 | 46.3 | 1.77 | 1.27 | 0.29 | 0.280 | 4.15 | 0.400 | 27.00 | 4.5 | Phoenix Valley | 0.044 | 41.6 | 1406 | **31%** | **1198** |
| *10* | 1.174 | 46.29 | 1.77 | 1.27 | 0.299 | 0.312 | 4.15 | 0.403 | 10.87 | 4.75 | Phoenix Valley | 0.05 | 47 | 1073 | | **914** |

# BUCKEYE ADMP EXISTING CONDITIONS HYDROLOGY UPDATE - PARAMETERS SUMMARY TABLE
## 100 Year, 6 Hour Storm

| SUB BASIN ADMP | AREA | SLOPE | Length | LCA | IA | DTHETA | PSIF | XKSAT | RTIMP | Tp | S-GRAPH TYPE | Kn | Lag | DISCHARGE | % INCREASE DISCHARGE | UNIT DISCHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *ADMS* | (sq mi) | (ft/mi) | (ft) | (ft) | (in) | | (in) | (in/hr) | (%) | (hrs) | | | (min) | (cfs) | | (cfs/sq mi) |
| **11A** | 0.571 | 84 | 0.57 | 0.33 | 0.28 | 0.280 | 5 | 0.310 | 23.00 | 4 | Phoenix Valley | 0.044 | 14.5 | 1215 | **17%** | **2128** |
| *11A* | 0.571 | 83.95 | 0.57 | 0.33 | 0.32 | 0.356 | 5.2 | 0.244 | 9.66 | 4.5 | Phoenix Valley | 0.05 | 16 | 1038 | | **1818** |
| **11B** | 0.581 | 41.8 | 1.39 | 0.62 | 0.29 | 0.290 | 4.3 | 0.450 | 18.00 | 4.25 | Phoenix Valley | 0.041 | 27.5 | 946 | **27%** | **1628** |
| *11B* | 0.581 | 41.81 | 1.39 | 0.62 | 0.35 | 0.35 | 4.28 | 0.363 | 0 | 4.75 | Phoenix Valley | 0.05 | 34 | 744 | | **1281** |
| **11C** | 0.343 | 54.3 | 0.99 | 0.31 | 0.33 | 0.330 | 3.95 | 0.400 | 8.00 | 4 | Desert Rangeland | 0.031 | 13.3 | 739 | **15%** | **2155** |
| *11C* | 0.343 | 54.38 | 0.99 | 0.31 | 0.35 | 0.35 | 3.98 | 0.4 | 0 | 4.5 | Phoenix Valley | 0.05 | 22 | 640 | | **1866** |
| **12** | 0.736 | 83 | 0.96 | 0.41 | 0.26 | 0.260 | 4.45 | 0.430 | 27.00 | 4.25 | Phoenix Valley | 0.047 | 20.5 | 1428 | **10%** | **1940** |
| *12* | 0.736 | 83.03 | 0.96 | 0.41 | 0.338 | 0.345 | 4.5 | 0.333 | 3.95 | 4.5 | Phoenix Valley | 0.05 | 22 | 1300 | | **1766** |
| **13** | 0.501 | 71.2 | 0.52 | 0.26 | 0.25 | 0.250 | 5.1 | 0.310 | 30.00 | 4 | Phoenix Valley | 0.05 | 15 | 1089 | **12%** | **2174** |
| *13* | 0.501 | 71.2 | 0.52 | 0.26 | 0.35 | 0.364 | 5.14 | 0.247 | 0 | 4.25 | Phoenix Valley | 0.05 | 15 | 971 | | **1938** |
| **14A** | 0.692 | 67.9 | 1.33 | 0.71 | 0.26 | 0.260 | 4.25 | 0.480 | 26.00 | 4.25 | Phoenix Valley | 0.047 | 29.7 | 1034 | **22%** | **1494** |
| *14A* | 0.692 | 67.87 | 1.33 | 0.71 | 0.335 | 0.344 | 4.26 | 0.368 | 4.73 | 4.75 | Phoenix Valley | 0.05 | 32 | 846 | | **1223** |
| **14B** | 0.502 | 54.1 | 0.59 | 0.30 | 0.25 | 0.250 | 4.15 | 0.520 | 30.00 | 4.25 | Phoenix Valley | 0.05 | 17.5 | 1026 | **31%** | **2044** |
| *14B* | 0.502 | 54 | 0.59 | 0.30 | 0.36 | 0.344 | 4.18 | 0.385 | 0 | 4.5 | Desert Rangeland | 0.05 | 17 | 786 | | **1566** |
| **20** | 0.665 | 16.6 | 1.57 | 0.79 | 0.42 | 0.250 | 3.95 | 0.400 | 34.00 | 5 | Phoenix Valley | 0.085 | 77.9 | 554 | **382%** | **833** |
| *20* | 0.665 | 16.56 | 1.57 | 0.79 | 1 | 0.252 | 3.97 | 0.479 | 0.02 | 6.75 | Agriculture | 0.02 | 183 | 115 | | **173** |
| **21A** | 0.366 | 39.9 | 1.43 | 0.71 | 0.25 | 0.250 | 4 | 0.550 | 45.00 | 4.5 | Phoenix Valley | 0.05 | 35.9 | 579 | **652%** | **1582** |
| *21A* | 0.366 | 39.92 | 1.43 | 0.71 | 1 | 0.277 | 4 | 0.641 | 0 | 6 | Agriculture | 0.02 | 144 | 77 | | **210** |
| **21B** | 0.273 | 24.6 | 1.02 | 0.51 | 0.9 | 0.260 | 4 | 0.690 | 3.00 | 5.25 | Agriculture | 0.175 | 107 | 84 | **25%** | **308** |
| *21B* | 0.273 | 24.58 | 1.02 | 0.51 | 1 | 0.25 | 4 | 0.692 | 0 | 5.75 | Agriculture | 0.02 | 122 | 67 | | **245** |
| **22** | 0.557 | 18.1 | 1.54 | 0.77 | 0.99 | 0.250 | 4 | 0.550 | 0.00 | 6.25 | Agriculture | 0.198 | 175.5 | 102 | **3%** | **183** |
| *22* | 0.557 | 18.14 | 1.54 | 0.77 | 1 | 0.25 | 4 | 0.55 | 0.18 | 6.5 | Agriculture | 0.02 | 178 | 99 | | **178** |
| **23** | 0.524 | 15.9 | 1.32 | 0.66 | 0.25 | 0.250 | 3.95 | 0.400 | 30.00 | 4.5 | Phoenix Valley | 0.05 | 40.4 | 774 | **591%** | **1477** |
| *23* | 0.524 | 15.92 | 1.32 | 0.66 | 1 | 0.248 | 3.96 | 0.472 | 0.99 | 6.5 | Agriculture | 0.02 | 161 | 112 | | **214** |
| **24** | 0.489 | 56.2 | 0.53 | 0.27 | 0.3 | 0.250 | 4.6 | 0.370 | 7.00 | 4.25 | Phoenix Valley | 0.051 | 16.3 | 909 | **3%** | **1859** |
| *24* | 0.489 | 56.27 | 0.53 | 0.27 | 0.312 | 0.276 | 4.59 | 0.365 | 11.26 | 4.25 | Desert Rangeland | 0.05 | 16 | 881 | | **1802** |
| **25** | 0.274 | 10.5 | 1.05 | 0.52 | 0.29 | 0.290 | 4.15 | 0.490 | 18.00 | 4.25 | Phoenix Valley | 0.04 | 29.3 | 419 | **39%** | **1529** |
| *25* | 0.274 | 10.49 | 1.05 | 0.52 | 1 | 0.285 | 4.14 | 0.39 | 1.29 | 4.75 | Phoenix Valley | 0.05 | 37 | 301 | | **1099** |
| **26** | 0.524 | 39.3 | 0.76 | 0.38 | 0.3 | 0.260 | 4 | 0.400 | 9.00 | 4.25 | Phoenix Valley | 0.049 | 21.9 | 1047 | **-1%** | **1998** |
| *26* | 0.524 | 39.29 | 0.76 | 0.38 | 0.304 | 0.26 | 4.05 | 0.4 | 13.8 | 4.5 | Phoenix Valley | 0.05 | 22 | 1060 | | **2023** |

## BUCKEYE ADMP EXISTING CONDITIONS HYDROLOGY UPDATE - PARAMETERS SUMMARY TABLE
### 100 Year, 6 Hour Storm

| SUB BASIN ADMP | AREA | SLOPE | Length | LCA | IA | DTHETA | PSIF | XKSAT | RTIMP | Tp | S-GRAPH TYPE | Kn | Lag | DISCHARGE | % INCREASE DISCHARGE | UNIT DISCHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *ADMS* | (sq mi) | (ft/mi) | (ft) | (ft) | (in) | | (in) | (in/hr) | (%) | (hrs) | | | (min) | (cfs) | | (cfs/sq mi) |
| **83** | 0.675 | 64.7 | 1.72 | 0.93 | 0.25 | 0.250 | 5.4 | 0.270 | 30.00 | 4.5 | Phoenix Valley | 0.05 | 39 | 1010 | **29%** | **1496** |
| *83* | 0.675 | 64.69 | 1.72 | 0.93 | 0.341 | 0.375 | 5.44 | 0.214 | 2.8 | 4.75 | Desert Rangeland | 0.05 | 39 | 781 | | **1157** |

**MODEL FRW 100-yr, 6-hr**

| SUB BASIN ADMP | AREA | SLOPE | Length | LCA | IA | DTHETA | PSIF | XKSAT | RTIMP | Tp | S-GRAPH TYPE | Kn | Lag | DISCHARGE | % INCREASE DISCHARGE | UNIT DISCHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *ADMS* | (sq mi) | (ft/mi) | (ft) | (ft) | (in) | | (in) | (in/hr) | (%) | (hrs) | | | (min) | (cfs) | | (cfs/sq mi) |
| **1** | 1.626 | 34.9 | 2.61 | 1.54 | 0.54 | 0.320 | 4.3 | 0.400 | 1.00 | 5.25 | Desert Rangeland | 0.079 | 98.3 | 576 | **-43%** | **354** |
| *1* | 1.626 | 34.86 | 2.61 | 1.54 | 0.347 | 0.329 | 4.33 | 0.398 | 5.88 | 5 | Desert Rangeland | 0.05 | 62 | 1004 | | **617** |
| **2** | 1.233 | 45.9 | 2.02 | 0.86 | 0.36 | 0.330 | 3.95 | 0.440 | 9.00 | 4.25 | Desert Rangeland | 0.035 | 30 | 1381 | **32%** | **1120** |
| *2* | 1.233 | 45.95 | 2.02 | 0.86 | 0.338 | 0.339 | 3.99 | 0.443 | 5.58 | 4.75 | Desert Rangeland | 0.05 | 43 | 1048 | | **850** |
| **3** | 1.648 | 39.2 | 2.04 | 1.39 | 0.32 | 0.320 | 4 | 0.490 | 13.00 | 4.5 | Desert Rangeland | 0.033 | 35.2 | 1474 | **106%** | **894** |
| *3* | 1.648 | 39.22 | 2.04 | 1.39 | 1 | 0.298 | 4.03 | 0.546 | 4.13 | 5 | Desert Rangeland | 0.05 | 53 | 715 | | **434** |
| **4** | 0.549 | 40.7 | 1.38 | 0.74 | 0.32 | 0.320 | 3.95 | 0.400 | 14.00 | 4.25 | Desert Rangeland | 0.032 | 23 | 956 | **56%** | **1741** |
| *4* | 0.549 | 40.65 | 1.38 | 0.74 | 0.306 | 0.332 | 4.02 | 0.485 | 14.55 | 4.75 | Desert Rangeland | 0.05 | 36 | 614 | | **1118** |
| **5A** | 1.172 | 49 | 1.75 | 1.16 | 0.32 | 0.310 | 4.3 | 0.440 | 19.00 | 4.25 | Desert Rangeland | 0.038 | 34.2 | 1230 | **22%** | **1049** |
| *5A* | 1.172 | 49.05 | 1.75 | 1.16 | 0.333 | 0.342 | 4.33 | 0.387 | 5.98 | 4.75 | Desert Rangeland | 0.05 | 45 | 1008 | | **860** |
| **5B** | 0.576 | 38.7 | 1.73 | 1.08 | 0.36 | 0.350 | 4.5 | 0.320 | 1.00 | 4.25 | Desert Rangeland | 0.028 | 25.5 | 913 | **52%** | **1585** |
| *5B* | 0.576 | 38.66 | 1.73 | 1.08 | 0.318 | 0.336 | 4.61 | 0.319 | 10.55 | 4.75 | Desert Rangeland | 0.05 | 46 | 602 | | **1045** |
| **15A** | 0.588 | 34.6 | 1.45 | 0.48 | 0.37 | 0.330 | 4.4 | 0.390 | 4.00 | 4.25 | Desert Rangeland | 0.036 | 23 | 943 | **33%** | **1604** |
| *15A* | 0.588 | 34.58 | 1.45 | 0.48 | 0.358 | 0.324 | 4.42 | 0.391 | 2.37 | 4.5 | Desert Rangeland | 0.05 | 32 | 711 | | **1209** |
| **15B** | 0.816 | 11 | 1.63 | 0.82 | 1 | 0.250 | 4.1 | 0.540 | 0.00 | 6.75 | Agriculture | 0.2 | 203.9 | 114 | **0%** | **140** |
| *15B* | 0.816 | 11.02 | 1.63 | 0.82 | 1 | 0.249 | 4.1 | 0.541 | 0.37 | 7 | Agriculture | 0.2 | 204 | 114 | | **140** |
| **16** | 0.951 | 25 | 2.00 | 1.37 | 0.28 | 0.250 | 4.35 | 0.440 | 47.00 | 4.75 | Phoenix Valley | 0.048 | 55 | 1075 | **2%** | **1130** |
| *16* | 0.951 | 24.99 | 2.00 | 1.37 | 0.208 | 0.25 | 4.4 | 0.438 | 45.68 | 5 | Phoenix Valley | 0.05 | 57 | 1049 | | **1103** |
| **17** | 0.607 | 16.9 | 1.43 | 0.71 | 0.25 | 0.250 | 4 | 0.550 | 30.00 | 4.5 | Phoenix Valley | 0.05 | 42.3 | 781 | **562%** | **1287** |
| *17* | 0.607 | 16.84 | 1.43 | 0.71 | 1 | 0.25 | 4.02 | 0.465 | 0.17 | 6.5 | Agriculture | 0.02 | 169 | 118 | | **194** |
| **18** | 0.796 | 31 | 1.81 | 0.75 | 0.25 | 0.250 | 4.15 | 0.520 | 30.00 | 4.5 | Phoenix Valley | 0.05 | 42.1 | 987 | **626%** | **1240** |
| *18* | 0.796 | 30.99 | 1.81 | 0.75 | 1 | 0.291 | 4.13 | 0.479 | 0.12 | 6.5 | Agriculture | 0.02 | 168 | 136 | | **171** |

## BUCKEYE ADMP EXISTING CONDITIONS HYDROLOGY UPDATE - PARAMETERS SUMMARY TABLE
### 100 Year, 6 Hour Storm

| SUB BASIN ADMP | AREA | SLOPE | Length | LCA | IA | DTHETA | PSIF | XKSAT | RTIMP | Tp | S-GRAPH TYPE | Kn | Lag | DISCHARGE | % INCREASE DISCHARGE | UNIT DISCHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *ADMS* | (sq mi) | (ft/mi) | (ft) | (ft) | (in) | | (in) | (in/hr) | (%) | (hrs) | | | (min) | (cfs) | | (cfs/sq mi) |
| **19** | 0.536 | 18.5 | 1.51 | 0.76 | 0.94 | 0.260 | 3.95 | 0.440 | 0.00 | 6 | Agriculture | 0.184 | 160.4 | 118 | **9%** | **220** |
| *19* | 0.536 | 18.49 | 1.51 | 0.76 | 1 | 0.249 | 3.96 | 0.435 | 0.57 | 6.5 | Agriculture | 0.02 | 174 | 108 | | **201** |

**MODEL RBE 100-yr, 6-hr**

| SUB BASIN ADMP | AREA | SLOPE | Length | LCA | IA | DTHETA | PSIF | XKSAT | RTIMP | Tp | S-GRAPH TYPE | Kn | Lag | DISCHARGE | % INCREASE DISCHARGE | UNIT DISCHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *ADMS* | (sq mi) | (ft/mi) | (ft) | (ft) | (in) | | (in) | (in/hr) | (%) | (hrs) | | | (min) | (cfs) | | (cfs/sq mi) |
| **34** | 0.637 | 19.5 | 1.23 | 0.62 | 0.94 | 0.250 | 4 | 0.570 | 2.00 | 5.75 | Agriculture | 0.187 | 138.2 | 147 | **9%** | **231** |
| *34* | 0.637 | 19.48 | 1.23 | 0.62 | 1 | 0.245 | 3.99 | 0.565 | 2.07 | 6.25 | Agriculture | 0.2 | 148 | 135 | | **212** |
| **35** | 1.504 | 33.6 | 1.96 | 0.98 | 0.96 | 0.250 | 3.95 | 0.490 | 2.00 | 6.5 | Agriculture | 0.191 | 180.8 | 229 | **4%** | **152** |
| *35* | 1.504 | 33.61 | 1.96 | 0.98 | 1 | 0.25 | 3.98 | 0.486 | 3.32 | 6.75 | Agriculture | 0.2 | 190 | 220 | | **146** |
| **36** | 0.684 | 36.6 | 1.85 | 0.93 | 0.73 | 0.250 | 3.95 | 0.400 | 6.00 | 5.5 | Agriculture | 0.143 | 127.7 | 223 | **66%** | **326** |
| *36* | 0.684 | 36.67 | 1.85 | 0.93 | 1 | 0.258 | 3.97 | 0.455 | 5.1 | 6.5 | Agriculture | 0.2 | 178 | 134 | | **196** |
| **37** | 1.421 | 30.1 | 2.36 | 1.18 | 0.67 | 0.250 | 4.1 | 0.610 | 13.00 | 6 | Agriculture | 0.133 | 148 | 333 | **95%** | **234** |
| *37* | 1.421 | 30.11 | 2.36 | 1.18 | 1 | 0.25 | 4.12 | 0.457 | 0 | 7 | Agriculture | 0.2 | 222 | 171 | | **120** |
| **38** | 0.542 | 20.7 | 1.40 | 0.70 | 0.94 | 0.250 | 3.95 | 0.470 | 1.00 | 6 | Agriculture | 0.187 | 150.3 | 127 | **9%** | **234** |
| *38* | 0.542 | 20.72 | 1.40 | 0.70 | 1 | 0.249 | 3.96 | 0.466 | 1.07 | 6.5 | Agriculture | 0.2 | 161 | 116 | | **214** |
| **39** | 0.725 | 25.2 | 1.63 | 0.82 | 0.9 | 0.260 | 4.3 | 0.470 | 2.00 | 5.75 | Agriculture | 0.176 | 153.3 | 156 | **18%** | **215** |
| *39* | 0.725 | 25.14 | 1.63 | 0.82 | 1 | 0.249 | 4.31 | 0.47 | 1.59 | 6.5 | Agriculture | 0.2 | 174 | 132 | | **182** |
| **40** | 0.976 | 31.3 | 1.83 | 0.91 | 0.96 | 0.250 | 4.2 | 0.530 | 1.00 | 6.25 | Agriculture | 0.191 | 173.5 | 157 | **8%** | **161** |
| *40* | 0.976 | 31.23 | 1.83 | 0.91 | 1 | 0.249 | 4.21 | 0.525 | 0.74 | 6.75 | Agriculture | 0.2 | 182 | 146 | | **150** |
| **46** | 1.381 | 25.2 | 1.79 | 0.89 | 0.56 | 0.250 | 4.15 | 0.570 | 17.00 | 5.5 | Phoenix Valley | 0.11 | 102.4 | 651 | **218%** | **471** |
| *46* | 1.381 | 25.18 | 1.79 | 0.89 | 1 | 0.258 | 4.19 | 0.469 | 2.56 | 6.75 | Agriculture | 0.2 | 186 | 205 | | **148** |
| **47** | 0.617 | 24.6 | 1.46 | 0.73 | 0.43 | 0.250 | 4.45 | 0.470 | 24.00 | 5 | Phoenix Valley | 0.085 | 68.2 | 532 | **326%** | **862** |
| *47* | 0.617 | 24.6 | 1.46 | 0.73 | 1 | 0.271 | 4.5 | 0.411 | 0.1 | 6.5 | Agriculture | 0.2 | 161 | 125 | | **203** |
| **48** | 0.500 | 16.5 | 1.10 | 0.55 | 0.98 | 0.250 | 4.35 | 0.450 | 1.00 | 5.75 | Agriculture | 0.196 | 136.9 | 127 | **2%** | **254** |
| *48* | 0.500 | 16.43 | 1.10 | 0.55 | 1 | 0.25 | 4.37 | 0.445 | 1.37 | 6 | Agriculture | 0.2 | 139 | 125 | | **250** |

## BUCKEYE ADMP EXISTING CONDITIONS HYDROLOGY UPDATE - PARAMETERS SUMMARY TABLE
### 100 Year, 6 Hour Storm

| SUB BASIN ADMP | AREA | SLOPE | Length | LCA | IA | DTHETA | PSIF | XKSAT | RTIMP | Tp | S-GRAPH TYPE | Kn | Lag | DISCHARGE | % INCREASE DISCHARGE | UNIT DISCHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *ADMS* | (sq mi) | (ft/mi) | (ft) | (ft) | (in) | | (in) | (in/hr) | (%) | (hrs) | | | (min) | (cfs) | | (cfs/sq mi) |
| **49** | 1.009 | 23.5 | 1.96 | 0.98 | 0.46 | 0.260 | 3.95 | 0.400 | 18.00 | 5.25 | Phoenix Valley | 0.086 | 87.1 | 676 | **339%** | **670** |
| *49* | 1.009 | 23.51 | 1.96 | 0.98 | 1 | 0.25 | 3.95 | 0.417 | 0.66 | 7 | Agriculture | 0.2 | 202 | 154 | | **153** |
| **50** | 1.002 | 26.7 | 1.98 | 0.99 | 0.91 | 0.250 | 4.2 | 0.490 | 3.00 | 6.5 | Agriculture | 0.18 | 179.3 | 171 | **16%** | **171** |
| *50* | 1.002 | 26.73 | 1.98 | 0.99 | 1 | 0.251 | 4.18 | 0.488 | 2.4 | 6.75 | Agriculture | 0.2 | 199 | 147 | | **147** |
| **51** | 1.004 | 23 | 1.96 | 0.98 | 0.88 | 0.250 | 4.4 | 0.560 | 3.00 | 6.25 | Agriculture | 0.173 | 176 | 163 | **27%** | **162** |
| *51* | 1.004 | 22.98 | 1.96 | 0.98 | 1 | 0.25 | 4.4 | 0.563 | 1.52 | 7 | Agriculture | 0.2 | 203 | 128 | | **127** |
| **56A** | 0.411 | 30.3 | 1.19 | 0.59 | 0.69 | 0.260 | 3.95 | 0.460 | 15.00 | 5 | Agriculture | 0.129 | 84.9 | 219 | **60%** | **533** |
| *56A* | 0.411 | 30.31 | 1.19 | 0.59 | 1 | 0.25 | 3.97 | 0.455 | 18.06 | 5.75 | Agriculture | 0.2 | 132 | 137 | | **333** |
| **56B** | 0.334 | 43.7 | 0.73 | 0.37 | 0.15 | 0.250 | 4 | 0.620 | 54.00 | 4 | Phoenix Valley | 0.021 | 9 | 1061 | **208%** | **3177** |
| *56B* | 0.334 | 43.7 | 0.73 | 0.37 | 0.1 | 0.25 | 4 | 0.524 | 80 | 5.5 | Phoenix Valley | 0.2 | 85 | 345 | | **1033** |
| **57** | 0.489 | 19.1 | 0.68 | 0.34 | 1 | 0.250 | 4.25 | 0.530 | 0.00 | 5.25 | Agriculture | 0.2 | 94.3 | 168 | **-3%** | **344** |
| *57* | 0.489 | 19.18 | 0.68 | 0.34 | 1 | 0.25 | 4.26 | 0.53 | 1.42 | 5.5 | Agriculture | 0.2 | 94 | 173 | | **354** |
| **58** | 0.190 | 16 | 0.50 | 0.25 | 0.29 | 0.310 | 4.3 | 0.550 | 21.00 | 4 | Phoenix Valley | 0.026 | 10 | 514 | **459%** | **2705** |
| *58* | 0.190 | 15.93 | 0.50 | 0.25 | 1 | 0.25 | 4.29 | 0.552 | 11.15 | 5.25 | Agriculture | 0.2 | 77 | 92 | | **484** |
| **65** | 0.376 | 11 | 0.82 | 0.41 | 0.99 | 0.250 | 4.6 | 0.410 | 1.00 | 5.5 | Agriculture | 0.198 | 119.5 | 112 | **2%** | **298** |
| *65* | 0.376 | 10.93 | 0.82 | 0.41 | 1 | 0.247 | 4.71 | 0.411 | 1.76 | 5.75 | Agriculture | 0.2 | 121 | 110 | | **293** |
| **66** | 0.294 | 19.2 | 0.73 | 0.36 | 0.81 | 0.260 | 4.35 | 0.390 | 10.00 | 5 | Agriculture | 0.158 | 78.1 | 158 | **39%** | **537** |
| *66* | 0.294 | 19.24 | 0.73 | 0.36 | 1 | 0.249 | 4.47 | 0.385 | 6.04 | 5.5 | Agriculture | 0.2 | 99 | 114 | | **388** |
| **67** | 0.472 | 25.7 | 0.82 | 0.41 | 0.25 | 0.250 | 4.3 | 0.390 | 30.00 | 4.25 | Phoenix Valley | 0.047 | 24.1 | 975 | **192%** | **2066** |
| *67* | 0.472 | 25.73 | 0.82 | 0.41 | 0.261 | 0.262 | 4.33 | 0.393 | 26.59 | 5.75 | Phoenix Valley | 0.2 | 102 | 334 | | **708** |
| **69** | 0.137 | 17.3 | 0.11 | 0.06 | 0.18 | 0.270 | 4.5 | 0.400 | 53.00 | 4.25 | Phoenix Valley | 0.2 | 24.9 | 294 | **1%** | **2146** |
| *69* | 0.137 | 17.52 | 0.11 | 0.06 | 0.176 | 0.264 | 4.5 | 0.395 | 49.22 | 4.5 | Phoenix Valley | 0.2 | 25 | 292 | | **2131** |
| **70** | 0.141 | 1.5 | 0.68 | 0.34 | 0.46 | 0.250 | 4.45 | 0.510 | 24.00 | 4.75 | Agriculture | 0.09 | 68.8 | 99 | **230%** | **702** |
| *70* | 0.141 | 1.48 | 0.68 | 0.34 | 1 | 0.25 | 4.4 | 0.512 | 0 | 6 | Agriculture | 0.2 | 152 | 30 | | **213** |
| **71** | 0.155 | 14.4 | 0.34 | 0.17 | 0.93 | 0.250 | 4.8 | 0.410 | 3.00 | 4.5 | Agriculture | 0.184 | 54 | 100 | **9%** | **645** |
| *71* | 0.155 | 14.51 | 0.34 | 0.17 | 1 | 0.243 | 4.91 | 0.414 | 2.61 | 5 | Agriculture | 0.2 | 59 | 92 | | **594** |

## BUCKEYE ADMP EXISTING CONDITIONS HYDROLOGY UPDATE - PARAMETERS SUMMARY TABLE
### 100 Year, 6 Hour Storm

| SUB BASIN ADMP | AREA | SLOPE | Length | LCA | IA | DTHETA | PSIF | XKSAT | RTIMP | Tp | S-GRAPH TYPE | Kn | Lag | DISCHARGE | % INCREASE DISCHARGE | UNIT DISCHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *ADMS* | (sq mi) | (ft/mi) | (ft) | (ft) | (in) | | (in) | (in/hr) | (%) | (hrs) | | | (min) | (cfs) | | (cfs/sq mi) |
| **72** | 0.086 | 7.7 | 0.13 | 0.06 | 0.59 | 0.300 | 4.45 | 0.420 | 6.00 | 4 | Agriculture | 0.095 | 14.7 | 148 | **63%** | **1721** |
| *72* | 0.086 | 7.71 | 0.13 | 0.06 | 1 | 0.23 | 4.47 | 0.424 | 7.94 | 4.5 | Agriculture | 0.2 | 32 | 91 | | **1058** |

**MODEL RBW 100-yr, 6-hr**

| SUB BASIN ADMP | AREA | SLOPE | Length | LCA | IA | DTHETA | PSIF | XKSAT | RTIMP | Tp | S-GRAPH TYPE | Kn | Lag | DISCHARGE | % INCREASE DISCHARGE | UNIT DISCHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *ADMS* | (sq mi) | (ft/mi) | (ft) | (ft) | (in) | | (in) | (in/hr) | (%) | (hrs) | | | (min) | (cfs) | | (cfs/sq mi) |
| **27** | 0.241 | 14.6 | 0.82 | 0.41 | 1 | 0.250 | 3.95 | 0.570 | 0.00 | 5.5 | Agriculture | 0.2 | 114.4 | 68 | **-3%** | **282** |
| *27* | 0.241 | 14.59 | 0.82 | 0.41 | 1 | 0.246 | 3.98 | 0.567 | 1.42 | 5.75 | Agriculture | 0.2 | 115 | 70 | | **290** |
| **28** | 0.335 | 16.7 | 1.02 | 0.51 | 0.97 | 0.250 | 4.15 | 0.470 | 1.00 | 5.5 | Agriculture | 0.195 | 128.3 | 92 | **6%** | **275** |
| *28* | 0.335 | 16.68 | 1.02 | 0.51 | 1 | 0.249 | 4.18 | 0.467 | 0.54 | 5.75 | Agriculture | 0.2 | 132 | 87 | | **260** |
| **29** | 0.999 | 22.9 | 1.47 | 0.73 | 1 | 0.250 | 3.95 | 0.550 | 0.00 | 6.25 | Agriculture | 0.2 | 163.2 | 162 | **0%** | **162** |
| *29* | 0.999 | 22.92 | 1.47 | 0.73 | 1 | 0.25 | 3.98 | 0.548 | 0 | 6.5 | Agriculture | 0.2 | 163 | 162 | | **162** |
| **30** | 0.983 | 21.9 | 1.55 | 0.78 | 0.99 | 0.250 | 4 | 0.470 | 0.00 | 6.5 | Agriculture | 0.197 | 169.6 | 168 | **-14%** | **171** |
| *30* | 0.983 | 21.93 | 1.55 | 0.78 | 1 | 0.25 | 4.03 | 0.469 | 8.73 | 6.5 | Agriculture | 0.2 | 172 | 195 | | **198** |
| **31** | 1.079 | 26.4 | 1.93 | 0.97 | 0.99 | 0.250 | 4 | 0.460 | 0.00 | 6.75 | Agriculture | 0.197 | 193.3 | 161 | **0%** | **149** |
| *31* | 1.079 | 26.4 | 1.93 | 0.97 | 1 | 0.249 | 4.02 | 0.456 | 0.85 | 6.75 | Agriculture | 0.2 | 196 | 161 | | **149** |
| **32** | 0.896 | 24.3 | 1.84 | 0.92 | 0.98 | 0.250 | 4 | 0.520 | 1.00 | 6.5 | Agriculture | 0.197 | 189 | 138 | **2%** | **154** |
| *32* | 0.896 | 24.34 | 1.84 | 0.92 | 1 | 0.249 | 4 | 0.515 | 1.15 | 6.75 | Agriculture | 0.2 | 192 | 135 | | **151** |
| **33** | 1.002 | 29.3 | 1.84 | 0.92 | 0.91 | 0.260 | 3.95 | 0.440 | 1.00 | 6.25 | Agriculture | 0.175 | 162 | 194 | **19%** | **194** |
| *33* | 1.002 | 29.3 | 1.84 | 0.92 | 1 | 0.249 | 3.96 | 0.44 | 0.53 | 6.75 | Agriculture | 0.2 | 185 | 163 | | **163** |
| **41** | 1.202 | 24 | 1.54 | 0.77 | 1 | 0.250 | 3.95 | 0.470 | 0.00 | 6.5 | Agriculture | 0.2 | 168 | 198 | **1%** | **165** |
| *41* | 1.202 | 23.99 | 1.54 | 0.77 | 1 | 0.25 | 3.97 | 0.474 | 0 | 6.5 | Agriculture | 0.2 | 168 | 197 | | **164** |
| **42** | 0.778 | 22.8 | 1.56 | 0.78 | 1 | 0.250 | 4.25 | 0.450 | 0.00 | 6.5 | Agriculture | 0.2 | 171.3 | 140 | **0%** | **180** |
| *42* | 0.778 | 22.73 | 1.56 | 0.78 | 1 | 0.25 | 4.28 | 0.452 | 0.47 | 6.5 | Agriculture | 0.2 | 172 | 140 | | **180** |
| **43** | 1.002 | 20.8 | 1.92 | 0.96 | 0.99 | 0.250 | 3.95 | 0.430 | 1.00 | 6.75 | Agriculture | 0.198 | 202.1 | 153 | **1%** | **153** |
| *43* | 1.002 | 20.85 | 1.92 | 0.96 | 1 | 0.25 | 3.96 | 0.425 | 0.66 | 7 | Agriculture | 0.2 | 204 | 151 | | **151** |
| **44** | 1.007 | 22.4 | 1.97 | 0.98 | 0.96 | 0.260 | 4.1 | 0.490 | 0.00 | 6.5 | Agriculture | 0.189 | 193.6 | 146 | **-5%** | **145** |
| *44* | 1.007 | 22.43 | 1.97 | 0.98 | 1 | 0.25 | 4.14 | 0.485 | 5.22 | 7 | Agriculture | 0.2 | 205 | 153 | | **152** |
| **45A** | 1.003 | 25.1 | 1.97 | 0.99 | 0.94 | 0.260 | 4 | 0.440 | 0.00 | 6.75 | Agriculture | 0.183 | 184.1 | 164 | **10%** | **164** |
| *45A* | 1.003 | 25.14 | 1.97 | 0.99 | 1 | 0.25 | 3.99 | 0.441 | 0.24 | 7 | Agriculture | 0.2 | 201 | 149 | | **149** |

## BUCKEYE ADMP EXISTING CONDITIONS HYDROLOGY UPDATE - PARAMETERS SUMMARY TABLE
### 100 Year, 6 Hour Storm

| SUB BASIN ADMP | AREA | SLOPE | Length | LCA | IA | DTHETA | PSIF | XKSAT | RTIMP | Tp | S-GRAPH TYPE | Kn | Lag | DISCHARGE | % INCREASE DISCHARGE | UNIT DISCHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *ADMS* | (sq mi) | (ft/mi) | (ft) | (ft) | (in) | | (in) | (in/hr) | (%) | (hrs) | | | (min) | (cfs) | | (cfs/sq mi) |
| **45B** | 0.140 | 8.7 | 0.52 | 0.26 | 0.68 | 0.260 | 4 | 0.420 | 18.00 | 4.75 | Agriculture | 0.13 | 58 | 110 | **43%** | **786** |
| *45B* | 0.140 | 8.59 | 0.52 | 0.26 | 1 | 0.25 | 3.97 | 0.417 | 29.71 | 5.25 | Agriculture | 0.2 | 89 | 77 | | **550** |
| **52A** | 0.313 | 7 | 0.92 | 0.57 | 1 | 0.250 | 3.95 | 0.440 | 0.00 | 6.25 | Agriculture | 0.2 | 155.7 | 71 | **0%** | **227** |
| *52A* | 0.313 | 6.91 | 0.92 | 0.57 | 1 | 0.25 | 3.97 | 0.439 | 0.36 | 6.25 | Agriculture | 0.2 | 156 | 71 | | **227** |
| **52B** | 0.495 | 32.5 | 0.71 | 0.32 | 0.97 | 0.250 | 4.1 | 0.530 | 1.00 | 5 | Agriculture | 0.193 | 81.7 | 204 | **6%** | **412** |
| *52B* | 0.495 | 32.56 | 0.71 | 0.32 | 1 | 0.251 | 4.09 | 0.53 | 0.35 | 5.25 | Agriculture | 0.2 | 85 | 192 | | **388** |
| **53** | 0.339 | 24 | 0.91 | 0.46 | 0.99 | 0.250 | 4 | 0.440 | 1.00 | 5.25 | Agriculture | 0.198 | 112 | 108 | **4%** | **319** |
| *53* | 0.339 | 23.93 | 0.91 | 0.46 | 1 | 0.25 | 4 | 0.444 | 0 | 5.75 | Agriculture | 0.2 | 113 | 104 | | **307** |
| **54** | 0.386 | 12.3 | 1.20 | 0.60 | 0.98 | 0.250 | 4 | 0.450 | 1.00 | 6 | Agriculture | 0.197 | 155.4 | 88 | **2%** | **228** |
| *54* | 0.386 | 12.35 | 1.20 | 0.60 | 1 | 0.25 | 4 | 0.447 | 0 | 6.5 | Agriculture | 0.2 | 157 | 86 | | **223** |
| **55** | 0.263 | 12.8 | 0.97 | 0.48 | 1 | 0.250 | 4.1 | 0.450 | 0.00 | 5.75 | Agriculture | 0.2 | 132.7 | 68 | **0%** | **259** |
| *55* | 0.263 | 12.83 | 0.97 | 0.48 | 1 | 0.25 | 4.13 | 0.446 | 0 | 6 | Agriculture | 0.2 | 133 | 68 | | **259** |
| **59** | 0.252 | 49.4 | 0.50 | 0.17 | 0.75 | 0.270 | 4.1 | 0.500 | 11.00 | 4.5 | Agriculture | 0.141 | 37.9 | 244 | **44%** | **968** |
| *59* | 0.252 | 49.34 | 0.50 | 0.17 | 1 | 0.23 | 4.17 | 0.497 | 8.09 | 4.75 | Agriculture | 0.2 | 53 | 169 | | **671** |
| **60A** | 0.412 | 27.5 | 1.07 | 0.46 | 0.85 | 0.250 | 4 | 0.540 | 13.00 | 5.25 | Agriculture | 0.17 | 99.6 | 170 | **45%** | **413** |
| *60A* | 0.412 | 27.51 | 1.07 | 0.46 | 1 | 0.249 | 4.04 | 0.541 | 0.79 | 5.75 | Agriculture | 0.2 | 117 | 117 | | **284** |
| **60B** | 0.574 | 22.7 | 1.03 | 0.35 | 0.86 | 0.260 | 4.15 | 0.550 | 3.00 | 5.25 | Agriculture | 0.169 | 91.2 | 215 | **24%** | **375** |
| *60B* | 0.574 | 22.68 | 1.03 | 0.35 | 1 | 0.249 | 4.16 | 0.551 | 3.25 | 5.5 | Agriculture | 0.2 | 108 | 174 | | **303** |
| **61** | 0.508 | 23 | 0.90 | 0.45 | 0.76 | 0.250 | 3.92 | 0.460 | 8.00 | 5 | Agriculture | 0.152 | 85.6 | 245 | **54%** | **482** |
| *61* | 0.508 | 23 | 0.90 | 0.45 | 1 | 0.248 | 3.97 | 0.464 | 2.23 | 5.75 | Agriculture | 0.2 | 113 | 159 | | **313** |
| **62** | 0.572 | 21.5 | 0.98 | 0.49 | 0.94 | 0.250 | 4.2 | 0.440 | 3.00 | 5.5 | Agriculture | 0.187 | 113.8 | 181 | **15%** | **316** |
| *62* | 0.572 | 21.54 | 0.98 | 0.49 | 1 | 0.249 | 4.2 | 0.444 | 0.47 | 6 | Agriculture | 0.2 | 122 | 158 | | **276** |
| **63** | 0.499 | 20.3 | 0.95 | 0.47 | 0.97 | 0.250 | 4.15 | 0.400 | 1.00 | 5.5 | Agriculture | 0.195 | 116.7 | 156 | **-19%** | **313** |
| *63* | 0.499 | 20.27 | 0.95 | 0.47 | 1 | 0.25 | 4.19 | 0.398 | 20.75 | 5.75 | Agriculture | 0.2 | 120 | 192 | | **385** |
| **64** | 0.415 | 18 | 0.89 | 0.45 | 0.98 | 0.250 | 4.35 | 0.450 | 0.00 | 5.5 | Agriculture | 0.196 | 115.1 | 123 | **-1%** | **296** |
| *64* | 0.415 | 17.94 | 0.89 | 0.45 | 1 | 0.248 | 4.36 | 0.445 | 1.18 | 5.75 | Agriculture | 0.2 | 117 | 124 | | **299** |

## BUCKEYE ADMP EXISTING CONDITIONS HYDROLOGY UPDATE - PARAMETERS SUMMARY TABLE
### 100 Year, 6 Hour Storm

| SUB BASIN ADMP | AREA | SLOPE | Length | LCA | IA | DTHETA | PSIF | XKSAT | RTIMP | Tp | S-GRAPH TYPE | Kn | Lag | DISCHARGE | % INCREASE DISCHARGE | UNIT DISCHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *ADMS* | (sq mi) | (ft/mi) | (ft) | (ft) | (in) | | (in) | (in/hr) | (%) | (hrs) | | | (min) | (cfs) | | (cfs/sq mi) |
| **68** | 0.413 | 45.6 | 0.96 | 0.33 | 0.52 | 0.290 | 4.35 | 0.370 | 4.00 | 4.5 | Desert Rangeland | 0.084 | 37.8 | 458 | **-34%** | **1109** |
| *68* | 0.413 | 45.58 | 0.96 | 0.33 | 0.374 | 0.334 | 4.37 | 0.374 | 0 | 4.5 | Desert Rangeland | 0.05 | 22 | 694 | | **1680** |

**MODEL AREA 2 100-yr, 6-hr**

| SUB BASIN ADMP | AREA | SLOPE | Length | LCA | IA | DTHETA | PSIF | XKSAT | RTIMP | Tp | S-GRAPH TYPE | Kn | Lag | DISCHARGE | % INCREASE DISCHARGE | UNIT DISCHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *ADMS* | (sq mi) | (%) | (ft) | (ft) | (in) | | (in) | (in/hr) | (%) | (hrs) | | | (min) | (cfs) | | (cfs/sq mi) |
| **A1** | 1.628 | 33 | 2.96 | 1.73 | 0.35 | 0.350 | 4.45 | 0.340 | 0.00 | 4.33 | Desert Rangeland | 0.025 | 34.5 | 1587 | **71%** | **975** |
| *A1* | 1.630 | 32.98 | 2.96 | 1.73 | 0.343 | 0.347 | 4.498 | 0.339 | 2.145 | 5 | Desert Rangeland | 0.05 | 69 | 929 | | **570** |
| **B1** | 0.300 | 57.2 | 1.34 | 0.66 | 0.35 | 0.350 | 4.6 | 0.320 | 0.00 | 4.08 | Desert Rangeland | 0.025 | 15.9 | 668 | **58%** | **2227** |
| *B1* | 0.300 | 57.24 | 1.34 | 0.66 | 0.35 | 0.35 | 4.624 | 0.315 | 0 | 4.42 | Desert Rangeland | 0.05 | 31 | 422 | | **1407** |
| **C1** | 0.947 | 41.6 | 2.65 | 1.06 | 0.35 | 0.350 | 4.65 | 0.310 | 0.00 | 4.25 | Desert Rangeland | 0.025 | 26.3 | 1301 | **72%** | **1374** |
| *C1* | 0.950 | 41.6 | 2.65 | 1.06 | 0.35 | 0.35 | 4.669 | 0.311 | 0 | 4.67 | Desert Rangeland | 0.05 | 52 | 758 | | **798** |
| **D1** | 0.687 | 41.1 | 2.05 | 0.98 | 0.35 | 0.350 | 4.65 | 0.320 | 0.00 | 4.25 | Desert Rangeland | 0.026 | 24.1 | 1072 | **66%** | **1560** |
| *D1* | 0.690 | 41.1 | 2.05 | 0.98 | 0.35 | 0.35 | 4.642 | 0.317 | 0 | 4.58 | Desert Rangeland | 0.05 | 46 | 646 | | **936** |
| **E1** | 1.466 | 27.9 | 3.19 | 1.81 | 0.35 | 0.350 | 4.35 | 0.360 | 0.00 | 4.42 | Desert Rangeland | 0.025 | 37.2 | 1375 | **78%** | **938** |
| *E1* | 1.470 | 27.95 | 3.19 | 1.81 | 0.343 | 0.347 | 4.362 | 0.364 | 2.082 | 5.08 | Desert Rangeland | 0.05 | 75 | 772 | | **525** |
| **E2-a2** | 1.223 | 27.5 | 2.97 | 1.67 | 0.41 | 0.340 | 4.4 | 0.350 | 1.00 | 4.75 | Desert Rangeland | 0.043 | 60.6 | 792 | **11%** | **648** |
| *E2-a2* | 1.220 | 27.48 | 2.97 | 1.67 | 0.348 | 0.343 | 4.461 | 0.354 | 2.288 | 5 | Desert Rangeland | 0.05 | 70 | 713 | | **584** |
| **E3-a2** | 0.943 | 25.9 | 2.72 | 0.99 | 0.78 | 0.270 | 4.25 | 0.440 | 1.00 | 6.33 | Desert Rangeland | 0.145 | 163.9 | 650 | **-41%** | **689** |
| *E3-a2* | 0.940 | 25.93 | 2.72 | 0.99 | 0.402 | 0.306 | 4.245 | 0.444 | 1.589 | 4.75 | Desert Rangeland | 0.05 | 56 | 1095 | | **1165** |
| **E4** | 0.740 | 29 | 2.00 | 1.24 | 0.56 | 0.300 | 4.15 | 0.420 | 1.00 | 5.25 | Desert Rangeland | 0.089 | 95.5 | 310 | **-45%** | **419** |
| *E4* | 0.740 | 28.98 | 2.00 | 1.24 | 0.389 | 0.324 | 4.185 | 0.421 | 0 | 4.75 | Desert Rangeland | 0.05 | 53 | 559 | | **755** |

# Parameters Summary Table

- 100 Year, 24 Hour Storm

# Parameters Summary Table

- 100 Year, 24 Hour Storm

## BUCKEYE ADMP EXISTING CONDITIONS HYDROLOGY UPDATE - PARAMETERS SUMMARY TABLE
### 100 Year, 24 Hour Storm

**MODEL BGE 100-yr, 24-hr**

| SUB BASIN ADMP | AREA | SLOPE | Length | LCA | IA | DTHETA | PSIF | XKSAT | RTIMP | Tp | S-GRAPH TYPE | Kn | Lag | DISCHARGE | % INCREASE DISCHARGE | UNIT DISCHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *ADMS* | (sq mi) | (ft/mi) | (ft) | (ft) | (in) | | (in) | (in/hr) | (%) | (hrs) | | | (min) | (cfs) | | (cfs/sq mi) |
| **90** | 1.055 | 21.5 | 2.05 | 1.02 | 0.87 | 0.150 | 9.7 | 0.080 | 7.00 | 14.5 | Agriculture | 0.171 | 181.9 | 275 | **22%** | **261** |
| *90* | 1.055 | 21.5 | 2.05 | 1.02 | 1 | 0.152 | 9.53 | 0.075 | 5.87 | 15.25 | Agriculture | 0.2 | 213 | 226 | | **214** |
| **91** | 1.189 | 21.1 | 5.08 | 1.04 | 0.55 | 0.160 | 8.4 | 0.090 | 15.00 | 14.5 | Phoenix Valley | 0.105 | 159.5 | 484 | **110%** | **407** |
| *91* | 1.189 | 21.1 | 5.08 | 1.04 | 1 | 0.15 | 8.29 | 0.113 | 5.19 | 15.25 | Agriculture | 0.2 | 217 | 230 | | **193** |
| **92** | 1.014 | 17.5 | 2.06 | 1.03 | 0.85 | 0.150 | 8.4 | 0.100 | 6.00 | 14.5 | Agriculture | 0.17 | 189.1 | 247 | **-46%** | **244** |
| *92* | 1.014 | 17.46 | 2.06 | 1.03 | 1 | 0.152 | 8.66 | 0.095 | 5.86 | 13.5 | Agriculture | 0.2 | 223 | 457 | | **451** |
| **93** | 0.377 | 17.4 | 1.21 | 0.60 | 0.82 | 0.250 | 4.9 | 0.410 | 7.00 | 13.5 | Agriculture | 0.162 | 120 | 96 | **25%** | **255** |
| *93* | 0.377 | 17.39 | 1.21 | 0.60 | 1 | 0.245 | 4.88 | 0.41 | 9.38 | 14.25 | Agriculture | 0.2 | 148 | 77 | | **204** |
| **94** | 0.719 | 22.4 | 1.30 | 0.65 | 0.91 | 0.150 | 7.3 | 0.160 | 4.00 | 13.75 | Agriculture | 0.182 | 136.2 | 212 | **15%** | **295** |
| *94* | 0.719 | 22.37 | 1.30 | 0.65 | 1 | 0.15 | 7.3 | 0.157 | 2.2 | 14.25 | Agriculture | 0.2 | 149 | 184 | | **256** |
| **95** | 0.522 | 7.8 | 1.66 | 0.83 | 0.85 | 0.150 | 8 | 0.120 | 6.00 | 14.5 | Agriculture | 0.17 | 187.2 | 126 | **31%** | **241** |
| *95* | 0.522 | 7.84 | 1.66 | 0.83 | 1 | 0.15 | 8.2 | 0.118 | 0.73 | 15.25 | Agriculture | 0.2 | 220 | 96 | | **184** |
| **96** | 0.914 | 4.5 | 1.32 | 0.66 | 0.89 | 0.150 | 7.3 | 0.160 | 5.00 | 14.5 | Agriculture | 0.177 | 181.7 | 207 | **27%** | **226** |
| *96* | 0.914 | 4.55 | 1.32 | 0.66 | 1 | 0.15 | 7.2 | 0.171 | 0.59 | 15 | Agriculture | 0.2 | 205 | 163 | | **178** |
| **97** | 0.500 | 6.1 | 1.32 | 0.66 | 0.77 | 0.170 | 6.8 | 0.180 | 9.00 | 13.75 | Agriculture | 0.153 | 148.3 | 143 | **59%** | **286** |
| *97* | 0.500 | 6.05 | 1.32 | 0.66 | 1 | 0.163 | 6.87 | 0.195 | 0.28 | 15 | Agriculture | 0.2 | 195 | 90 | | **180** |
| **98** | 0.388 | 6.7 | 1.50 | 0.75 | 0.53 | 0.160 | 8.8 | 0.080 | 19.00 | 13.25 | Agriculture | 0.102 | 107 | 189 | **9%** | **487** |
| *98* | 0.388 | 6.69 | 1.50 | 0.75 | 1 | 0.174 | 9.08 | 0.078 | 10.56 | 13.5 | Agriculture | 0.2 | 209 | 174 | | **448** |
| **99** | 0.948 | 3.5 | 2.01 | 1.24 | 0.19 | 0.260 | 6 | 0.220 | 7.00 | 12.75 | Phoenix Valley | 0.034 | 54.6 | 812 | **104%** | **857** |
| *99* | 0.948 | 3.49 | 2.01 | 1.24 | 1 | 0.334 | 6.02 | 0.216 | 0.01 | 13.5 | Phoenix Valley | 0.05 | 80 | 399 | | **421** |
| **100** | 0.582 | 18.8 | 1.70 | 0.85 | 1 | 0.230 | 6.2 | 0.250 | 0.00 | 14.25 | Agriculture | 0.199 | 188.7 | 92 | **0%** | **158** |
| *100* | 0.582 | 18.83 | 1.70 | 0.85 | 1 | 0.228 | 6.24 | 0.251 | 1.19 | 14.75 | Agriculture | 0.2 | 190 | 92 | | **158** |
| **101** | 0.381 | 8.6 | 1.63 | 0.81 | 0.55 | 0.150 | 7 | 0.180 | 6.00 | 13.75 | Phoenix Valley | 0.109 | 115.9 | 184 | **167%** | **483** |
| *101* | 0.381 | 8.59 | 1.63 | 0.81 | 1 | 0.149 | 6.96 | 0.172 | 3.95 | 15.25 | Agriculture | 0.2 | 213 | 69 | | **181** |
| **4th** | 0.082 | 0.2 | 0.52 | 0.40 | 0.18 | 0.250 | 5.2 | 0.330 | 55.00 | 12.5 | Phoenix Valley | 0.034 | 36.6 | 104 | **-24%** | **1268** |
| *4th* | 0.082 | 0.01 | 0.52 | 0.40 | 0.192 | 0.248 | 5.15 | 0.326 | 55.32 | 12.5 | Phoenix Valley | 0.011 | 24 | 136 | | **1659** |
| **4thS** | 0.145 | 0.1 | 0.74 | 0.50 | 0.18 | 0.220 | 6.4 | 0.200 | 58.00 | 12.75 | Phoenix Valley | 0.034 | 52 | 154 | **-23%** | **1062** |
| *4thS* | 0.145 | 0.01 | 0.74 | 0.50 | 0.181 | 0.203 | 6.47 | 0.204 | 37.61 | 12.5 | Phoenix Valley | 0.011 | 30 | 199 | | **1372** |
| **6th** | 0.057 | 0.2 | 0.46 | 0.17 | 0.2 | 0.150 | 7.6 | 0.120 | 47.00 | 12.25 | Phoenix Valley | 0.039 | 29 | 87 | **-14%** | **1526** |
| *6th* | 0.057 | 0.01 | 0.46 | 0.17 | 0.206 | 0.148 | 7.57 | 0.12 | 51.54 | 12.5 | Phoenix Valley | 0.011 | 17 | 101 | | **1772** |

# BUCKEYE ADMP EXISTING CONDITIONS HYDROLOGY UPDATE - PARAMETERS SUMMARY TABLE
## 100 Year, 24 Hour Storm

| SUB BASIN ADMP | AREA | SLOPE | Length | LCA | IA | DTHETA | PSIF | XKSAT | RTIMP | Tp | S-GRAPH TYPE | Kn | Lag | DISCHARGE | % INCREASE DISCHARGE | UNIT DISCHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *ADMS* | (sq mi) | (ft/mi) | (ft) | (ft) | (in) | | (in) | (in/hr) | (%) | (hrs) | | | (min) | (cfs) | | (cfs/sq mi) |
| **7th** | 0.127 | 0.2 | 0.66 | 0.33 | 0.21 | 0.260 | 5.3 | 0.310 | 39.00 | 12.5 | Phoenix Valley | 0.037 | 40.5 | 145 | -28% | **1142** |
| *7th* | 0.127 | 0.01 | 0.66 | 0.33 | 0.252 | 0.261 | 5.11 | 0.312 | 38.17 | 12.5 | Phoenix Valley | 0.011 | 24 | 200 | | **1575** |
| **8th** | 0.079 | 0.2 | 0.60 | 0.31 | 0.23 | 0.160 | 8.8 | 0.070 | 38.00 | 12.5 | Phoenix Valley | 0.044 | 45.4 | 93 | -35% | **1177** |
| *8th* | 0.079 | 0.01 | 0.60 | 0.31 | 0.241 | 0.15 | 8.77 | 0.074 | 42.7 | 12.5 | Phoenix Valley | 0.011 | 23 | 144 | | **1823** |
| **9thE** | 0.095 | 0.2 | 0.54 | 0.32 | 0.17 | 0.160 | 8.8 | 0.080 | 31.00 | 12.25 | Phoenix Valley | 0.029 | 29.1 | 144 | -1% | **1516** |
| *9thE* | 0.095 | 0.01 | 0.54 | 0.32 | 0.173 | 0.154 | 8.73 | 0.083 | 35.4 | 12.5 | Phoenix Valley | 0.011 | 22 | 145 | | **1526** |
| **9thW** | 0.081 | 0.1 | 0.77 | 0.39 | 0.18 | 0.170 | 8.4 | 0.100 | 30.00 | 12.5 | Phoenix Valley | 0.031 | 43.8 | 96 | -35% | **1185** |
| *9thW* | 0.081 | 0.01 | 0.77 | 0.39 | 0.197 | 0.149 | 8.42 | 0.101 | 29.52 | 12.5 | Phoenix Valley | 0.011 | 29 | 147 | | **1815** |
| **BAYLIS** | 0.016 | 0.3 | 0.30 | 0.08 | 0.15 | 0.160 | 9.7 | 0.070 | 64.00 | 12 | Phoenix Valley | 0.024 | 10.5 | 40 | -2% | **2500** |
| *BAYLIS* | 0.016 | 0.01 | 0.30 | 0.08 | 0.1 | 0.15 | 9.7 | 0.069 | 80 | 12.25 | Phoenix Valley | 0.011 | 9 | 41 | | **2563** |
| **BELOAT** | 0.047 | 0.2 | 0.44 | 0.25 | 0.26 | 0.160 | 8.8 | 0.060 | 32.00 | 12.5 | Phoenix Valley | 0.047 | 39.7 | 62 | -27% | **1319** |
| *BELOAT* | 0.047 | 0 | 0.44 | 0.25 | 0.37 | 0.218 | 9.33 | 0.062 | 7.02 | 12.5 | Phoenix Valley | 0.011 | 19 | 85 | | **1809** |
| **CENTRE** | 0.069 | 0.3 | 0.40 | 0.23 | 0.23 | 0.160 | 7 | 0.150 | 41.00 | 12.25 | Phoenix Valley | 0.043 | 31.4 | 93 | -24% | **1348** |
| *CENTRE* | 0.069 | 0.01 | 0.40 | 0.23 | 0.248 | 0.153 | 6.97 | 0.147 | 35.73 | 12.5 | Phoenix Valley | 0.011 | 18 | 123 | | **1783** |
| **DRAIN** | 0.116 | 0.2 | 0.59 | 0.26 | 0.29 | 0.150 | 9.7 | 0.060 | 34.00 | 12.75 | Phoenix Valley | 0.058 | 55.6 | 124 | -37% | **1069** |
| *DRAIN* | 0.116 | 0.01 | 0.59 | 0.26 | 1 | 0.15 | 9.66 | 0.071 | 7.35 | 12.5 | Phoenix Valley | 0.011 | 20 | 196 | | **1690** |

## MODEL BGW 100-yr, 24-hr

| SUB BASIN ADMP | AREA | SLOPE | Length | LCA | IA | DTHETA | PSIF | XKSAT | RTIMP | Tp | S-GRAPH TYPE | Kn | Lag | DISCHARGE | % INCREASE DISCHARGE | UNIT DISCHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *ADMS* | (sq mi) | (ft/mi) | (ft) | (ft) | (in) | | (in) | (in/hr) | (%) | (hrs) | | | (min) | (cfs) | | (cfs/sq mi) |
| **84** | 0.877 | 13.3 | 1.81 | 0.98 | 0.99 | 0.150 | 9.7 | 0.070 | 0.00 | 15 | Agriculture | 0.199 | 217.9 | 180 | 1% | **205** |
| *84* | 0.877 | 13.27 | 1.81 | 0.98 | 1 | 0.147 | 9.73 | 0.071 | 1 | 15.25 | Agriculture | 0.2 | 219 | 179 | | **204** |
| **85A** | 0.216 | 37.9 | 0.84 | 0.42 | 1 | 0.150 | 7.3 | 0.170 | 0.00 | 13.25 | Agriculture | 0.2 | 97.2 | 81 | -1% | **375** |
| *85A* | 0.216 | 37.89 | 0.84 | 0.42 | 1 | 0.148 | 7.22 | 0.169 | 1.44 | 13.5 | Agriculture | 0.2 | 98 | 82 | | **380** |
| **85B** | 0.745 | 15.6 | 1.47 | 0.73 | 0.93 | 0.250 | 5.7 | 0.300 | 2.00 | 14 | Agriculture | 0.185 | 162.4 | 135 | 12% | **181** |
| *85B* | 0.745 | 15.68 | 1.47 | 0.73 | 1 | 0.247 | 5.67 | 0.297 | 1.99 | 14.5 | Agriculture | 0.2 | 176 | 121 | | **162** |
| **86** | 0.440 | 25.8 | 1.09 | 0.54 | 0.91 | 0.150 | 8 | 0.110 | 2.00 | 13.5 | Agriculture | 0.181 | 114.9 | 164 | 12% | **373** |
| *86* | 0.440 | 25.78 | 1.09 | 0.54 | 1 | 0.15 | 8.11 | 0.11 | 6.81 | 13.75 | Agriculture | 0.2 | 127 | 147 | | **334** |
| **87** | 0.913 | 22.5 | 1.87 | 0.93 | 1 | 0.150 | 9.7 | 0.070 | 0.00 | 14.75 | Agriculture | 0.199 | 195.7 | 207 | -2% | **227** |
| *87* | 0.913 | 22.48 | 1.87 | 0.93 | 1 | 0.142 | 9.84 | 0.066 | 1.13 | 15 | Agriculture | 0.2 | 197 | 212 | | **232** |

## BUCKEYE ADMP EXISTING CONDITIONS HYDROLOGY UPDATE - PARAMETERS SUMMARY TABLE
### 100 Year, 24 Hour Storm

| SUB BASIN ADMP | AREA | SLOPE | Length | LCA | IA | DTHETA | PSIF | XKSAT | RTIMP | Tp | S-GRAPH TYPE | Kn | Lag | DISCHARGE | % INCREASE DISCHARGE | UNIT DISCHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *ADMS* | (sq mi) | (ft/mi) | (ft) | (ft) | (in) | | (in) | (in/hr) | (%) | (hrs) | | | (min) | (cfs) | | (cfs/sq mi) |
| **88** | 0.765 | 19.3 | 1.66 | 0.83 | 0.99 | 0.150 | 9.7 | 0.070 | 0.00 | 14.5 | Agriculture | 0.198 | 183.5 | 185 | **-1%** | **242** |
| *88* | 0.765 | 19.29 | 1.66 | 0.83 | 1 | 0.145 | 9.8 | 0.068 | 0.29 | 14.75 | Agriculture | 0.2 | 185 | 186 | | **243** |
| **89** | 0.963 | 21.2 | 1.79 | 0.90 | 0.99 | 0.150 | 9.7 | 0.070 | 0.00 | 14.5 | Agriculture | 0.199 | 192.3 | 223 | **0%** | **232** |
| *89* | 0.963 | 21.2 | 1.79 | 0.90 | 1 | 0.144 | 9.82 | 0.068 | 0.56 | 15 | Agriculture | 0.2 | 193 | 224 | | **233** |
| **102** | 0.520 | 25.7 | 1.48 | 0.74 | 0.99 | 0.150 | 8.4 | 0.100 | 0.00 | 14 | Agriculture | 0.197 | 158.5 | 136 | **1%** | **262** |
| *102* | 0.520 | 25.68 | 1.48 | 0.74 | 1 | 0.15 | 8.6 | 0.1 | 0.19 | 14.25 | Agriculture | 0.2 | 161 | 134 | | **258** |
| **103** | 0.507 | 22.8 | 1.14 | 0.57 | 0.84 | 0.230 | 6.2 | 0.240 | 3.00 | 13.25 | Agriculture | 0.165 | 111.4 | 154 | **34%** | **304** |
| *103* | 0.507 | 22.77 | 1.14 | 0.57 | 1 | 0.218 | 6.32 | 0.244 | 0.67 | 14 | Agriculture | 0.2 | 135 | 115 | | **227** |
| **104** | 1.012 | 13.8 | 1.95 | 0.98 | 0.99 | 0.170 | 6.8 | 0.190 | 0.00 | 15 | Agriculture | 0.198 | 221.5 | 159 | **2%** | **157** |
| *104* | 1.012 | 13.83 | 1.95 | 0.98 | 1 | 0.175 | 6.76 | 0.192 | 0.05 | 15.25 | Agriculture | 0.2 | 223 | 156 | | **154** |
| **105** | 0.997 | 18.6 | 1.94 | 0.97 | 0.98 | 0.150 | 8.4 | 0.110 | 0.00 | 15 | Agriculture | 0.196 | 205.9 | 197 | **1%** | **198** |
| *105* | 0.997 | 18.59 | 1.94 | 0.97 | 1 | 0.15 | 8.42 | 0.106 | 1.66 | 15.25 | Agriculture | 0.2 | 210 | 196 | | **197** |
| **106** | 1.209 | 20.8 | 2.21 | 1.11 | 1 | 0.150 | 7.6 | 0.150 | 0.00 | 15 | Agriculture | 0.2 | 227.5 | 198 | **-2%** | **164** |
| *106* | 1.209 | 20.78 | 2.21 | 1.11 | 1 | 0.15 | 7.6 | 0.146 | 0.44 | 15.5 | Agriculture | 0.2 | 227 | 202 | | **167** |
| **107** | 0.484 | 18.4 | 0.98 | 0.49 | 1 | 0.170 | 6.8 | 0.210 | 0.00 | 13.5 | Agriculture | 0.2 | 125.3 | 130 | **1%** | **269** |
| *107* | 0.484 | 18.37 | 0.98 | 0.49 | 1 | 0.181 | 6.69 | 0.21 | 0 | 13.75 | Agriculture | 0.2 | 125 | 129 | | **267** |

**MODEL FRE 100-yr, 24-hr**

| SUB BASIN ADMP | AREA | SLOPE | Length | LCA | IA | DTHETA | PSIF | XKSAT | RTIMP | Tp | S-GRAPH TYPE | Kn | Lag | DISCHARGE | % INCREASE DISCHARGE | UNIT DISCHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *ADMS* | (sq mi) | (ft/mi) | (ft) | (ft) | (in) | | (in) | (in/hr) | (%) | (hrs) | | | (min) | (cfs) | | (cfs/sq mi) |
| **6** | 0.318 | 88.2 | 0.50 | 0.35 | 0.35 | 0.350 | 4.8 | 0.240 | 1.00 | 12 | Desert Rangeland | 0.025 | 7.9 | 699 | **59%** | **2198** |
| *6* | 0.318 | 88.18 | 0.50 | 0.35 | 0.327 | 0.359 | 5.26 | 0.239 | 8.06 | 12.25 | Desert Rangeland | 0.05 | 16 | 440 | | **1384** |
| **7** | 0.446 | 73 | 0.74 | 0.30 | 0.35 | 0.350 | 3.88 | 0.400 | 1.00 | 12 | Desert Rangeland | 0.026 | 9.4 | 870 | **67%** | **1951** |
| *7* | 0.446 | 73.02 | 0.74 | 0.30 | 0.336 | 0.345 | 4.13 | 0.4 | 4.38 | 12.5 | Desert Rangeland | 0.05 | 18 | 521 | | **1168** |
| **8** | 0.414 | 14.8 | 1.22 | 0.56 | 0.37 | 0.320 | 4.1 | 0.480 | 9.00 | 12.25 | Desert Rangeland | 0.04 | 29.9 | 403 | **10%** | **973** |
| *8* | 0.414 | 14.8 | 1.22 | 0.56 | 0.277 | 0.319 | 4.1 | 0.445 | 23.07 | 12.75 | Desert Rangeland | 0.05 | 37 | 366 | | **884** |
| **9** | 0.612 | 57.1 | 0.79 | 0.41 | 0.31 | 0.320 | 4 | 0.510 | 16.00 | 12 | Desert Rangeland | 0.03 | 13.1 | 938 | **24%** | **1533** |
| *9* | 0.612 | 57.09 | 0.79 | 0.41 | 0.327 | 0.34 | 3.98 | 0.411 | 7.24 | 12.5 | Desert Rangeland | 0.05 | 22 | 754 | | **1232** |
| **10** | 1.174 | 46.3 | 1.77 | 1.27 | 0.29 | 0.280 | 4.15 | 0.400 | 27.00 | 12.5 | Phoenix Valley | 0.044 | 41.6 | 1178 | **32%** | **1003** |
| *10* | 1.174 | 46.29 | 1.77 | 1.27 | 0.299 | 0.312 | 4.15 | 0.403 | 10.87 | 12.75 | Phoenix Valley | 0.05 | 47 | 894 | | **761** |

# BUCKEYE ADMP EXISTING CONDITIONS HYDROLOGY UPDATE - PARAMETERS SUMMARY TABLE
## 100 Year, 24 Hour Storm

| SUB BASIN ADMP | AREA | SLOPE | Length | LCA | IA | DTHETA | PSIF | XKSAT | RTIMP | Tp | S-GRAPH TYPE | Kn | Lag | DISCHARGE | % INCREASE DISCHARGE | UNIT DISCHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *ADMS* | (sq mi) | (ft/mi) | (ft) | (ft) | (in) | | (in) | (in/hr) | (%) | (hrs) | | | (min) | (cfs) | | (cfs/sq mi) |
| **11A** | 0.571 | 84 | 0.57 | 0.33 | 0.28 | 0.280 | 5 | 0.310 | 23.00 | 12 | Phoenix Valley | 0.044 | 14.5 | 926 | **18%** | **1622** |
| *11A* | 0.571 | 83.95 | 0.57 | 0.33 | 0.32 | 0.356 | 5.2 | 0.244 | 9.66 | 12.25 | Phoenix Valley | 0.05 | 16 | 787 | | **1378** |
| **11B** | 0.581 | 41.8 | 1.39 | 0.62 | 0.29 | 0.290 | 4.3 | 0.450 | 18.00 | 12.25 | Phoenix Valley | 0.041 | 27.5 | 706 | **29%** | **1215** |
| *11B* | 0.581 | 41.81 | 1.39 | 0.62 | 0.35 | 0.35 | 4.28 | 0.363 | 0 | 12.75 | Phoenix Valley | 0.05 | 34 | 547 | | **941** |
| **11C** | 0.343 | 54.3 | 0.99 | 0.31 | 0.33 | 0.330 | 3.95 | 0.400 | 8.00 | 12 | Desert Rangeland | 0.031 | 13.3 | 541 | **18%** | **1577** |
| *11C* | 0.343 | 54.38 | 0.99 | 0.31 | 0.35 | 0.35 | 3.98 | 0.4 | 0 | 12.5 | Phoenix Valley | 0.05 | 22 | 460 | | **1341** |
| **12** | 0.736 | 83 | 0.96 | 0.41 | 0.26 | 0.260 | 4.45 | 0.430 | 27.00 | 12.25 | Phoenix Valley | 0.047 | 20.5 | 1122 | **9%** | **1524** |
| *12* | 0.736 | 83.03 | 0.96 | 0.41 | 0.338 | 0.345 | 4.5 | 0.333 | 3.95 | 12.5 | Phoenix Valley | 0.05 | 22 | 1028 | | **1397** |
| **13** | 0.501 | 71.2 | 0.52 | 0.26 | 0.25 | 0.250 | 5.1 | 0.310 | 30.00 | 12 | Phoenix Valley | 0.05 | 15 | 808 | **11%** | **1613** |
| *13* | 0.501 | 71.2 | 0.52 | 0.26 | 0.35 | 0.364 | 5.14 | 0.247 | 0 | 12.25 | Phoenix Valley | 0.05 | 15 | 731 | | **1459** |
| **14A** | 0.692 | 67.9 | 1.33 | 0.71 | 0.26 | 0.260 | 4.25 | 0.480 | 26.00 | 12.25 | Phoenix Valley | 0.047 | 29.7 | 795 | **24%** | **1149** |
| *14A* | 0.692 | 67.87 | 1.33 | 0.71 | 0.335 | 0.344 | 4.26 | 0.368 | 4.73 | 12.5 | Phoenix Valley | 0.05 | 32 | 643 | | **929** |
| **14B** | 0.502 | 54.1 | 0.59 | 0.30 | 0.25 | 0.250 | 4.15 | 0.520 | 30.00 | 12.25 | Phoenix Valley | 0.05 | 17.5 | 733 | **32%** | **1460** |
| *14B* | 0.502 | 54 | 0.59 | 0.30 | 0.36 | 0.344 | 4.18 | 0.385 | 0 | 12.25 | Desert Rangeland | 0.05 | 17 | 557 | | **1110** |
| **20** | 0.665 | 16.6 | 1.57 | 0.79 | 0.42 | 0.250 | 3.95 | 0.400 | 34.00 | 13 | Phoenix Valley | 0.085 | 77.9 | 424 | **366%** | **638** |
| *20* | 0.665 | 16.56 | 1.57 | 0.79 | 1 | 0.252 | 3.97 | 0.479 | 0.02 | 14.5 | Agriculture | 0.02 | 183 | 91 | | **137** |
| **21A** | 0.366 | 39.9 | 1.43 | 0.71 | 0.25 | 0.250 | 4 | 0.550 | 45.00 | 12.5 | Phoenix Valley | 0.05 | 35.9 | 421 | **665%** | **1150** |
| *21A* | 0.366 | 39.92 | 1.43 | 0.71 | 1 | 0.277 | 4 | 0.641 | 0 | 14 | Agriculture | 0.02 | 144 | 55 | | **150** |
| **21B** | 0.273 | 24.6 | 1.02 | 0.51 | 0.9 | 0.260 | 4 | 0.690 | 3.00 | 13.25 | Agriculture | 0.175 | 107 | 60 | **25%** | **220** |
| *21B* | 0.273 | 24.58 | 1.02 | 0.51 | 1 | 0.25 | 4 | 0.692 | 0 | 13.75 | Agriculture | 0.02 | 122 | 48 | | **176** |
| **22** | 0.557 | 18.1 | 1.54 | 0.77 | 0.99 | 0.250 | 4 | 0.550 | 0.00 | 14.25 | Agriculture | 0.198 | 175.5 | 76 | **1%** | **136** |
| *22* | 0.557 | 18.14 | 1.54 | 0.77 | 1 | 0.25 | 4 | 0.55 | 0.18 | 14.5 | Agriculture | 0.02 | 178 | 75 | | **135** |
| **23** | 0.524 | 15.9 | 1.32 | 0.66 | 0.25 | 0.250 | 3.95 | 0.400 | 30.00 | 12.5 | Phoenix Valley | 0.05 | 40.4 | 563 | **562%** | **1074** |
| *23* | 0.524 | 15.92 | 1.32 | 0.66 | 1 | 0.248 | 3.96 | 0.472 | 0.99 | 14.25 | Agriculture | 0.02 | 161 | 85 | | **162** |
| **24** | 0.489 | 56.2 | 0.53 | 0.27 | 0.3 | 0.250 | 4.6 | 0.370 | 7.00 | 12.25 | Phoenix Valley | 0.051 | 16.3 | 637 | **-2%** | **1303** |
| *24* | 0.489 | 56.27 | 0.53 | 0.27 | 0.312 | 0.276 | 4.59 | 0.365 | 11.26 | 12.25 | Desert Rangeland | 0.05 | 16 | 652 | | **1333** |
| **25** | 0.274 | 10.5 | 1.05 | 0.52 | 0.29 | 0.290 | 4.15 | 0.490 | 18.00 | 12.25 | Phoenix Valley | 0.04 | 29.3 | 305 | **35%** | **1113** |
| *25* | 0.274 | 10.49 | 1.05 | 0.52 | 1 | 0.285 | 4.14 | 0.39 | 1.29 | 12.75 | Phoenix Valley | 0.05 | 37 | 226 | | **825** |
| **26** | 0.524 | 39.3 | 0.76 | 0.38 | 0.3 | 0.260 | 4 | 0.400 | 9.00 | 12.25 | Phoenix Valley | 0.049 | 21.9 | 757 | **-1%** | **1445** |
| *26* | 0.524 | 39.29 | 0.76 | 0.38 | 0.304 | 0.26 | 4.05 | 0.4 | 13.8 | 12.5 | Phoenix Valley | 0.05 | 22 | 768 | | **1466** |

## BUCKEYE ADMP EXISTING CONDITIONS HYDROLOGY UPDATE - PARAMETERS SUMMARY TABLE
### 100 Year, 24 Hour Storm

| SUB BASIN ADMP | AREA | SLOPE | Length | LCA | IA | DTHETA | PSIF | XKSAT | RTIMP | Tp | S-GRAPH TYPE | Kn | Lag | DISCHARGE | % INCREASE DISCHARGE | UNIT DISCHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *ADMS* | (sq mi) | (ft/mi) | (ft) | (ft) | (in) | | (in) | (in/hr) | (%) | (hrs) | | | (min) | (cfs) | | (cfs/sq mi) |
| **83** | 0.675 | 64.7 | 1.72 | 0.93 | 0.25 | 0.250 | 5.4 | 0.270 | 30.00 | 12.5 | Phoenix Valley | 0.05 | 39 | 774 | **29%** | **1147** |
| *83* | 0.675 | 64.69 | 1.72 | 0.93 | 0.341 | 0.375 | 5.44 | 0.214 | 2.8 | 12.75 | Desert Rangeland | 0.05 | 39 | 599 | | **887** |

**MODEL FRW 100-yr, 24-hr**

| SUB BASIN ADMP | AREA | SLOPE | Length | LCA | IA | DTHETA | PSIF | XKSAT | RTIMP | Tp | S-GRAPH TYPE | Kn | Lag | DISCHARGE | % INCREASE DISCHARGE | UNIT DISCHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *ADMS* | (sq mi) | (ft/mi) | (ft) | (ft) | (in) | | (in) | (in/hr) | (%) | (hrs) | | | (min) | (cfs) | | (cfs/sq mi) |
| **1** | 1.626 | 34.9 | 2.61 | 1.54 | 0.54 | 0.320 | 4.3 | 0.400 | 1.00 | 13.25 | Desert Rangeland | 0.079 | 98.3 | 516 | **-41%** | **317** |
| *1* | 1.626 | 34.86 | 2.61 | 1.54 | 0.347 | 0.329 | 4.33 | 0.398 | 5.88 | 13 | Desert Rangeland | 0.05 | 62 | 876 | | **539** |
| **2** | 1.233 | 45.9 | 2.02 | 0.86 | 0.36 | 0.330 | 3.95 | 0.440 | 9.00 | 12.25 | Desert Rangeland | 0.035 | 30 | 1223 | **37%** | **992** |
| *2* | 1.233 | 45.95 | 2.02 | 0.86 | 0.338 | 0.339 | 3.99 | 0.443 | 5.58 | 12.75 | Desert Rangeland | 0.05 | 43 | 895 | | **726** |
| **3** | 1.648 | 39.2 | 2.04 | 1.39 | 0.32 | 0.320 | 4 | 0.490 | 13.00 | 12.25 | Desert Rangeland | 0.033 | 35.2 | 1321 | **80%** | **802** |
| *3* | 1.648 | 39.22 | 2.04 | 1.39 | 1 | 0.298 | 4.03 | 0.546 | 4.13 | 13 | Desert Rangeland | 0.05 | 53 | 733 | | **445** |
| **4** | 0.549 | 40.7 | 1.38 | 0.74 | 0.32 | 0.320 | 3.95 | 0.400 | 14.00 | 12.25 | Desert Rangeland | 0.032 | 23 | 700 | **56%** | **1275** |
| *4* | 0.549 | 40.65 | 1.38 | 0.74 | 0.306 | 0.332 | 4.02 | 0.485 | 14.55 | 12.75 | Desert Rangeland | 0.05 | 36 | 448 | | **816** |
| **5A** | 1.172 | 49 | 1.75 | 1.16 | 0.32 | 0.310 | 4.3 | 0.440 | 19.00 | 12.25 | Desert Rangeland | 0.038 | 34.2 | 1051 | **24%** | **897** |
| *5A* | 1.172 | 49.05 | 1.75 | 1.16 | 0.333 | 0.342 | 4.33 | 0.387 | 5.98 | 12.75 | Desert Rangeland | 0.05 | 45 | 849 | | **724** |
| **5B** | 0.576 | 38.7 | 1.73 | 1.08 | 0.36 | 0.350 | 4.5 | 0.320 | 1.00 | 12.25 | Desert Rangeland | 0.028 | 25.5 | 684 | **53%** | **1188** |
| *5B* | 0.576 | 38.66 | 1.73 | 1.08 | 0.318 | 0.336 | 4.61 | 0.319 | 10.55 | 12.75 | Desert Rangeland | 0.05 | 46 | 447 | | **776** |
| **15A** | 0.588 | 34.6 | 1.45 | 0.48 | 0.37 | 0.330 | 4.4 | 0.390 | 4.00 | 12.25 | Desert Rangeland | 0.036 | 23 | 704 | **31%** | **1197** |
| *15A* | 0.588 | 34.58 | 1.45 | 0.48 | 0.358 | 0.324 | 4.42 | 0.391 | 2.37 | 12.5 | Desert Rangeland | 0.05 | 32 | 539 | | **917** |
| **15B** | 0.816 | 11 | 1.63 | 0.82 | 1 | 0.250 | 4.1 | 0.540 | 0.00 | 14.75 | Agriculture | 0.2 | 203.9 | 95 | **0%** | **116** |
| *15B* | 0.816 | 11.02 | 1.63 | 0.82 | 1 | 0.249 | 4.1 | 0.541 | 0.37 | 15 | Agriculture | 0.2 | 204 | 95 | | **116** |
| **16** | 0.951 | 25 | 2.00 | 1.37 | 0.28 | 0.250 | 4.35 | 0.440 | 47.00 | 12.75 | Phoenix Valley | 0.048 | 55 | 861 | **3%** | **905** |
| *16* | 0.951 | 24.99 | 2.00 | 1.37 | 0.208 | 0.25 | 4.4 | 0.438 | 45.68 | 13 | Phoenix Valley | 0.05 | 57 | 836 | | **879** |
| **17** | 0.607 | 16.9 | 1.43 | 0.71 | 0.25 | 0.250 | 4 | 0.550 | 30.00 | 12.5 | Phoenix Valley | 0.05 | 42.3 | 582 | **533%** | **959** |
| *17* | 0.607 | 16.84 | 1.43 | 0.71 | 1 | 0.25 | 4.02 | 0.465 | 0.17 | 14.5 | Agriculture | 0.02 | 169 | 92 | | **152** |
| **18** | 0.796 | 31 | 1.81 | 0.75 | 0.25 | 0.250 | 4.15 | 0.520 | 30.00 | 12.5 | Phoenix Valley | 0.05 | 42.1 | 771 | **582%** | **969** |
| *18* | 0.796 | 30.99 | 1.81 | 0.75 | 1 | 0.291 | 4.13 | 0.479 | 0.12 | 14.5 | Agriculture | 0.02 | 168 | 113 | | **142** |

## BUCKEYE ADMP EXISTING CONDITIONS HYDROLOGY UPDATE - PARAMETERS SUMMARY TABLE
### 100 Year, 24 Hour Storm

| SUB BASIN ADMP | AREA | SLOPE | Length | LCA | IA | DTHETA | PSIF | XKSAT | RTIMP | Tp | S-GRAPH TYPE | Kn | Lag | DISCHARGE | % INCREASE DISCHARGE | UNIT DISCHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *ADMS* | (sq mi) | (ft/mi) | (ft) | (ft) | (in) | | (in) | (in/hr) | (%) | (hrs) | | | (min) | (cfs) | | (cfs/sq mi) |
| **19** | 0.536 | 18.5 | 1.51 | 0.76 | 0.94 | 0.260 | 3.95 | 0.440 | 0.00 | 14 | Agriculture | 0.184 | 160.4 | 90 | **10%** | **168** |
| *19* | 0.536 | 18.49 | 1.51 | 0.76 | 1 | 0.249 | 3.96 | 0.435 | 0.57 | 14.5 | Agriculture | 0.02 | 174 | 82 | | **153** |

**MODEL RBE 100-yr, 24-hr**

| SUB BASIN ADMP | AREA | SLOPE | Length | LCA | IA | DTHETA | PSIF | XKSAT | RTIMP | Tp | S-GRAPH TYPE | Kn | Lag | DISCHARGE | % INCREASE DISCHARGE | UNIT DISCHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *ADMS* | (sq mi) | (ft/mi) | (ft) | (ft) | (in) | | (in) | (in/hr) | (%) | (hrs) | | | (min) | (cfs) | | (cfs/sq mi) |
| **34** | 0.637 | 19.5 | 1.23 | 0.62 | 0.94 | 0.250 | 4 | 0.570 | 2.00 | 13.75 | Agriculture | 0.187 | 138.2 | 114 | **8%** | **179** |
| *34* | 0.637 | 19.48 | 1.23 | 0.62 | 1 | 0.245 | 3.99 | 0.565 | 2.07 | 14.25 | Agriculture | 0.2 | 148 | 106 | | **166** |
| **35** | 1.504 | 33.6 | 1.96 | 0.98 | 0.96 | 0.250 | 3.95 | 0.490 | 2.00 | 14.5 | Agriculture | 0.191 | 180.8 | 217 | **4%** | **144** |
| *35* | 1.504 | 33.61 | 1.96 | 0.98 | 1 | 0.25 | 3.98 | 0.486 | 3.32 | 14.75 | Agriculture | 0.2 | 190 | 209 | | **139** |
| **36** | 0.684 | 36.6 | 1.85 | 0.93 | 0.73 | 0.250 | 3.95 | 0.400 | 6.00 | 13.5 | Agriculture | 0.143 | 127.7 | 178 | **65%** | **260** |
| *36* | 0.684 | 36.67 | 1.85 | 0.93 | 1 | 0.258 | 3.97 | 0.455 | 5.1 | 14.75 | Agriculture | 0.2 | 178 | 108 | | **158** |
| **37** | 1.421 | 30.1 | 2.36 | 1.18 | 0.67 | 0.250 | 4.1 | 0.610 | 13.00 | 14 | Agriculture | 0.133 | 148 | 296 | **84%** | **208** |
| *37* | 1.421 | 30.11 | 2.36 | 1.18 | 1 | 0.25 | 4.12 | 0.457 | 0 | 14.75 | Agriculture | 0.2 | 222 | 161 | | **113** |
| **38** | 0.542 | 20.7 | 1.40 | 0.70 | 0.94 | 0.250 | 3.95 | 0.470 | 1.00 | 14 | Agriculture | 0.187 | 150.3 | 96 | **9%** | **177** |
| *38* | 0.542 | 20.72 | 1.40 | 0.70 | 1 | 0.249 | 3.96 | 0.466 | 1.07 | 14.25 | Agriculture | 0.2 | 161 | 88 | | **162** |
| **39** | 0.725 | 25.2 | 1.63 | 0.82 | 0.9 | 0.260 | 4.3 | 0.470 | 2.00 | 13.75 | Agriculture | 0.176 | 153.3 | 126 | **18%** | **174** |
| *39* | 0.725 | 25.14 | 1.63 | 0.82 | 1 | 0.249 | 4.31 | 0.47 | 1.59 | 14.5 | Agriculture | 0.2 | 174 | 107 | | **148** |
| **40** | 0.976 | 31.3 | 1.83 | 0.91 | 0.96 | 0.250 | 4.2 | 0.530 | 1.00 | 14.25 | Agriculture | 0.191 | 173.5 | 138 | **7%** | **141** |
| *40* | 0.976 | 31.23 | 1.83 | 0.91 | 1 | 0.249 | 4.21 | 0.525 | 0.74 | 14.75 | Agriculture | 0.2 | 182 | 129 | | **132** |
| **46** | 1.381 | 25.2 | 1.79 | 0.89 | 0.56 | 0.250 | 4.15 | 0.570 | 17.00 | 13.5 | Phoenix Valley | 0.11 | 102.4 | 576 | **200%** | **417** |
| *46* | 1.381 | 25.18 | 1.79 | 0.89 | 1 | 0.258 | 4.19 | 0.469 | 2.56 | 14.75 | Agriculture | 0.2 | 186 | 192 | | **139** |
| **47** | 0.617 | 24.6 | 1.46 | 0.73 | 0.43 | 0.250 | 4.45 | 0.470 | 24.00 | 13 | Phoenix Valley | 0.085 | 68.2 | 403 | **311%** | **653** |
| *47* | 0.617 | 24.6 | 1.46 | 0.73 | 1 | 0.271 | 4.5 | 0.411 | 0.1 | 14.25 | Agriculture | 0.2 | 161 | 98 | | **159** |
| **48** | 0.500 | 16.5 | 1.10 | 0.55 | 0.98 | 0.250 | 4.35 | 0.450 | 1.00 | 13.75 | Agriculture | 0.196 | 136.9 | 95 | **1%** | **190** |
| *48* | 0.500 | 16.43 | 1.10 | 0.55 | 1 | 0.25 | 4.37 | 0.445 | 1.37 | 14 | Agriculture | 0.2 | 139 | 94 | | **188** |

## BUCKEYE ADMP EXISTING CONDITIONS HYDROLOGY UPDATE - PARAMETERS SUMMARY TABLE
### 100 Year, 24 Hour Storm

| SUB BASIN ADMP | AREA | SLOPE | Length | LCA | IA | DTHETA | PSIF | XKSAT | RTIMP | Tp | S-GRAPH TYPE | Kn | Lag | DISCHARGE | % INCREASE DISCHARGE | UNIT DISCHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *ADMS* | (sq mi) | (ft/mi) | (ft) | (ft) | (in) | | (in) | (in/hr) | (%) | (hrs) | | | (min) | (cfs) | | (cfs/sq mi) |
| **49** | 1.009 | 23.5 | 1.96 | 0.98 | 0.46 | 0.260 | 3.95 | 0.400 | 18.00 | 13.25 | Phoenix Valley | 0.086 | 87.1 | 553 | **313%** | **548** |
| *49* | 1.009 | 23.51 | 1.96 | 0.98 | 1 | 0.25 | 3.95 | 0.417 | 0.66 | 15 | Agriculture | 0.2 | 202 | 134 | | **133** |
| **50** | 1.002 | 26.7 | 1.98 | 0.99 | 0.91 | 0.250 | 4.2 | 0.490 | 3.00 | 14.5 | Agriculture | 0.18 | 179.3 | 150 | **16%** | **150** |
| *50* | 1.002 | 26.73 | 1.98 | 0.99 | 1 | 0.251 | 4.18 | 0.488 | 2.4 | 15 | Agriculture | 0.2 | 199 | 129 | | **129** |
| **51** | 1.004 | 23 | 1.96 | 0.98 | 0.88 | 0.250 | 4.4 | 0.560 | 3.00 | 14.25 | Agriculture | 0.173 | 176 | 145 | **24%** | **144** |
| *51* | 1.004 | 22.98 | 1.96 | 0.98 | 1 | 0.25 | 4.4 | 0.563 | 1.52 | 15 | Agriculture | 0.2 | 203 | 117 | | **117** |
| **56A** | 0.411 | 30.3 | 1.19 | 0.59 | 0.69 | 0.260 | 3.95 | 0.460 | 15.00 | 13 | Agriculture | 0.129 | 84.9 | 165 | **57%** | **401** |
| *56A* | 0.411 | 30.31 | 1.19 | 0.59 | 1 | 0.25 | 3.97 | 0.455 | 18.06 | 14 | Agriculture | 0.2 | 132 | 105 | | **255** |
| **56B** | 0.334 | 43.7 | 0.73 | 0.37 | 0.15 | 0.250 | 4 | 0.620 | 54.00 | 12 | Phoenix Valley | 0.021 | 9 | 764 | **194%** | **2287** |
| *56B* | 0.334 | 43.7 | 0.73 | 0.37 | 0.1 | 0.25 | 4 | 0.524 | 80 | 13.5 | Phoenix Valley | 0.2 | 85 | 260 | | **778** |
| **57** | 0.489 | 19.1 | 0.68 | 0.34 | 1 | 0.250 | 4.25 | 0.530 | 0.00 | 13.25 | Agriculture | 0.2 | 94.3 | 123 | **-3%** | **252** |
| *57* | 0.489 | 19.18 | 0.68 | 0.34 | 1 | 0.25 | 4.26 | 0.53 | 1.42 | 13.5 | Agriculture | 0.2 | 94 | 127 | | **260** |
| **58** | 0.190 | 16 | 0.50 | 0.25 | 0.29 | 0.310 | 4.3 | 0.550 | 21.00 | 12 | Phoenix Valley | 0.026 | 10 | 366 | **438%** | **1926** |
| *58* | 0.190 | 15.93 | 0.50 | 0.25 | 1 | 0.25 | 4.29 | 0.552 | 11.15 | 13.25 | Agriculture | 0.2 | 77 | 68 | | **358** |
| **65** | 0.376 | 11 | 0.82 | 0.41 | 0.99 | 0.250 | 4.6 | 0.410 | 1.00 | 13.5 | Agriculture | 0.198 | 119.5 | 84 | **1%** | **223** |
| *65* | 0.376 | 10.93 | 0.82 | 0.41 | 1 | 0.247 | 4.71 | 0.411 | 1.76 | 13.75 | Agriculture | 0.2 | 121 | 83 | | **221** |
| **66** | 0.294 | 19.2 | 0.73 | 0.36 | 0.81 | 0.260 | 4.35 | 0.390 | 10.00 | 13 | Agriculture | 0.158 | 78.1 | 121 | **39%** | **412** |
| *66* | 0.294 | 19.24 | 0.73 | 0.36 | 1 | 0.249 | 4.47 | 0.385 | 6.04 | 13.5 | Agriculture | 0.2 | 99 | 87 | | **296** |
| **67** | 0.472 | 25.7 | 0.82 | 0.41 | 0.25 | 0.250 | 4.3 | 0.390 | 30.00 | 12.25 | Phoenix Valley | 0.047 | 24.1 | 704 | **187%** | **1492** |
| *67* | 0.472 | 25.73 | 0.82 | 0.41 | 0.261 | 0.262 | 4.33 | 0.393 | 26.59 | 13.75 | Phoenix Valley | 0.2 | 102 | 245 | | **519** |
| **69** | 0.137 | 17.3 | 0.11 | 0.06 | 0.18 | 0.270 | 4.5 | 0.400 | 53.00 | 12.25 | Phoenix Valley | 0.2 | 24.9 | 215 | **0%** | **1569** |
| *69* | 0.137 | 17.52 | 0.11 | 0.06 | 0.176 | 0.264 | 4.5 | 0.395 | 49.22 | 12.5 | Phoenix Valley | 0.2 | 25 | 214 | | **1562** |
| **70** | 0.141 | 1.5 | 0.68 | 0.34 | 0.46 | 0.250 | 4.45 | 0.510 | 24.00 | 12.75 | Agriculture | 0.09 | 68.8 | 74 | **222%** | **525** |
| *70* | 0.141 | 1.48 | 0.68 | 0.34 | 1 | 0.25 | 4.4 | 0.512 | 0 | 14 | Agriculture | 0.2 | 152 | 23 | | **163** |
| **71** | 0.155 | 14.4 | 0.34 | 0.17 | 0.93 | 0.250 | 4.8 | 0.410 | 3.00 | 12.5 | Agriculture | 0.184 | 54 | 76 | **9%** | **490** |
| *71* | 0.155 | 14.51 | 0.34 | 0.17 | 1 | 0.243 | 4.91 | 0.414 | 2.61 | 13 | Agriculture | 0.2 | 59 | 70 | | **452** |

## BUCKEYE ADMP EXISTING CONDITIONS HYDROLOGY UPDATE - PARAMETERS SUMMARY TABLE
### 100 Year, 24 Hour Storm

| SUB BASIN ADMP | AREA | SLOPE | Length | LCA | IA | DTHETA | PSIF | XKSAT | RTIMP | Tp | S-GRAPH TYPE | Kn | Lag | DISCHARGE | % INCREASE DISCHARGE | UNIT DISCHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *ADMS* | (sq mi) | (ft/mi) | (ft) | (ft) | (in) | | (in) | (in/hr) | (%) | (hrs) | | | (min) | (cfs) | | (cfs/sq mi) |
| **72** | 0.086 | 7.7 | 0.13 | 0.06 | 0.59 | 0.300 | 4.45 | 0.420 | 6.00 | 12 | Agriculture | 0.095 | 14.7 | 112 | **60%** | **1302** |
| *72* | 0.086 | 7.71 | 0.13 | 0.06 | 1 | 0.23 | 4.47 | 0.424 | 7.94 | 12.5 | Agriculture | 0.2 | 32 | 70 | | **814** |

**MODEL RBW 100-yr, 24-hr**

| SUB BASIN ADMP | AREA | SLOPE | Length | LCA | IA | DTHETA | PSIF | XKSAT | RTIMP | Tp | S-GRAPH TYPE | Kn | Lag | DISCHARGE | % INCREASE DISCHARGE | UNIT DISCHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *ADMS* | (sq mi) | (ft/mi) | (ft) | (ft) | (in) | | (in) | (in/hr) | (%) | (hrs) | | | (min) | (cfs) | | (cfs/sq mi) |
| **27** | 0.241 | 14.6 | 0.82 | 0.41 | 1 | 0.250 | 3.95 | 0.570 | 0.00 | 13.5 | Agriculture | 0.2 | 114.4 | 50 | **-2%** | **207** |
| *27* | 0.241 | 14.59 | 0.82 | 0.41 | 1 | 0.246 | 3.98 | 0.567 | 1.42 | 13.75 | Agriculture | 0.2 | 115 | 51 | | **212** |
| **28** | 0.335 | 16.7 | 1.02 | 0.51 | 0.97 | 0.250 | 4.15 | 0.470 | 1.00 | 13.5 | Agriculture | 0.195 | 128.3 | 68 | **5%** | **203** |
| *28* | 0.335 | 16.68 | 1.02 | 0.51 | 1 | 0.249 | 4.18 | 0.467 | 0.54 | 13.75 | Agriculture | 0.2 | 132 | 65 | | **194** |
| **29** | 0.999 | 22.9 | 1.47 | 0.73 | 1 | 0.250 | 3.95 | 0.550 | 0.00 | 14 | Agriculture | 0.2 | 163.2 | 145 | **0%** | **145** |
| *29* | 0.999 | 22.92 | 1.47 | 0.73 | 1 | 0.25 | 3.98 | 0.548 | 0 | 14.25 | Agriculture | 0.2 | 163 | 145 | | **145** |
| **30** | 0.983 | 21.9 | 1.55 | 0.78 | 0.99 | 0.250 | 4 | 0.470 | 0.00 | 14 | Agriculture | 0.197 | 169.6 | 147 | **-13%** | **150** |
| *30* | 0.983 | 21.93 | 1.55 | 0.78 | 1 | 0.25 | 4.03 | 0.469 | 8.73 | 14.5 | Agriculture | 0.2 | 172 | 168 | | **171** |
| **31** | 1.079 | 26.4 | 1.93 | 0.97 | 0.99 | 0.250 | 4 | 0.460 | 0.00 | 14.75 | Agriculture | 0.197 | 193.3 | 143 | **0%** | **133** |
| *31* | 1.079 | 26.4 | 1.93 | 0.97 | 1 | 0.249 | 4.02 | 0.456 | 0.85 | 15 | Agriculture | 0.2 | 196 | 143 | | **133** |
| **32** | 0.896 | 24.3 | 1.84 | 0.92 | 0.98 | 0.250 | 4 | 0.520 | 1.00 | 14.5 | Agriculture | 0.197 | 189 | 118 | **2%** | **132** |
| *32* | 0.896 | 24.34 | 1.84 | 0.92 | 1 | 0.249 | 4 | 0.515 | 1.15 | 14.75 | Agriculture | 0.2 | 192 | 116 | | **129** |
| **33** | 1.002 | 29.3 | 1.84 | 0.92 | 0.91 | 0.260 | 3.95 | 0.440 | 1.00 | 14.25 | Agriculture | 0.175 | 162 | 169 | **19%** | **169** |
| *33* | 1.002 | 29.3 | 1.84 | 0.92 | 1 | 0.249 | 3.96 | 0.44 | 0.53 | 14.75 | Agriculture | 0.2 | 185 | 142 | | **142** |
| **41** | 1.202 | 24 | 1.54 | 0.77 | 1 | 0.250 | 3.95 | 0.470 | 0.00 | 14 | Agriculture | 0.2 | 168 | 181 | **1%** | **151** |
| *41* | 1.202 | 23.99 | 1.54 | 0.77 | 1 | 0.25 | 3.97 | 0.474 | 0 | 14.25 | Agriculture | 0.2 | 168 | 179 | | **149** |
| **42** | 0.778 | 22.8 | 1.56 | 0.78 | 1 | 0.250 | 4.25 | 0.450 | 0.00 | 14 | Agriculture | 0.2 | 171.3 | 115 | **0%** | **148** |
| *42* | 0.778 | 22.73 | 1.56 | 0.78 | 1 | 0.25 | 4.28 | 0.452 | 0.47 | 14.5 | Agriculture | 0.2 | 172 | 115 | | **148** |
| **43** | 1.002 | 20.8 | 1.92 | 0.96 | 0.99 | 0.250 | 3.95 | 0.430 | 1.00 | 14.75 | Agriculture | 0.198 | 202.1 | 134 | **2%** | **134** |
| *43* | 1.002 | 20.85 | 1.92 | 0.96 | 1 | 0.25 | 3.96 | 0.425 | 0.66 | 15 | Agriculture | 0.2 | 204 | 131 | | **131** |
| **44** | 1.007 | 22.4 | 1.97 | 0.98 | 0.96 | 0.260 | 4.1 | 0.490 | 0.00 | 14.5 | Agriculture | 0.189 | 193.6 | 129 | **-4%** | **128** |
| *44* | 1.007 | 22.43 | 1.97 | 0.98 | 1 | 0.25 | 4.14 | 0.485 | 5.22 | 15 | Agriculture | 0.2 | 205 | 134 | | **133** |
| **45A** | 1.003 | 25.1 | 1.97 | 0.99 | 0.94 | 0.260 | 4 | 0.440 | 0.00 | 14.25 | Agriculture | 0.183 | 184.1 | 144 | **11%** | **144** |
| *45A* | 1.003 | 25.14 | 1.97 | 0.99 | 1 | 0.25 | 3.99 | 0.441 | 0.24 | 15 | Agriculture | 0.2 | 201 | 130 | | **130** |

## BUCKEYE ADMP EXISTING CONDITIONS HYDROLOGY UPDATE - PARAMETERS SUMMARY TABLE
### 100 Year, 24 Hour Storm

| SUB BASIN ADMP | AREA | SLOPE | Length | LCA | IA | DTHETA | PSIF | XKSAT | RTIMP | Tp | S-GRAPH TYPE | Kn | Lag | DISCHARGE | % INCREASE DISCHARGE | UNIT DISCHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *ADMS* | (sq mi) | (ft/mi) | (ft) | (ft) | (in) | | (in) | (in/hr) | (%) | (hrs) | | | (min) | (cfs) | | (cfs/sq mi) |
| **45B** | 0.140 | 8.7 | 0.52 | 0.26 | 0.68 | 0.260 | 4 | 0.420 | 18.00 | 12.75 | Agriculture | 0.13 | 58 | 83 | **41%** | **593** |
| *45B* | 0.140 | 8.59 | 0.52 | 0.26 | 1 | 0.25 | 3.97 | 0.417 | 29.71 | 13.25 | Agriculture | 0.2 | 89 | 59 | | **421** |
| **52A** | 0.313 | 7 | 0.92 | 0.57 | 1 | 0.250 | 3.95 | 0.440 | 0.00 | 14.25 | Agriculture | 0.2 | 155.7 | 54 | **2%** | **173** |
| *52A* | 0.313 | 6.91 | 0.92 | 0.57 | 1 | 0.25 | 3.97 | 0.439 | 0.36 | 14.25 | Agriculture | 0.2 | 156 | 53 | | **169** |
| **52B** | 0.495 | 32.5 | 0.71 | 0.32 | 0.97 | 0.250 | 4.1 | 0.530 | 1.00 | 13 | Agriculture | 0.193 | 81.7 | 149 | **6%** | **301** |
| *52B* | 0.495 | 32.56 | 0.71 | 0.32 | 1 | 0.251 | 4.09 | 0.53 | 0.35 | 13.25 | Agriculture | 0.2 | 85 | 141 | | **285** |
| **53** | 0.339 | 24 | 0.91 | 0.46 | 0.99 | 0.250 | 4 | 0.440 | 1.00 | 13.25 | Agriculture | 0.198 | 112 | 81 | **4%** | **239** |
| *53* | 0.339 | 23.93 | 0.91 | 0.46 | 1 | 0.25 | 4 | 0.444 | 0 | 13.75 | Agriculture | 0.2 | 113 | 78 | | **230** |
| **54** | 0.386 | 12.3 | 1.20 | 0.60 | 0.98 | 0.250 | 4 | 0.450 | 1.00 | 13.75 | Agriculture | 0.197 | 155.4 | 66 | **3%** | **171** |
| *54* | 0.386 | 12.35 | 1.20 | 0.60 | 1 | 0.25 | 4 | 0.447 | 0 | 14.25 | Agriculture | 0.2 | 157 | 64 | | **166** |
| **55** | 0.263 | 12.8 | 0.97 | 0.48 | 1 | 0.250 | 4.1 | 0.450 | 0.00 | 13.5 | Agriculture | 0.2 | 132.7 | 51 | **-2%** | **194** |
| *55* | 0.263 | 12.83 | 0.97 | 0.48 | 1 | 0.25 | 4.13 | 0.446 | 0 | 13.75 | Agriculture | 0.2 | 133 | 52 | | **198** |
| **59** | 0.252 | 49.4 | 0.50 | 0.17 | 0.75 | 0.270 | 4.1 | 0.500 | 11.00 | 12.5 | Agriculture | 0.141 | 37.9 | 180 | **43%** | **714** |
| *59* | 0.252 | 49.34 | 0.50 | 0.17 | 1 | 0.23 | 4.17 | 0.497 | 8.09 | 12.75 | Agriculture | 0.2 | 53 | 126 | | **500** |
| **60A** | 0.412 | 27.5 | 1.07 | 0.46 | 0.85 | 0.250 | 4 | 0.540 | 13.00 | 13.25 | Agriculture | 0.17 | 99.6 | 126 | **47%** | **306** |
| *60A* | 0.412 | 27.51 | 1.07 | 0.46 | 1 | 0.249 | 4.04 | 0.541 | 0.79 | 13.75 | Agriculture | 0.2 | 117 | 86 | | **209** |
| **60B** | 0.574 | 22.7 | 1.03 | 0.35 | 0.86 | 0.260 | 4.15 | 0.550 | 3.00 | 13.25 | Agriculture | 0.169 | 91.2 | 161 | **22%** | **280** |
| *60B* | 0.574 | 22.68 | 1.03 | 0.35 | 1 | 0.249 | 4.16 | 0.551 | 3.25 | 13.5 | Agriculture | 0.2 | 108 | 132 | | **230** |
| **61** | 0.508 | 23 | 0.90 | 0.45 | 0.76 | 0.250 | 3.92 | 0.460 | 8.00 | 13 | Agriculture | 0.152 | 85.6 | 186 | **56%** | **366** |
| *61* | 0.508 | 23 | 0.90 | 0.45 | 1 | 0.248 | 3.97 | 0.464 | 2.23 | 13.75 | Agriculture | 0.2 | 113 | 119 | | **234** |
| **62** | 0.572 | 21.5 | 0.98 | 0.49 | 0.94 | 0.250 | 4.2 | 0.440 | 3.00 | 13.5 | Agriculture | 0.187 | 113.8 | 139 | **15%** | **243** |
| *62* | 0.572 | 21.54 | 0.98 | 0.49 | 1 | 0.249 | 4.2 | 0.444 | 0.47 | 13.75 | Agriculture | 0.2 | 122 | 121 | | **212** |
| **63** | 0.499 | 20.3 | 0.95 | 0.47 | 0.97 | 0.250 | 4.15 | 0.400 | 1.00 | 13.5 | Agriculture | 0.195 | 116.7 | 118 | **-20%** | **236** |
| *63* | 0.499 | 20.27 | 0.95 | 0.47 | 1 | 0.25 | 4.19 | 0.398 | 20.75 | 13.75 | Agriculture | 0.2 | 120 | 147 | | **295** |
| **64** | 0.415 | 18 | 0.89 | 0.45 | 0.98 | 0.250 | 4.35 | 0.450 | 0.00 | 13.5 | Agriculture | 0.196 | 115.1 | 92 | **0%** | **222** |
| *64* | 0.415 | 17.94 | 0.89 | 0.45 | 1 | 0.248 | 4.36 | 0.445 | 1.18 | 13.75 | Agriculture | 0.2 | 117 | 92 | | **222** |

## BUCKEYE ADMP EXISTING CONDITIONS HYDROLOGY UPDATE - PARAMETERS SUMMARY TABLE
### 100 Year, 24 Hour Storm

| SUB BASIN ADMP | AREA | SLOPE | Length | LCA | IA | DTHETA | PSIF | XKSAT | RTIMP | Tp | S-GRAPH TYPE | Kn | Lag | DISCHARGE | % INCREASE DISCHARGE | UNIT DISCHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *ADMS* | (sq mi) | (ft/mi) | (ft) | (ft) | (in) | | (in) | (in/hr) | (%) | (hrs) | | | (min) | (cfs) | | (cfs/sq mi) |
| **68** | 0.413 | 45.6 | 0.96 | 0.33 | 0.52 | 0.290 | 4.35 | 0.370 | 4.00 | 12.5 | Desert Rangeland | 0.084 | 37.8 | 333 | **-33%** | **806** |
| *68* | 0.413 | 45.58 | 0.96 | 0.33 | 0.374 | 0.334 | 4.37 | 0.374 | 0 | 12.5 | Desert Rangeland | 0.05 | 22 | 499 | | **1208** |

**MODEL AREA 2 100-yr, 24-hr**

| SUB BASIN ADMP | AREA | SLOPE | Length | LCA | IA | DTHETA | PSIF | XKSAT | RTIMP | Tp | S-GRAPH TYPE | Kn | Lag | DISCHARGE | % INCREASE DISCHARGE | UNIT DISCHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *ADMS* | (sq mi) | (%) | (ft) | (ft) | (in) | | (in) | (in/hr) | (%) | (hrs) | | | (min) | (cfs) | | (cfs/sq mi) |
| **A1** | 1.628 | 33 | 2.96 | 1.73 | 0.35 | 0.350 | 4.45 | 0.340 | 0.00 | 12.33 | Desert Rangeland | 0.025 | 34.5 | 1466 | **83%** | **900** |
| *A1* | 1.630 | 32.98 | 2.96 | 1.73 | 0.343 | 0.347 | 4.498 | 0.339 | 2.145 | 12.92 | Desert Rangeland | 0.05 | 69 | 803 | | **493** |
| **B1** | 0.300 | 57.2 | 1.34 | 0.66 | 0.35 | 0.350 | 4.6 | 0.320 | 0.00 | 12.08 | Desert Rangeland | 0.025 | 15.9 | 488 | **59%** | **1627** |
| *B1* | 0.300 | 57.24 | 1.34 | 0.66 | 0.35 | 0.35 | 4.624 | 0.315 | 0 | 12.42 | Desert Rangeland | 0.05 | 31 | 307 | | **1023** |
| **C1** | 0.947 | 41.6 | 2.65 | 1.06 | 0.35 | 0.350 | 4.65 | 0.310 | 0.00 | 12.25 | Desert Rangeland | 0.025 | 26.3 | 1096 | **79%** | **1157** |
| *C1* | 0.950 | 41.6 | 2.65 | 1.06 | 0.35 | 0.35 | 4.669 | 0.311 | 0 | 12.67 | Desert Rangeland | 0.05 | 52 | 613 | | **645** |
| **D1** | 0.687 | 41.1 | 2.05 | 0.98 | 0.35 | 0.350 | 4.65 | 0.320 | 0.00 | 12.25 | Desert Rangeland | 0.026 | 24.1 | 832 | **67%** | **1211** |
| *D1* | 0.690 | 41.1 | 2.05 | 0.98 | 0.35 | 0.35 | 4.642 | 0.317 | 0 | 12.58 | Desert Rangeland | 0.05 | 46 | 497 | | **720** |
| **E1** | 1.466 | 27.9 | 3.19 | 1.81 | 0.35 | 0.350 | 4.35 | 0.360 | 0.00 | 12.42 | Desert Rangeland | 0.025 | 37.2 | 1226 | **87%** | **836** |
| *E1* | 1.470 | 27.95 | 3.19 | 1.81 | 0.343 | 0.347 | 4.362 | 0.364 | 2.082 | 13 | Desert Rangeland | 0.05 | 75 | 656 | | **446** |
| **E2-a2** | 1.223 | 27.5 | 2.97 | 1.67 | 0.41 | 0.340 | 4.4 | 0.350 | 1.00 | 12.75 | Desert Rangeland | 0.043 | 60.6 | 664 | **13%** | **543** |
| *E2-a2* | 1.220 | 27.48 | 2.97 | 1.67 | 0.348 | 0.343 | 4.461 | 0.354 | 2.288 | 13 | Desert Rangeland | 0.05 | 70 | 590 | | **484** |
| **E3-a2** | 0.943 | 25.9 | 2.72 | 0.99 | 0.78 | 0.270 | 4.25 | 0.440 | 1.00 | 14.33 | Desert Rangeland | 0.145 | 163.9 | 618 | **-37%** | **655** |
| *E3-a2* | 0.940 | 25.93 | 2.72 | 0.99 | 0.402 | 0.306 | 4.245 | 0.444 | 1.589 | 12.75 | Desert Rangeland | 0.05 | 56 | 976 | | **1038** |
| **E4** | 0.740 | 29 | 2.00 | 1.24 | 0.56 | 0.300 | 4.15 | 0.420 | 1.00 | 13.25 | Desert Rangeland | 0.089 | 95.5 | 246 | **-43%** | **332** |
| *E4* | 0.740 | 28.98 | 2.00 | 1.24 | 0.389 | 0.324 | 4.185 | 0.421 | 0 | 12.67 | Desert Rangeland | 0.05 | 53 | 435 | | **588** |

# Retention Summary Table

- 100 Year, 6 Hour Storm
- 100 Year, 24 Hour Storm

# BUCKEYE ADMP EXISTING CONDITIONS HYDROLOGY UPDATE - RETENTION SUMMARY TABLE (100YR, 6HR)

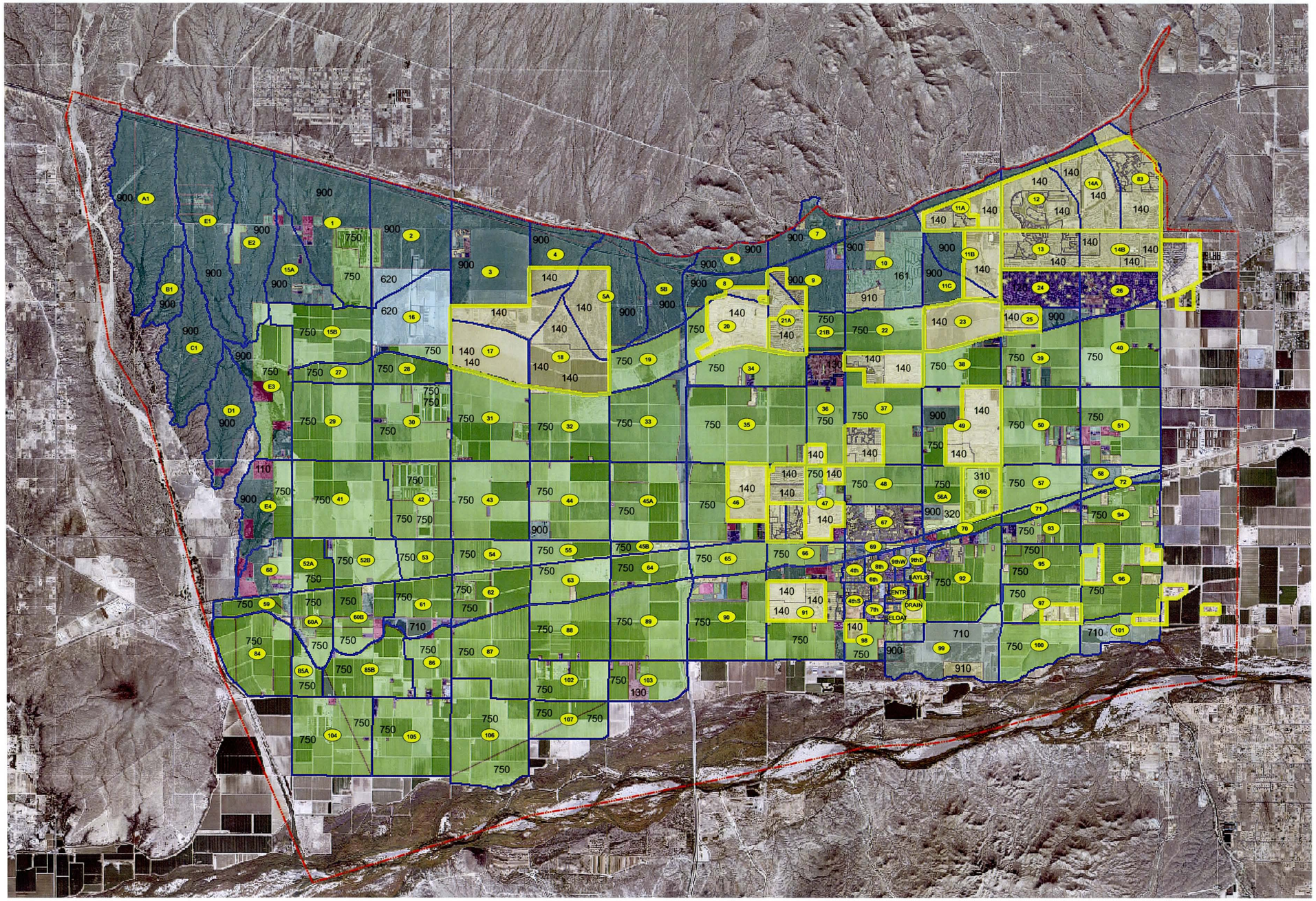
| MODEL | SUBBASIN NAME | RETENTION DIVERSION | VOLUME (ac-ft) | ADMP Q (cfs) | POST-RETENTION Q (cfs) | % REDUCED (%) |
|---|---|---|---|---|---|---|
| BGE | 101 | 101RET | 4.0 | 240 | 240 | 0% |
| FRE | 11A | 11ARET | 50.2 | 1215 | 196 | 84% |
| FRE | 11B | 11BRET | 30.2 | 946 | 653 | 31% |
| FRE | 11C | 11CRET | 6.2 | 739 | 603 | 18% |
| FRE | 12 | 12RET | 53.5 | 1428 | 514 | 64% |
| FRE | 13 | 13RET | 41.1 | 1089 | 483 | 56% |
| FRE | 14A | 14ARET | 49.8 | 1034 | 345 | 67% |
| FRE | 14B | 14BRET | 41.7 | 1026 | 206 | 80% |
| FRW | 17 | 17RET | 51.4 | 781 | 225 | 71% |
| FRW | 18 | 18RET | 66.8 | 987 | 261 | 74% |
| FRE | 20 | 20RET | 43.2 | 554 | 400 | 28% |
| FRE | 21A | 21ARET | 30.9 | 579 | 325 | 44% |
| FRE | 23 | 23RET | 47.2 | 774 | 254 | 67% |
| FRE | 25 | 25RET | 20.0 | 419 | 118 | 72% |
| RBE | 37 | 37RET | 52.0 | 333 | 242 | 27% |
| FRW | 3 | 3RET | 37.3 | 1474 | 1474 | 0% |
| RBE | 46 | 46RET | 59.3 | 651 | 400 | 39% |
| RBE | 47 | 47RET | 32.4 | 532 | 393 | 26% |
| RBE | 49 | 49RET | 57.6 | 676 | 436 | 36% |
| FRW | 4 | 4RET | 13.7 | 956 | 956 | 0% |
| RBE | 56B | 56BRET | 27.1 | 1061 | 328 | 69% |
| FRW | 5A | 5ARET | 40.8 | 1230 | 1187 | 3% |
| FRE | 83 | 83RET | 32.0 | 1010 | 871 | 14% |
| FRE | 8 | 8RET | 6.9 | 554 | 526 | 5% |
| BGE | 91 | 91RET | 31.0 | 567 | 567 | 0% |
| BGE | 96 | 96RET | 13.3 | 234 | 234 | 0% |
| BGE | 97 | 97RET | 10.4 | 177 | 177 | 0% |
| BGE | 98 | 98RET | 5.2 | 236 | 236 | 0% |
| FRE | 9 | 9RET | 7.6 | 1236 | 1229 | 1% |
| BGE | DRAIN | DRNRET | 5.2 | 163 | 163 | 0% |

# BUCKEYE ADMP EXISTING CONDITIONS HYDROLOGY UPDATE - RETENTION SUMMARY TABLE (100YR, 24HR)

| MODEL | SUBBASIN NAME | RETENTION DIVERSION | VOLUME (ac-ft) | ADMP Q (cfs) | POST-RETENTION Q (cfs) | % REDUCED (%) |
|---|---|---|---|---|---|---|
| BGE | 101 | 101RET | 4.0 | 184 | 184 | 0% |
| FRE | 11A | 11ARET | 11.9 | 926 | 5 | 99% |
| FRE | 11B | 11BRET | 30.2 | 706 | 388 | 45% |
| FRE | 11C | 11CRET | 6.2 | 541 | 422 | 22% |
| FRE | 12 | 12RET | 4.5 | 1122 | 266 | 76% |
| FRE | 13 | 13RET | 0.0 | 808 | 60 | 93% |
| FRE | 14A | 14ARET | 4.0 | 795 | 179 | 77% |
| FRE | 14B | 14BRET | 11.1 | 733 | 26 | 96% |
| FRW | 17 | 17RET | 51.4 | 582 | 27 | 95% |
| FRW | 18 | 18RET | 66.8 | 771 | 45 | 94% |
| FRE | 20 | 20RET | 43.2 | 424 | 292 | 31% |
| FRE | 21A | 21ARET | 30.9 | 421 | 123 | 71% |
| FRE | 23 | 23RET | 47.2 | 563 | 22 | 96% |
| FRE | 25 | 25RET | 20.0 | 305 | 9 | 97% |
| RBE | 37 | 37RET | 52.0 | 296 | 210 | 29% |
| FRW | 3 | 3RET | 37.3 | 1321 | 1316 | 0% |
| RBE | 46 | 46RET | 59.3 | 576 | 382 | 34% |
| RBE | 47 | 47RET | 32.4 | 403 | 266 | 34% |
| RBE | 49 | 49RET | 57.6 | 553 | 264 | 52% |
| FRW | 4 | 4RET | 13.7 | 700 | 700 | 0% |
| RBE | 56B | 56BRET | 27.1 | 764 | 147 | 81% |
| FRW | 5A | 5ARET | 40.8 | 1051 | 991 | 6% |
| FRE | 83 | 83RET | 0.0 | 774 | 616 | 20% |
| FRE | 8 | 8RET | 6.9 | 403 | 367 | 9% |
| BGE | 91 | 91RET | 31.0 | 484 | 484 | 0% |
| BGE | 96 | 96RET | 13.3 | 207 | 207 | 0% |
| BGE | 97 | 97RET | 10.4 | 143 | 143 | 0% |
| BGE | 98 | 98RET | 5.2 | 189 | 189 | 0% |
| FRE | 9 | 9RET | 7.6 | 938 | 938 | 0% |
| BGE | DRAIN | DRNRET | 5.2 | 124 | 124 | 0% |

# Appendix B

- Existing Land Use
- ADMP S-Graphs
- ADMS S-Graphs
- HEC-1 Schematic



**Buckeye Area**
**Drainage Master Plan**
F.C.D. Contract No. 2004C058

## Legend

- Project Area
- New Developments
- Drainage Basins

## Data Sources

Base Map Data supplied by FCDMC

NOT TO SCALE

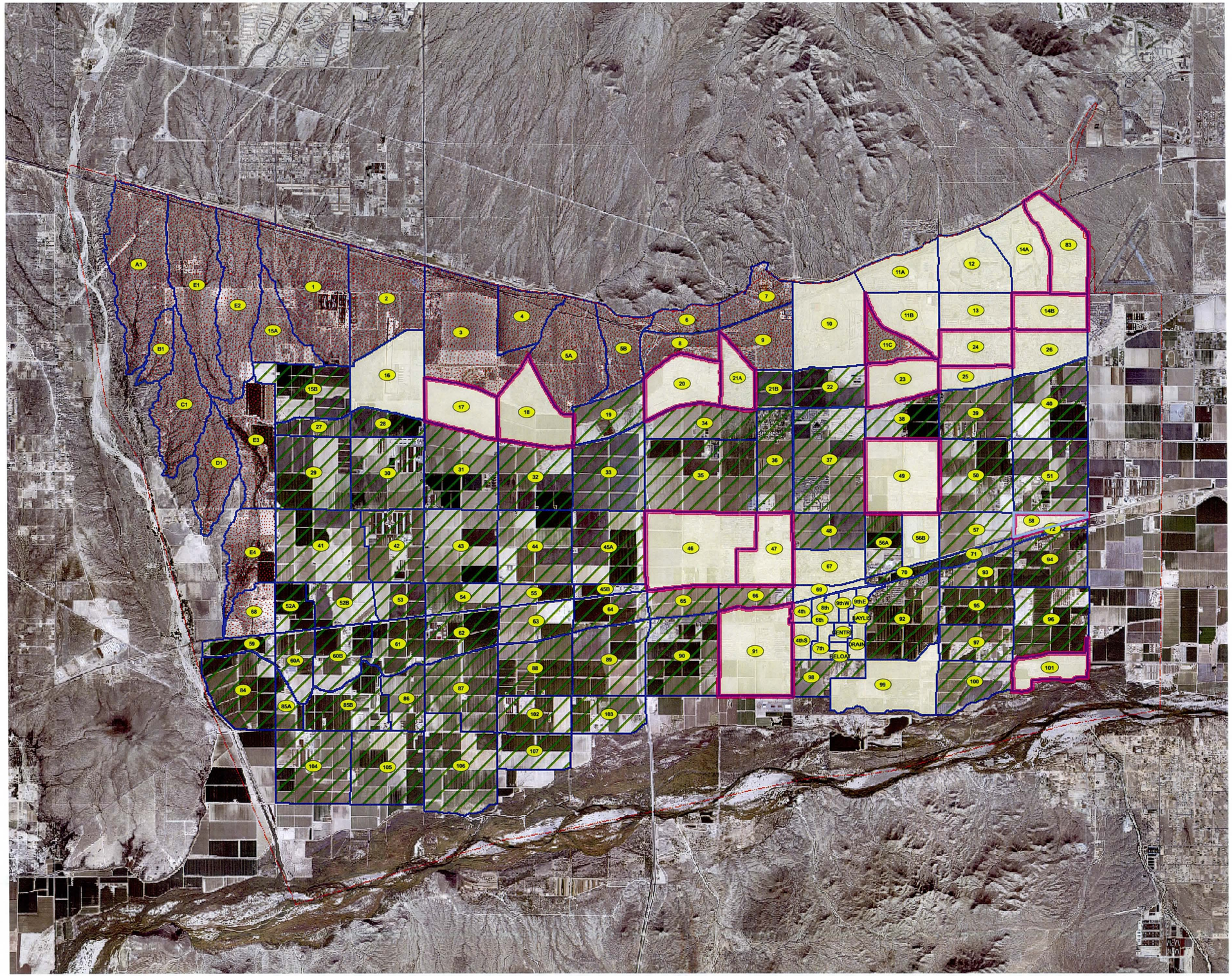
0 0.3 0.6 1.2 1.8 2.4 Miles

Dibble Engineering

**Hydrology Update**
**Land Use Updates**

### MAG 2005 Land Use (updated)

- 110, Rural Residential
- 120, Estate Residential
- 130, Large Lot Residential (SF)
- 140, Medium Lot Residential (SF)
- 150, Small Lot Residential (SF)
- 160, Very Small Lot Residential (SF)
- 161, Very Small Lot Residential (SF-Mobile Homes)
- 170, Medium Density Residential (MF)
- 180, High Density Residential (MF)
- 190, Residential
- 190, Very High Density Residential (MF)
- 199, Parking lots serving Residential
- 199, Residential
- 200, Commercial
- 210, Commercial
- 210, Specialty Commercial
- 220, Neighborhood Commercial
- 230, Community Commercial
- 300, Industrial
- 310, Light Industrial
- 320, Industrial
- 410, Office Low Rise
- 520, Institutional
- 530, Institutional
- 550, Public Facilities
- 550, Institutional
- 560, Other
- 570, Other Employment (low)
- 620, Airports
- 710, Active Open Space
- 720, Golf courses
- 750, Agriculture
- 900, Vacant (existing land use database only)




**Buckeye Area**
**Drainage Master Plan**
F.C.D. Contract No. 2004C058

## Legend

- S-GRAPH CHANGE
- Project Area
- Drainage_Basins

**ADMP_S-GRAPHS**

- Agriculture
- Desert Rangeland
- Phoenix Valley

## Data Sources

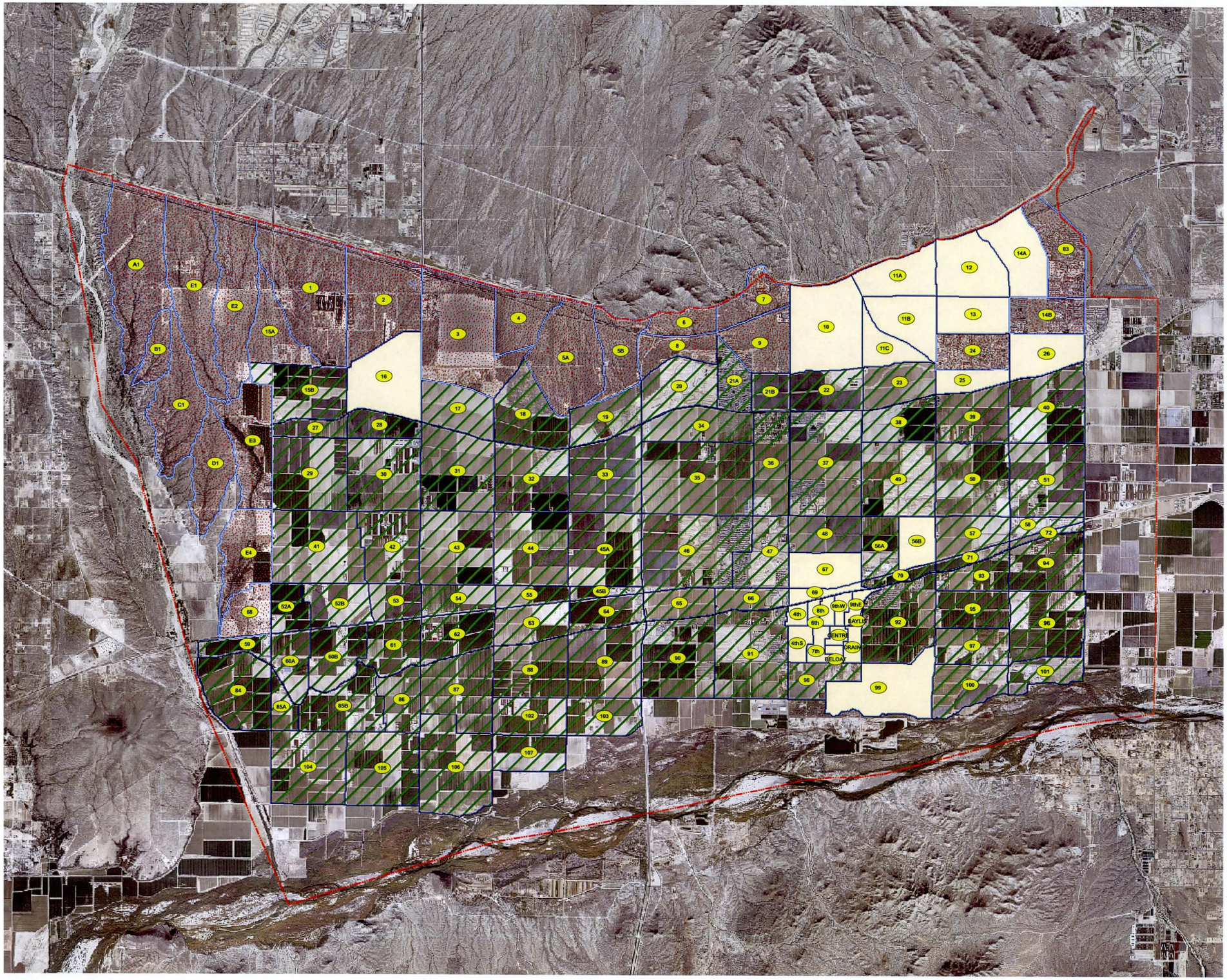
Base Map Data supplied by FCDMC

NOT TO SCALE

0 0.3 0.6 1.2 1.8 2.4 Miles

Dibble Engineering

**Hydrology Update**
**ADMP S-Graphs**



**Buckeye Area**
**Drainage Master Plan**
F.C.D. Contract No. 2004C058

## Legend

Project Area

Sub Basin

**ADMS_S-GRAPHS**

Agriculture

Desert Rangeland

Phoenix Valley

## Data Sources

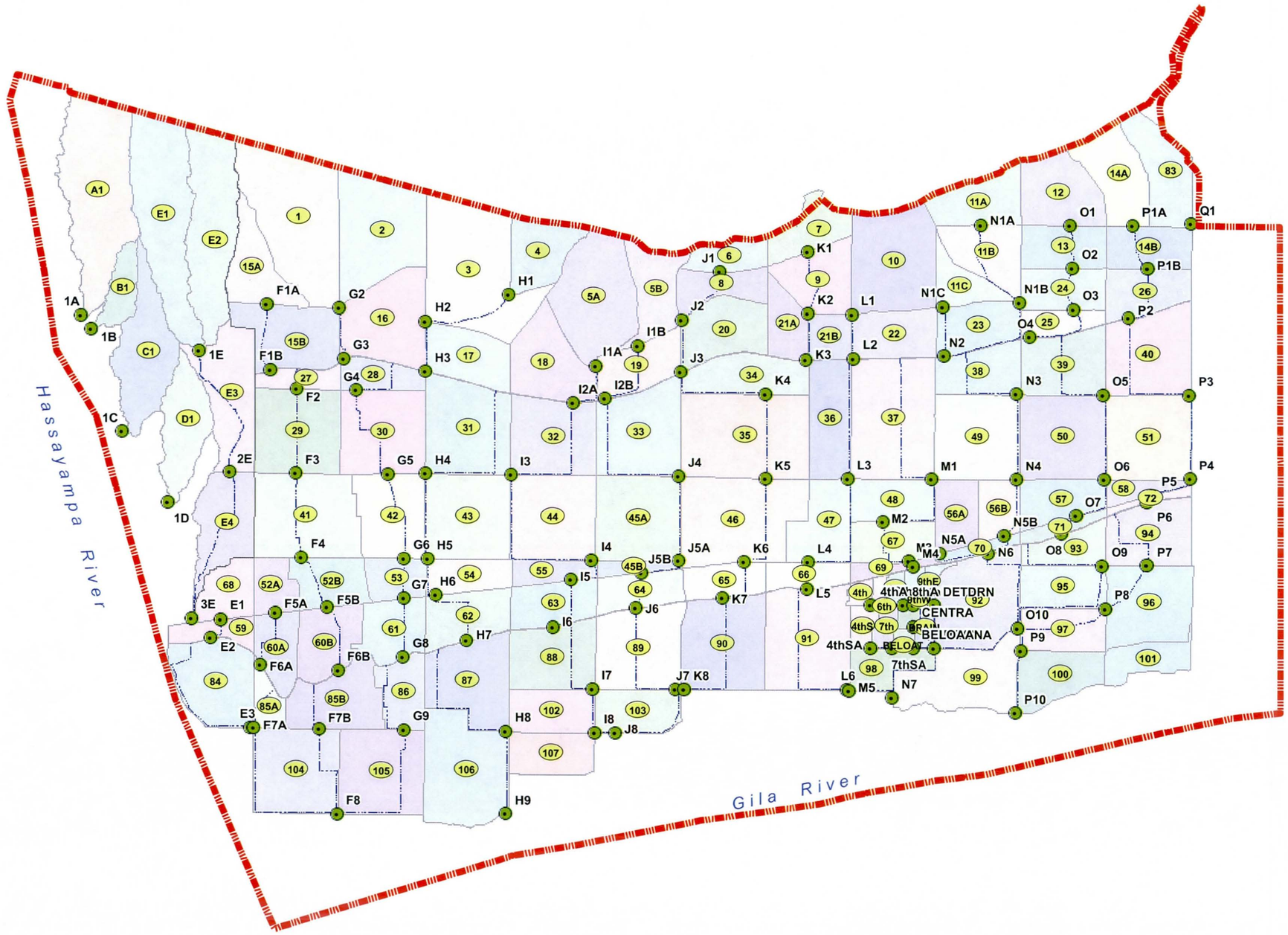
Base Map Data supplied by FCDMC

NOT TO SCALE

0 0.3 0.6 1.2 1.8 2.4 Miles

Dibble Engineering

**Hydrology Update**
**ADMS S-Graphs**




**Buckeye Area Drainage Master Plan**

F.C.D. Contract No. 2004C058

## Legend

- Buckeye ADMP Study Area
- Concentration Point
- Routing Reach

## Data Sources

Base Map Data supplied by FCDMC

NOT TO SCALE

0 0.25 0.5 1 1.5 2 Miles

Dibble Engineering

**Hydrology Update**
**HEC-1 Schematic**

# Appendix C

HEC-1 Existing Conditions 100-Yr, 6-Hr

# HEC-1 Existing Conditions

- A2, 100-Yr, 6-Hr

```
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   28FEB08  TIME  16:15:35   *                    *           (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        FCDMC
        2           ID        0607BASE_EXST_6HR - Buckeye ADMP Existing Conditions Hydrology Update
        3           ID        Major Basin: 07
        4           ID        100 Year - Return Period
        5           ID        6 Hour Storm
        6           ID        Multiple Storms
        7           ID        Unit Hydrograph: S-Graph
        8           ID        01/09/2008
                    * ******************************************************************************
                    *  Original Model prepared as: Buckeye/Sun Valley ADMS - May 2004
                    *                              by PBS&J - Modelers: Jacob Lesue & Wen Chen
                    * ************* THIS MODEL: Major Basin 07, Model Area: AREA 2 *****************
                    *  100-year 6-hour
                    *  NEW FILE NAME:  "A2-1006EX.DAT"
                    *  Existing Conditions
                    *  AREA 2
                    *  Major Basin Key:  01=BGE, 02=BGW, 03=FRE, 04=FRW, 05=RBE, 06=RBW, 07=AREA2
                    *  Rainfall Loss Method - Green & Ampt
                    *  Unit Hydrograph Method - FCDMC S-Graph
                    *  Channel Routing Method - Normal Depth
                    *  Soil Data - USDA SCS Soil Survey (1972 & 1981)
                    *  Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
                    * ******************************************************************************
                    *  UPDATED BY DIBBLE ENGINEERING, SEPTEMBER 2007
                    *  Land Use Updated using - FCDMC GIS Data: mag_landuse (2005)
                    * ******************************************************************************
                    *
                    *DIAGRAM
                    *
        9           IT       5 01JAN94       0     400
       10           IO       5
       11           IN      15 01JAN94       0
                    *
                    *
       12           JD   3.300  0.0100
                    * 6-hour distribution, pattern 1.0
       13           PC   0.000   0.008   0.016   0.025   0.033   0.041   0.050   0.058   0.066   0.074
       14           PC   0.087   0.099   0.118   0.138   0.216   0.377   0.834   0.911   0.931   0.950
       15           PC   0.962   0.972   0.983   0.991   1.000
       16           JD   3.280  0.5000
                    * 6-hour distribution, pattern 1.0
       17           PC   0.000   0.008   0.016   0.025   0.033   0.041   0.050   0.058   0.066   0.074
       18           PC   0.087   0.099   0.118   0.138   0.216   0.377   0.834   0.911   0.931   0.950
       19           PC   0.962   0.972   0.983   0.991   1.000
       20           JD   3.257     1.0
                    * 6-hour distribution, pattern 1.4
       21           PC   0.000   0.008   0.016   0.025   0.033   0.041   0.050   0.058   0.066   0.075
       22           PC   0.087   0.099   0.119   0.148   0.230   0.407   0.778   0.881   0.919   0.945
       23           PC   0.957   0.968   0.980   0.990   1.000
       24           JD   3.168     5.0
                    * 6-hour distribution, pattern 2.3
```

```
  25          PC   0.000   0.011   0.017   0.027   0.039   0.049   0.060   0.070   0.080   0.091
  26          PC   0.103   0.118   0.139   0.183   0.270   0.458   0.686   0.823   0.889   0.929
  27          PC   0.949   0.962   0.974   0.988   1.000
  28          JD   3.102    10.0
              * 6-hour distribution, pattern 2.7
1                                          HEC-1 INPUT                                          PAGE  2

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

  29          PC   0.000   0.013   0.019   0.029   0.044   0.057   0.069   0.081   0.094   0.107
  30          PC   0.122   0.137   0.160   0.205   0.289   0.466   0.677   0.807   0.877   0.919
  31          PC   0.947   0.961   0.974   0.987   1.000
              * ******************************************************************************
              *

  32          KK      E2   BASIN
  33          KM            S-GRAPH TYPE=DESERT RANGELAND
  34          BA   1.223
  35          LG    0.41    0.34    4.40    0.35       1
  36          UI      68      68      95     211     300     385     463     543     599     631
  37          UI     654     642     615     573     487     427     369     318     277     246
              *

  38          KK      E1   BASIN
  39          KM            S-GRAPH TYPE=DESERT RANGELAND
  40          BA   1.466
  41          LG    0.35    0.35    4.35    0.36       0
  42          UI     132     206     502     783    1035    1202    1256    1241    1045     833
  43          UI     668     520     414     327     256     207     155     132      91      92
              *

  44          KK      1E COMBINE   1E-2E
  45          HC       2
              *

  46          KK   1E-2E   ROUTE      1E
  47          RS       7    FLOW     0.0     0.0
  48          RC   0.050   0.070   0.050    9559  0.0051    0.00
  49          RX    0.00   15.00   45.00   55.00   75.00   85.00  115.00  130.00
  50          RY   10.50    4.50    2.00    0.00    0.00    2.00    4.50   10.50
              *

  51          KK      E3   BASIN
  52          KM            S-GRAPH TYPE=DESERT RANGELAND
  53          BA   0.943
  54          BF   450.0     0.0     1.0
  55          LG    0.78    0.27    4.25    0.44       1
  56          UI      19      20      19      19      20      19      20      36      55      56
  57          UI      72      76      91      98     105     116     126     133     136     148
  58          UI     159     161     170     171     177     178     185     183     188     185
  59          UI     185     187     177     175     177     167     165     156     142     135
  60          UI     136     123     116     112     106      99      96      90      85      83
              *

  61          KK      2E COMBINE   2E-3E
  62          HC       2
              *

  63          KK   2E-3E   ROUTE      2E
  64          RS       5    FLOW     0.0     0.0
  65          RC   0.055   0.030   0.055   10646  0.0051    0.00
  66          RX    0.00   15.00   35.00   40.00   60.00   65.00   85.00  100.00
  67          RY    7.50    4.00    3.00    0.00    0.00    3.00    4.00    7.50
              *
1                                          HEC-1 INPUT                                          PAGE  3

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

  68          KK      E4   BASIN
  69          KM            S-GRAPH TYPE=DESERT RANGELAND
  70          BA   0.740
  71          BF     0.0     0.0     0.0
  72          LG    0.56    0.30    4.15    0.42       1
  73          UI      26      26      27      26      56      77     101     124     146     165
  74          UI     185     200     219     233     235     247     253     249     244     239
  75          UI     230     215     194     182     158     150     134     123     115     102
              *

  76          KK      3E COMBINE     13R
  77          HC       2
              *

  78          KK     13R   CNAME      3E
  79          RN     13R
              *

  80          KK      D1   BASIN
  81          KM            S-GRAPH TYPE=DESERT RANGELAND
```

```
         82          BA   0.687
         83          LG    0.35    0.35    4.65    0.32       0
         84          UI      96     330     628     850     916     765     528     377     257     179
                     *

         85          KK      4R   CNAME      1D
         86          RN      4R
                     *

         87          KK      C1   BASIN
         88          KM            S-GRAPH TYPE=DESERT RANGELAND
         89          BA   0.947
         90          LG    0.35    0.35    4.65    0.31       0
         91          UI     121     354     727    1011    1160    1084     814     596     422     301
                     *

         92          KK      3R   CNAME      1C
         93          RN      3R
                     *

         94          KK      B1   BASIN
         95          KM            S-GRAPH TYPE=DESERT RANGELAND
         96          BA   0.300
         97          LG    0.35    0.35    4.60    0.32       0
         98          UI      96     376     581     527     319     183     107      58      35      15
                     *

         99          KK      2R   CNAME      1B
        100          RN      2R
                     *
1                                                HEC-1 INPUT                                                PAGE  4

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


        101          KK      A1   BASIN
        102          KM            S-GRAPH TYPE=DESERT RANGELAND
        103          BA   1.628
        104          LG    0.35    0.35    4.45    0.34       0
        105          UI     158     286     670    1022    1327    1483    1502    1382    1072     833
                     *

        106          KK      1R   CNAME      1A
        107          RN      1R
                     *
        108          ZZ
1
                 SCHEMATIC DIAGRAM OF STREAM NETWORK
 INPUT
  LINE      (V) ROUTING          (--->) DIVERSION OR PUMP FLOW

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

    32          E2
                 .
                 .
    38           .          E1
                 .           .
                 .           .
    44          1E...........
                 V
                 V
    46       1E-2E
                 .
                 .
    51           .          E3
                 .           .
                 .           .
    61          2E...........
                 V
                 V
    63       2E-3E
                 .
                 .
    68           .          E4
                 .           .
                 .           .
    76          3E...........
                 V
                 V
    78         13R
                 .
                 .
    80           .          D1
                 .           V
                 .           V
    85           .          4R
                 .           .
                 .           .
```

```
   87          .          .          C1
               .          .           V
               .          .           V
   92          .          .          3R
               .          .           .
               .          .           .
   94          .          .           .          B1
               .          .           .           V
               .          .           .           V
   99          .          .           .          2R
               .          .           .           .
               .          .           .           .
  101          .          .           .           .          A1
               .          .           .           .           V
               .          .           .           .           V
  106          .          .           .           .          1R

 (***) 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   28FEB08  TIME  16:15:35  *                                          *           (916) 756-1104             *
 *                                      *                                          *                                      *
 ****************************************                                          ****************************************
```

```
                                FCDMC
                                0607BASE_EXST_6HR - Buckeye ADMP Existing Conditions Hydrology Update
                                Major Basin: 07
                                100 Year - Return Period
                                6 Hour Storm
                                Multiple Storms
                                Unit Hydrograph: S-Graph
                                01/09/2008

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

     IT          HYDROGRAPH TIME DATA
                        NMIN           5  MINUTES IN COMPUTATION INTERVAL
                       IDATE      1JAN94  STARTING DATE
                       ITIME        0000  STARTING TIME
                          NQ         400  NUMBER OF HYDROGRAPH ORDINATES
                      NDDATE      2JAN94  ENDING DATE
                      NDTIME        0915  ENDING TIME
                      ICENT          19  CENTURY MARK

                 COMPUTATION INTERVAL    0.08 HOURS
                      TOTAL TIME BASE   33.25 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

  12 JD          INDEX STORM NO. 1
                       STRM        3.30  PRECIPITATION DEPTH
                       TRDA        0.01  TRANSPOSITION DRAINAGE AREA

  13 PI            PRECIPITATION PATTERN
                      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                      0.00      0.00      0.00      0.01      0.01      0.01      0.01      0.01      0.01      0.03
                      0.03      0.03      0.05      0.05      0.05      0.15      0.15      0.15      0.03      0.03
                      0.03      0.01      0.01      0.01      0.01      0.01      0.01      0.00      0.00      0.00
                      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                      0.00      0.00

  16 JD          INDEX STORM NO. 2
                       STRM        3.28  PRECIPITATION DEPTH
                       TRDA        0.50  TRANSPOSITION DRAINAGE AREA

  17 PI            PRECIPITATION PATTERN
                      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
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                0.00      0.00      0.00      0.01      0.01      0.01      0.01      0.01      0.01      0.03
                0.03      0.03      0.05      0.05      0.05      0.15      0.15      0.15      0.03      0.03
                0.03      0.01      0.01      0.01      0.01      0.01      0.01      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00

20 JD        INDEX STORM NO. 3
                STRM        3.26  PRECIPITATION DEPTH
                TRDA        1.00  TRANSPOSITION DRAINAGE AREA

21 PI          PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.01      0.01      0.01      0.01      0.01      0.01      0.03
                0.03      0.03      0.06      0.06      0.06      0.12      0.12      0.12      0.03      0.03
                0.03      0.01      0.01      0.01      0.01      0.01      0.01      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00

24 JD        INDEX STORM NO. 4
                STRM        3.17  PRECIPITATION DEPTH
                TRDA        5.00  TRANSPOSITION DRAINAGE AREA

25 PI          PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.01      0.00      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.03
                0.03      0.03      0.06      0.06      0.06      0.08      0.08      0.08      0.05      0.05
                0.05      0.02      0.02      0.02      0.01      0.01      0.01      0.01      0.01      0.01
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00

28 JD        INDEX STORM NO. 5
                STRM        3.10  PRECIPITATION DEPTH
                TRDA       10.00  TRANSPOSITION DRAINAGE AREA

29 PI          PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.01      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.01      0.00      0.01
                0.01      0.00      0.00      0.01      0.01      0.01      0.02      0.02      0.02      0.03
                0.03      0.03      0.06      0.06      0.06      0.07      0.07      0.07      0.04      0.04
                0.04      0.02      0.02      0.02      0.01      0.01      0.01      0.01      0.01      0.01
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00
1
                                                RUNOFF SUMMARY
                                        FLOW IN CUBIC FEET PER SECOND
                                      TIME IN HOURS,  AREA IN SQUARE MILES

                                          PEAK   TIME OF     AVERAGE FLOW FOR MAXIMUM PERIOD      BASIN    MAXIMUM    TIME OF
        OPERATION        STATION          FLOW    PEAK                                          AREA     STAGE    MAX STAGE
+                                                          6-HOUR    24-HOUR    72-HOUR
        HYDROGRAPH AT
+                            E2          792.    4.75       143.       36.       26.       1.22
        HYDROGRAPH AT
+                            E1         1375.    4.42       193.       48.       35.       1.47
        2 COMBINED AT
+                            1E         1754.    4.50       303.       76.       55.       2.69
        ROUTED TO
+                         1E-2E         1585.    4.92       302.       76.       55.       2.69
        HYDROGRAPH AT
+                            E3          650.    6.33       538.      472.      466.       0.94
        2 COMBINED AT
+                            2E         2017.    5.00       805.      539.      514.       3.63
        ROUTED TO
+                         2E-3E         1896.    5.42       805.      539.      508.       3.63
        HYDROGRAPH AT
+                            E4          310.    5.25        82.       20.       15.       0.74
        2 COMBINED AT
+                            3E         2062.    5.42       853.      551.      516.       4.37
        ROUTED TO
+                           13R         2062.    5.42       853.      551.      516.       4.37
        HYDROGRAPH AT
+                            D1         1072.    4.25        98.       25.       18.       0.69
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          ROUTED TO
+                         4R      1072.    4.25          98.         25.         18.       0.69

          HYDROGRAPH AT
+                         C1      1301.    4.25         128.         32.         23.       0.95

          ROUTED TO
+                         3R      1301.    4.25         128.         32.         23.       0.95

          HYDROGRAPH AT
+                         B1       668.    4.08          48.         12.          9.       0.30

          ROUTED TO
+                         2R       668.    4.08          48.         12.          9.       0.30

          HYDROGRAPH AT
+                         A1      1587.    4.33         170.         42.         31.       1.63

          ROUTED TO
+                         1R      1587.    4.33         170.         42.         31.       1.63


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

```
                0.00      0.00      0.00      0.01      0.01      0.01      0.01      0.01      0.01      0.03
                0.03      0.03      0.05      0.05      0.05      0.15      0.15      0.15      0.03      0.03
                0.03      0.01      0.01      0.01      0.01      0.01      0.01      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00

20 JD         INDEX STORM NO. 3
                STRM        3.26  PRECIPITATION DEPTH
                TRDA        1.00  TRANSPOSITION DRAINAGE AREA

21 PI          PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.01      0.01      0.01      0.01      0.01      0.01      0.03
                0.03      0.03      0.06      0.06      0.06      0.12      0.12      0.12      0.03      0.03
                0.03      0.01      0.01      0.01      0.01      0.01      0.01      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00

24 JD         INDEX STORM NO. 4
                STRM        3.17  PRECIPITATION DEPTH
                TRDA        5.00  TRANSPOSITION DRAINAGE AREA

25 PI          PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.01      0.00      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.03
                0.03      0.03      0.06      0.06      0.06      0.08      0.08      0.08      0.05      0.05
                0.05      0.02      0.02      0.02      0.01      0.01      0.01      0.01      0.01      0.01
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00

28 JD         INDEX STORM NO. 5
                STRM        3.10  PRECIPITATION DEPTH
                TRDA       10.00  TRANSPOSITION DRAINAGE AREA

29 PI          PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.01      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.01      0.00      0.01
                0.01      0.00      0.00      0.01      0.01      0.01      0.02      0.02      0.02      0.03
                0.03      0.03      0.06      0.06      0.06      0.07      0.07      0.07      0.04      0.04
                0.04      0.02      0.02      0.02      0.01      0.01      0.01      0.01      0.01      0.01
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00
1
                                          RUNOFF SUMMARY
                                   FLOW IN CUBIC FEET PER SECOND
                                TIME IN HOURS,  AREA IN SQUARE MILES

                                      PEAK   TIME OF     AVERAGE FLOW FOR MAXIMUM PERIOD      BASIN    MAXIMUM    TIME OF
        OPERATION        STATION      FLOW    PEAK                                          AREA     STAGE    MAX STAGE
+                                                          6-HOUR     24-HOUR     72-HOUR

        HYDROGRAPH AT
+                            E2       792.    4.75         143.        36.         26.       1.22
        HYDROGRAPH AT
+                            E1      1375.    4.42         193.        48.         35.       1.47
        2 COMBINED AT
+                            1E      1754.    4.50         303.        76.         55.       2.69
        ROUTED TO
+                         1E-2E      1585.    4.92         302.        76.         55.       2.69
        HYDROGRAPH AT
+                            E3       650.    6.33         538.       472.        466.       0.94
        2 COMBINED AT
+                            2E      2017.    5.00         805.       539.        514.       3.63
        ROUTED TO
+                         2E-3E      1896.    5.42         805.       539.        508.       3.63
        HYDROGRAPH AT
+                            E4       310.    5.25          82.        20.         15.       0.74
        2 COMBINED AT
+                            3E      2062.    5.42         853.       551.        516.       4.37
        ROUTED TO
+                           13R      2062.    5.42         853.       551.        516.       4.37
        HYDROGRAPH AT
+                            D1      1072.    4.25          98.        25.         18.       0.69
```

```
          ROUTED TO
+                         4R      1072.    4.25          98.         25.         18.       0.69

          HYDROGRAPH AT
+                         C1      1301.    4.25         128.         32.         23.       0.95

          ROUTED TO
+                         3R      1301.    4.25         128.         32.         23.       0.95

          HYDROGRAPH AT
+                         B1       668.    4.08          48.         12.          9.       0.30

          ROUTED TO
+                         2R       668.    4.08          48.         12.          9.       0.30

          HYDROGRAPH AT
+                         A1      1587.    4.33         170.         42.         31.       1.63

          ROUTED TO
+                         1R      1587.    4.33         170.         42.         31.       1.63


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

# HEC-1 Existing Conditions

- BGE, 100-Yr, 6-Hr

```
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   28FEB08  TIME  16:53:19  *                                    *           (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        FCDMC
        2           ID        0607BASE_EXST_6HR - Buckeye ADMP Existing Conditions Hydrology Update
        3           ID        Major Basin: 01
        4           ID        100 Year - Return Period
        5           ID        6 Hour Storm
        6           ID        Multiple Storms
        7           ID        Unit Hydrograph: S-Graph
        8           ID        01/09/2008
                    * ******************************************************************************
                    *  Original Model prepared as: Buckeye/Sun Valley ADMS - November 2004
                    *                              by PBS&J - Modelers: Jacob Lesue & Wen Chen
                    * ************ THIS MODEL: Major Basin 01, Model Area BGE *********************
                    *  100-year 6-hour
                    *  NEW FILE NAME:  "BGE1006EX.DAT"
                    *  Existing Conditions
                    *  Area 1 - BIC to Gila (East)
                    *  Major Basin Key:  01=BGE, 02=BGW, 03=FRE, 04=FRW, 05=RBE, 06=RBW, 07=AREA2
                    *  Rainfall Loss Method - Green & Ampt
                    *  Unit Hydrograph Method - FCDMC S-Graph
                    *  Channel Routing Method - Normal Depth
                    *  Soil Data - USDA SCS Soil Survey (1972 & 1981)
                    *  Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
                    *  Retention volume for newly developed areas accounted for with FCDMC
                    *  storage methodology equation - V=C(P/12)A, where C=0.71 & P=2.8
                    * ******************************************************************************
                    *  UPDATED BY DIBBLE ENGINEERING, SEPTEMBER 2007
                    *  Land Use Updated using - FCDMC GIS Data: mag_landuse (2005)
                    * ******************************************************************************
                    *
                    *DIAGRAM
                    *
        9           IT       15 02JAN94       0     400
       10           IO        5
       11           IN       15 02JAN94       0
                    *
                    *
       12           JD   3.300  0.0100
                    * 6-hour distribution, pattern 1.0
       13           PC   0.000   0.008   0.016   0.025   0.033   0.041   0.050   0.058   0.066   0.074
       14           PC   0.087   0.099   0.118   0.138   0.216   0.377   0.834   0.911   0.931   0.950
       15           PC   0.962   0.972   0.983   0.991   1.000
       16           JD   3.280  0.5000
                    * 6-hour distribution, pattern 1.0
       17           PC   0.000   0.008   0.016   0.025   0.033   0.041   0.050   0.058   0.066   0.074
       18           PC   0.087   0.099   0.118   0.138   0.216   0.377   0.834   0.911   0.931   0.950
       19           PC   0.962   0.972   0.983   0.991   1.000
       20           JD   3.257     1.0
                    * 6-hour distribution, pattern 1.4
       21           PC   0.000   0.008   0.016   0.025   0.033   0.041   0.050   0.058   0.066   0.075
       22           PC   0.087   0.099   0.119   0.148   0.230   0.407   0.778   0.881   0.919   0.945
       23           PC   0.957   0.968   0.980   0.990   1.000
```

```
 24          JD   3.168     5.0
             * 6-hour distribution, pattern 2.3
 25          PC   0.000   0.011   0.017   0.027   0.039   0.049   0.060   0.070   0.080   0.091
 26          PC   0.103   0.118   0.139   0.183   0.270   0.458   0.686   0.823   0.889   0.929
1                                          HEC-1 INPUT                                          PAGE  2

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

 27          PC   0.949   0.962   0.974   0.988   1.000
 28          JD   3.102    10.0
             * 6-hour distribution, pattern 2.7
 29          PC   0.000   0.013   0.019   0.029   0.044   0.057   0.069   0.081   0.094   0.107
 30          PC   0.122   0.137   0.160   0.205   0.289   0.466   0.677   0.807   0.877   0.919
 31          PC   0.947   0.961   0.974   0.987   1.000
             *
             *

 32          KK    BICM
 33          KM   ******************************************************************************
 34          KM   **   SUB-WATERSHED M   ******************************************************
 35          KM   ******************************************************************************
 36          KM   FALSE BASIN TO SIMULATE INFLOW FROM BIC
 37          BA   0.001
 38          ZR  =QI A=BIC BIC B=52599 LAT STRUCT C=FLOW-WEIR D=02JAN1994 E=15MIN F=BIC-100-06E
             *

 39          KK  M4S6TH   ROUTE
 40          KM   ROUTE INFLOW FROM BIC CONCENTRATED AT M4S TO 6TH (CHANNEL M4S-6TH)
 41          RS       1    FLOW     0.0     0.0
 42          RC   0.050   0.015   0.050    1950  0.0080    2.00
 43          RX    0.00  100.00  100.00  112.00  112.00  124.00  124.00  224.00
 44          RY    2.00    0.50    0.00    0.24    0.24    0.00    0.50    2.00
             *

 45          KK     4th   BASIN
 46          KM   S-GRAPH TYPE=PHOENIX VALLEY
 47          BA   0.082
 48          LG    0.18    0.25    5.20    0.33      55
 49          UI      17      50      79      44      14       4       3       0       0       0
             *

 50          KK  TO4THS  DIVERT
 51          KM   HYDROGRAPH DIVERTED TO 4THS
 52          DT  TO4THS     0.0     0.0
 53          DI     0.0   100.0  1000.0  2000.0  2000.0  2000.0  2000.0  2000.0  2000.0  2000.0
 54          DI  2000.0  2000.0  2000.0  2000.0  2000.0  2000.0  2000.0  2000.0  2000.0  2000.0
 55          DQ     0.0    50.0   500.0  1000.0  1000.0  1000.0  1000.0  1000.0  1000.0  1000.0
 56          DQ  1000.0  1000.0  1000.0  1000.0  1000.0  1000.0  1000.0  1000.0  1000.0  1000.0
             *

 57          KK  4TH6TH   ROUTE
 58          KM   ROUTE HYDROGRAPH FROM 4TH CONCENTRATED AT 4THA TO 6TH (CHANNEL 4TH6TH)
 59          RS       1    FLOW     0.0     0.0
 60          RC   0.050   0.015   0.050     872  0.0020    0.00
 61          RX    0.00  100.00  100.00  127.50  127.50  155.00  155.00  255.00
 62          RY    2.00    0.50    0.00    0.55    0.55    0.00    0.50    2.00
             *
1                                          HEC-1 INPUT                                          PAGE  3

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

 63          KK     6th   BASIN
 64          KM   S-GRAPH TYPE=PHOENIX VALLEY
 65          BA   0.057
 66          LG    0.20    0.15    7.60    0.12      47
 67          UI      19      59      49      15       3       0       0       0       0       0
             *

 68          KK    6thA COMBINE  6TH8TH
 69          KM   COMBINE ROUTED HYDROGRAPH FROM 4THA WITH RUNOFF FROM 6TH @ 6THA
 70          HC       3
             *

 71          KK  TO7THS  DIVERT
 72          KM   HYDROGRAPH DIVERTED TO 7THS
 73          DT  TO7THS     0.0     0.0
 74          DI     0.0   100.0  1000.0  2000.0  2000.0  2000.0  2000.0  2000.0  2000.0  2000.0
 75          DI  2000.0  2000.0  2000.0  2000.0  2000.0  2000.0  2000.0  2000.0  2000.0  2000.0
 76          DQ     0.0    50.0   500.0  1000.0  1000.0  1000.0  1000.0  1000.0  1000.0  1000.0
 77          DQ  1000.0  1000.0  1000.0  1000.0  1000.0  1000.0  1000.0  1000.0  1000.0  1000.0
             *

 78          KK  6TH8TH   ROUTE
 79          KM   ROUTE HYDROGRAPH FROM 6THA TO 8TH (CHANNEL 6TH8TH)
 80          RS       1    FLOW     0.0     0.0
 81          RC   0.050   0.015   0.050    1116  0.0020    0.00
 82          RX    0.00  100.00  100.00  127.50  127.50  155.00  155.00  255.00
 83          RY    2.00    0.50    0.00    0.55    0.55    0.00    0.50    2.00
```

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                 *

  84             KK     8th   BASIN
  85             KM   S-GRAPH TYPE=PHOENIX VALLEY
  86             BA   0.079
  87             LG    0.23    0.16    8.80    0.07      38
  88             UI      10      32      58      53      31      11       5       2       2       0
                 *

  89             KK    8thA COMBINE  8TH9TH
  90             KM   COMBINE ROUTED HYDROGRAPH FROM 6THA WITH RUNOFF FROM 8TH @ 8THA
  91             HC       2
                 *

  92             KK   TOCEN  DIVERT
  93             KM   HYDROGRAPH DIVERTED TO CENTRA
  94             DT  TOCEN1     0.0     0.0
  95             DI     0.0   100.0  1000.0  2000.0  2000.0  2000.0  2000.0  2000.0  2000.0  2000.0
  96             DI  2000.0  2000.0  2000.0  2000.0  2000.0  2000.0  2000.0  2000.0  2000.0  2000.0
  97             DQ     0.0    50.0   500.0  1000.0  1000.0  1000.0  1000.0  1000.0  1000.0  1000.0
  98             DQ  1000.0  1000.0  1000.0  1000.0  1000.0  1000.0  1000.0  1000.0  1000.0  1000.0
                 *
1                                          HEC-1 INPUT                                          PAGE  4

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

  99             KK  8TH9TH   ROUTE
 100             KM   ROUTE HYDROGRAPH FROM 8THA TO 9TH (CHANNEL 8TH9TH)
 101             RS       1    FLOW     0.0     0.0
 102             RC   0.050   0.015   0.050     680  0.0020    0.00
 103             RX    0.00  100.00  100.00  127.50  127.50  155.00  155.00  255.00
 104             RY    2.00    0.50    0.00    0.55    0.55    0.00    0.50    2.00
                 *

 105             KK    9thE   BASIN
 106             KM   S-GRAPH TYPE=PHOENIX VALLEY
 107             BA   0.095
 108             LG    0.17    0.16    8.80    0.08      31
 109             UI      31      99      81      25       6       0       0       0       0       0
                 *

 110             KK    9thW   BASIN
 111             KM   S-GRAPH TYPE=PHOENIX VALLEY
 112             BA   0.081
 113             LG    0.18    0.17    8.40    0.10      30
 114             UI      12      34      64      52      29      11       4       2       0       0
                 *

 115             KK     9th COMBINE
 116             KM   COMBINE ROUTED HYDROGRAPH FROM 8THA WITH RUNOFF FROM 9THE AND 9THW @ 9TH
 117             HC       3
                 *

 118             KK  TOCEN2  DIVERT
 119             KM   HYDROGRAPH DIVERTED TO CENTRA
 120             DT  TOCEN2     0.0     0.0
 121             DI     0.0   100.0  1000.0  2000.0  2000.0  2000.0  2000.0  2000.0  2000.0  2000.0
 122             DI  2000.0  2000.0  2000.0  2000.0  2000.0  2000.0  2000.0  2000.0  2000.0  2000.0
 123             DQ     0.0    50.0   500.0  1000.0  1000.0  1000.0  1000.0  1000.0  1000.0  1000.0
 124             DQ  1000.0  1000.0  1000.0  1000.0  1000.0  1000.0  1000.0  1000.0  1000.0  1000.0
                 *

 125             KK    BICN
 126             KM   ******************************************************************************
 127             KM   **   SUB-WATERSHED N-A   (DRAINS INTO SUB-WATERSHED M) ************************
 128             KM   ******************************************************************************
 129             KM   FALSE BASIN TO SIMULATE INFLOW FROM BIC
 130             BA   0.001
 131             ZR  =QI A=BIC BIC B=58999 LAT STRUCT C=FLOW-WEIR D=02JAN1994 E=15MIN F=BIC-100-06E
                 *

 132             KK   N6S-D   ROUTE
 133             KM   ROUTE INFLOW FROM BIC CONCENTRATED AT N6S TO DRAINA (CHANNEL A)
 134             RS       1    FLOW     0.0     0.0
 135             RC   0.100   0.100   0.100   12189  0.0030    0.00
 136             RX    0.00  250.00  500.00  750.00 1000.00 1333.30 1666.60 2000.00
 137             RY   10.00    7.50    5.00    2.50    0.00    3.30    6.60   10.00
                 *
1                                          HEC-1 INPUT                                          PAGE  5

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

 138             KK    BICO
 139             KM   ******************************************************************************
 140             KM   **   SUB-WATERSHED O (DRAINS INTO SUB-WATERSHED M) *************************
 141             KM   ******************************************************************************
 142             KM   FALSE BASIN TO SIMULATE INFLOW FROM BIC
```

```
143          BA   0.001
144          ZR  =QI A=BIC BIC B=63799 LAT STRUCT C=FLOW-WEIR D=02JAN1994 E=15MIN F=BIC-100-06E
             *

145          KK   O8SO9   ROUTE
146          KM   ROUTE INFLOW FROM BIC CONCENTRATED AT O8S TO O9 (CHANNEL A)
147          RS       1    FLOW     0.0     0.0
148          RC   0.100   0.100   0.100    6048  0.0040    0.00
149          RX    0.00  250.00  500.00  750.00 1000.00 1333.30 1666.60 2000.00
150          RY   10.00    7.50    5.00    2.50    0.00    3.30    6.60   10.00
             *

151          KK      93   BASIN
152          KM   S-GRAPH TYPE=AGRICULTURE
153          BA   0.377
154          LG    0.82    0.25    4.90    0.41       7
155          UI      11      16      34      66      73      92      97      98      80      85
156          UI      62      56      40      34      27      20      15      13      10       9
157          UI       7       6       4       1       2       1       2       1       1       2
158          UI       1       2       1       1       2       0       0       0       0       0
             *

159          KK      O9 COMBINE   O9O10
160          KM   COMBINE ROUTED HYDROGRAPH FROM O9 WITH RUNOFF FROM 93 @ O10
161          HC       2
             *

162          KK   O9O10   ROUTE
163          KM   ROUTE HYDROGRAPH FROM O9 TO O10 (CHANNEL A)
164          RS       3    FLOW     0.0     0.0
165          RC   0.100   0.100   0.100    8758  0.0010    0.00
166          RX    0.00  250.00  500.00  750.00 1000.00 1333.30 1666.60 2000.00
167          RY   10.00    7.50    5.00    2.50    0.00    3.30    6.60   10.00
             *

168          KK      95   BASIN
169          KM   S-GRAPH TYPE=AGRICULTURE
170          BA   0.522
171          LG    0.85    0.15    8.00    0.12       6
172          UI      10      11      14      24      43      60      55      80      76      86
173          UI      87      86      79      73      75      65      55      57      41      37
174          UI      30      31      24      19      16      14      13      11      10       9
175          UI       7       6       6       5       6       1       2       1       1       1
176          UI       2       1       1       1       1       2       1       1       1       2
177          UI       1       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

178          KK     O10 COMBINE   O10DR
179          KM   COMBINE ROUTED HYDROGRAPH FROM O9 WITH RUNOFF FROM 95 @ O10
180          HC       2
             *

181          KK    TOP9  DIVERT
182          KM   HYDROGRAPH DIVERTED TO P9
183          DT    TOP9     0.0     0.0
184          DI     0.0   100.0  1000.0  2000.0  2000.0  2000.0  2000.0  2000.0  2000.0  2000.0
185          DI  2000.0  2000.0  2000.0  2000.0  2000.0  2000.0  2000.0  2000.0  2000.0  2000.0
186          DQ     0.0    50.0   500.0  1000.0  1000.0  1000.0  1000.0  1000.0  1000.0  1000.0
187          DQ  1000.0  1000.0  1000.0  1000.0  1000.0  1000.0  1000.0  1000.0  1000.0  1000.0
             *

188          KK   O10DR   ROUTE
189          KM   ROUTE HYDROGRAPH FROM O10 TO DRAINA (CHANNEL A)
190          RS      13    FLOW     0.0     0.0
191          RC   0.100   0.100   0.100    5733  0.0003    0.00
192          RX    0.00  250.00  500.00  750.00 1000.00 1333.30 1666.60 2000.00
193          RY   10.00    7.50    5.00    2.50    0.00    3.30    6.60   10.00
             *

194          KK  CENTRE   BASIN
195          KM   S-GRAPH TYPE=PHOENIX VALLEY
196          BA   0.069
197          LG    0.23    0.16    7.00    0.15      41
198          UI      19      61      64      24       8       2       0       0       0       0
             *

199          KK  FRM9THRETRIEVE
200          KM   RETRIEVE HYDROGRAPH FROM 9TH
201          DR  TOCEN2
             *

202          KK  9THCEN   ROUTE
203          KM   ROUTE HYDROGRAPH FROM 9TH TO CENTRA (CHANNEL 9THCEN)
204          RS       1    FLOW     0.0     0.0
205          RC   0.050   0.015   0.050    1300  0.0080    0.00
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```
206          RX    0.00  100.00  100.00  112.00  112.00  124.00  124.00  224.00
207          RY    2.00    0.50    0.00    0.24    0.24    0.00    0.50    2.00
             *

208          KK  FRM8THRETRIEVE
209          KM   RETRIEVE HYDROGRAPH FROM 8TH
210          DR  TOCEN1
             *

211          KK  8THCEN   ROUTE
212          KM   ROUTE HYDROGRAPH FROM 8TH TO CENTRA (CHANNEL 8THCEN)
213          RS       1    FLOW     0.0     0.0
214          RC   0.050   0.015   0.050    1967  0.0070    0.00
215          RX    0.00  100.00  100.00  112.00  112.00  124.00  124.00  224.00
216          RY    2.00    0.50    0.00    0.24    0.24    0.00    0.50    2.00
             *
1                                          HEC-1 INPUT                                                    PAGE  7

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

217          KK  CENTRA COMBINE  CENBEL
218          KM   COMBINE DIVERTED HYDROGRAPHS FROM 8THA AND 9TH WITH RUNOFF FROM CENTRAL @ CEN
219          HC       3
             *

220          KK  TOBELO  DIVERT
221          KM   HYDROGRAPH DIVERTED TO BELOAA
222          DT   TODRN     0.0     0.0
223          DI     0.0   100.0  1000.0  2000.0  2000.0  2000.0  2000.0  2000.0  2000.0  2000.0
224          DI  2000.0  2000.0  2000.0  2000.0  2000.0  2000.0  2000.0  2000.0  2000.0  2000.0
225          DQ     0.0    50.0   500.0  1000.0  1000.0  1000.0  1000.0  1000.0  1000.0  1000.0
226          DQ  1000.0  1000.0  1000.0  1000.0  1000.0  1000.0  1000.0  1000.0  1000.0  1000.0
             *

227          KK  CENBEL   ROUTE
228          KM   ROUTE HYDROGRAPH FROM CENTRA TO BELOAA (CHANNEL CENBEL)
229          RS       2    FLOW     0.0     0.0
230          RC   0.050   0.015   0.050    2542  0.0050    0.00
231          RX    0.00  100.00  100.00  112.00  112.00  124.00  124.00  224.00
232          RY    2.00    0.50    0.00    0.24    0.24    0.00    0.50    2.00
             *

233          KK  BELOAT   BASIN
234          KM   S-GRAPH TYPE=PHOENIX VALLEY
235          BA   0.047
236          LG    0.26    0.16    8.80    0.06      32
237          UI       8      25      42      28      11       5       1       0       0       0
             *

238          KK  BELOAA COMBINE  BELDRN
239          KM   COMBINE ROUTED HYDROGRAPH FROM CENTRA WITH RUNOFF FROM BELOAT @ BELOAA
240          HC       2
             *

241          KK  BELDRN   ROUTE
242          KM   ROUTE HYDROGRAPH FROM BELOAA TO DRAINA (CHANNEL BELDRN)
243          RS       2    FLOW     0.0     0.0
244          RC   0.035   0.150   0.035    1343  0.0010    0.00
245          RX    0.00  108.00  120.00  132.00  132.00  144.00  156.00  264.00
246          RY    8.00    0.00    3.00    3.24    3.24    3.00    0.00    8.00
             *

247          KK  BAYLIS   BASIN
248          KM   S-GRAPH TYPE=PHOENIX VALLEY
249          BA   0.016
250          LG    0.15    0.16    9.70    0.07      64
251          UI      33       8       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

252          KK  DETDRN   ROUTE
253          KM   ROUTE HYDROGRAPH FROM DET TO DRAINA (CHANNEL DETDRN)
254          RS       1    FLOW     0.0     0.0
255          RC   0.050   0.030   0.050    2657  0.0070    0.00
256          RX    0.00   50.00  100.00  108.00  110.00  118.00  168.00  218.00
257          RY    9.00    8.50    8.00    0.00    0.00    8.00    8.50    9.00
             *

258          KK      92   BASIN
259          KM   S-GRAPH TYPE=AGRICULTURE
260          BA   1.014
261          LG    0.85    0.15    8.40    0.10       6
262          UI      20      19      28      44      81     115     106     149     148     166
263          UI     166     166     155     139     147     130     104     114      80      74
264          UI      59      57      53      38      31      29      24      23      18      18
```

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                *

 265            KK   DRAIN   BASIN
 266            KM   S-GRAPH TYPE=PHOENIX VALLEY
 267            BA   0.116
 268            LG    0.29    0.15    9.70    0.06      34
 269            UI       9      33      50      80      57      37      16       9       4       2
                *

 270            KK   DRN-O  DIVERT
 271            KM   DIVERT RETENTION OUT OF MODEL DUE TO DEVELOPMENT
 272            KM   RETENTION CALCULATION BASED ON FCDMC METHODOLOGY - CALCULATED VALUE IS 6.5
 273            KM   80% OF CALCULATED VALUE (5.2) IS APPLIED HERE - JTB
 274            DT  DRNRET     5.2     0.0
                * 'DRAIN' ABREVIATED TO "DRN" FOR 'DRNRET' ON DT RECORD - JTB
 275            DI     0.0 10000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
 276            DQ     0.0 10000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

 277            KK  FRMCENRETRIEVE
 278            KM   RETRIEVE HYDROGRAPH FROM CENTRA
 279            DR   TODRN
                *

 280            KK  CENDRN   ROUTE
 281            KM   ROUTE HYDROGRAPH FROM CENTRA TO DRAINA (CHANNEL CENDRN)
 282            RS       1    FLOW     0.0     0.0
 283            RC   0.050   0.050   0.050    1888  0.0050    0.00
 284            RX    0.00  300.00  600.00  900.00 1200.00 1500.00 1800.00 2100.00
 285            RY    1.00    0.67    0.33    0.00    0.00    0.33    0.67    1.00
                *

 286            KK  DRAINA COMBINE   DRNM5
 287            KM   COMBINE DIVERTED HYDROGRAPH FROM CENTRA WITH ROUTED HYDROGRAPHS FROM BELOAA,
 288            HC       7
                *
1                                          HEC-1 INPUT                                          PAGE  9

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

 289            KK   DRNM5   ROUTE
 290            KM   ROUTE HYDROGRAPH FROM DRAINA TO M5 (CHANNEL DRNM5)
 291            RS       5    FLOW     0.0     0.0
 292            RC   0.050   0.050   0.050    7895  0.0010    0.00
 293            RX    0.00  500.00  525.00  528.00  543.00  546.00  571.00 1071.00
 294            RY    9.00    4.00    2.00    0.00    0.00    2.00    4.00    9.00
                *

 295            KK    4thS   BASIN
 296            KM   S-GRAPH TYPE=PHOENIX VALLEY
 297            BA   0.145
 298            LG    0.18    0.22    6.40    0.20      58
 299            UI      14      45      73     106      66      40      15       9       2       3
                *

 300            KK  FRM4THRETRIEVE
 301            KM   RETRIEVE HYDROGRAPH FROM 4TH
 302            DR  TO4THS
                *

 303            KK   4TH4S   ROUTE
 304            KM   ROUTE HYDROGRAPH FROM 4THA TO 4THSA (CHANNEL 4TH4S)
 305            RS       1    FLOW     0.0     0.0
 306            RC   0.050   0.015   0.050    2629  0.0150    0.00
 307            RX    0.00  100.00  100.00  112.00  112.00  124.00  124.00  224.00
 308            RY    2.00    0.50    0.00    0.24    0.24    0.00    0.50    2.00
                *

 309            KK   4thSA COMBINE  4TH7TH
 310            KM   COMBINE DIVERTED HYDROGRAPH FROM 4THA WITH RUNOFF FROM 4THS @ 4THSA
 311            HC       2
                *

 312            KK  4TH7TH   ROUTE
 313            KM   ROUTE HYDROGRAPH FROM 4THSA TO 7THSA (CHANNEL 4TH7TH)
 314            RS       2    FLOW     0.0     0.0
 315            RC   0.050   0.015   0.050    1339  0.0028    0.00
 316            RX    0.00  100.00  100.00  112.00  112.00  124.00  124.00  224.00
 317            RY    2.00    0.50    0.00    0.24    0.24    0.00    0.50    2.00
                *

 318            KK     7th   BASIN
 319            KM   S-GRAPH TYPE=PHOENIX VALLEY
 320            BA   0.127
 321            LG    0.21    0.26    5.30    0.31      39
 322            UI      21      63     113      76      34      14       3       4       0       0
                *
```

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 323          KK  FRM6THRETRIEVE
 324          KM   RETRIEVE HYDROGRAPH FROM 6THA
 325          DR  TO7THS
              *
1                                        HEC-1 INPUT                                                    PAGE 10

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


 326          KK  6TH7TH   ROUTE
 327          KM   ROUTE HYDROGRAPH FROM 6THA TO 7THSA (CHANNEL 6TH7TH)
 328          RS       1    FLOW     0.0     0.0
 329          RC   0.050   0.015   0.050    3061  0.0060    0.00
 330          RX    0.00  100.00  100.00  112.00  112.00  124.00  124.00  224.00
 331          RY    2.00    0.50    0.00    0.24    0.24    0.00    0.50    2.00
              *

 332          KK   7thSA COMBINE   7THM5
 333          KM   COMBINE DIVERTED HYDROGRAPH FROM 6THA WITH ROUTED HYDROGRAPH FROM 4THSA WITH
 334          HC       3
              *

 335          KK   7THM5   ROUTE
 336          KM   ROUTE HYDROGRAPH FROM 7THSA TO M5 (CHANNEL 7THM5)
 337          RS       2    FLOW     0.0     0.0
 338          RC   0.050   0.050   0.050    5287  0.0020    0.00
 339          RX    0.00   25.00   28.00   31.00   46.00   49.00   52.00   77.00
 340          RY    6.00    4.00    2.00    0.00    0.00    2.00    4.00    6.00
              *

 341          KK      98   BASIN
 342          KM   S-GRAPH TYPE=AGRICULTURE
 343          BA   0.388
 344          LG    0.53    0.16    8.80    0.08      19
 345          UI      13      21      51      75     101     113     112      96      95      73
 346          UI      57      43      37      24      19      15      12       9       8       8
 347          UI       2       1       2       2       1       2       2       1       2       2
 348          UI       1       0       0       0       0       0       0       0       0       0
              *
              *

 349          KK    98-O  DIVERT
 350          KM   DIVERT RETENTION OUT OF MODEL DUE TO DEVELOPMENT
 351          KM   RETENTION CALCULATION BASED ON FCDMC METHODOLOGY - CALCULATED VALUE IS 6.6
 352          KM   80% OF CALCULATED VALUE (5.2) IS APPLIED HERE - JTB
 353          DT   98RET     5.2     0.0
 354          DI     0.0 10000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
 355          DQ     0.0 10000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

 356          KK      M5 COMBINE
 357          KM   COMBINE ROUTED HYDROGRAPHs FROM 7THSA AND DRAINA WITH RUNOFF FROM 98 @ M5
 358          HC       3
              *

 359          KK    BICP
 360          KM   ******************************************************************************
 361          KM   **   SUB-WATERSHED P   ********************************************************
 362          KM   ******************************************************************************
 363          KM   FALSE BASIN TO SIMULATE INFLOW FROM BIC
 364          BA   0.001
 365          ZR  =QI A=BIC BIC B=67395 LAT STRUCT C=FLOW-WEIR D=02JAN1994 E=15MIN F=BIC-100-06E
              *
1                                        HEC-1 INPUT                                                    PAGE 11

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


 366          KK   P6SP7   ROUTE
 367          KM   ROUTE INFLOW FROM BIC CONCENTRATED AT P6S TO P7 (CHANNEL A)
 368          RS       1    FLOW     0.0     0.0
 369          RC   0.100   0.100   0.100    5100  0.0050    0.00
 370          RX    0.00  250.00  500.00  750.00 1000.00 1333.30 1666.60 2000.00
 371          RY   10.00    7.50    5.00    2.50    0.00    3.30    6.60   10.00
              *

 372          KK      94   BASIN
 373          KM   S-GRAPH TYPE=AGRICULTURE
 374          BA   0.719
 375          LG    0.91    0.15    7.30    0.16       4
 376          UI      19      22      46      90     111     142     158     163     164     138
 377          UI     145     112     110      76      64      57      44      32      28      24
 378          UI      18      18      11      11      11       6       3       2       3       2
 379          UI       3       2       2       3       2       3       2       3       2       2
 380          UI       0       0       0       0       0       0       0       0       0       0
              *

 381          KK      P7 COMBINE   P7-P8
 382          KM   COMBINE ROUTED HYDROGRAPH FROM P6S WITH RUNOFF FROM 94 @ P7
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```
 383          HC       2
              *

 384          KK   P7-P8   ROUTE
 385          KM   ROUTE HYDROGRAPH FROM P7 TO P8 (CHANNEL A)
 386          RS       6    FLOW     0.0     0.0
 387          RC   0.100   0.100   0.100    3900  0.0020    0.00
 388          RX    0.00  250.00  500.00  750.00 1000.00 1333.30 1666.60 2000.00
 389          RY   10.00    7.50    5.00    2.50    0.00    3.30    6.60   10.00
              *

 390          KK      96   BASIN
 391          KM   S-GRAPH TYPE=AGRICULTURE
 392          BA   0.914
 393          LG    0.89    0.15    7.30    0.16       5
 394          UI      18      19      28      45      82     109     104     141     149     155
 395          UI     156     156     133     132     140      98     105      84      71      58
 396          UI      52      52      35      31      27      23      21      17      17      13
 397          UI      10      11      10      10       3       2       2       2       3       2
 398          UI       2       3       2       2       3       2       2       3       2       2
 399          UI       2       0       0       0       0       0       0       0       0       0
              *

 400          KK    96-O  DIVERT
 401          KM   DIVERT RETENTION OUT OF MODEL DUE TO DEVELOPMENT
 402          KM   RETENTION CALCULATION BASED ON FCDMC METHODOLOGY - CALCULATED VALUE IS 16.6
 403          KM   80% OF CALCULATED VALUE (13.3) IS APPLIED HERE - JTB
 404          DT   96RET    13.3     0.0
 405          DI     0.0 10000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
 406          DQ     0.0 10000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
1                                          HEC-1 INPUT                                          PAGE 12

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

 407          KK      P8 COMBINE   P8-P9
 408          KM   COMBINE ROUTED HYDROGRAPH FROM P7 WITH RUNOFF FROM 96 @ P8
 409          HC       2
              *

 410          KK   P8-P9   ROUTE
 411          KM   ROUTE HYDROGRAPH FROM P8 TO P9 (CHANNEL A)
 412          RS       9    FLOW     0.0     0.0
 413          RC   0.100   0.100   0.100    6986  0.0010    0.00
 414          RX    0.00  250.00  500.00  750.00 1000.00 1333.30 1666.60 2000.00
 415          RY   10.00    7.50    5.00    2.50    0.00    3.30    6.60   10.00
              *

 416          KK      97   BASIN
 417          KM   S-GRAPH TYPE=AGRICULTURE
 418          BA   0.500
 419          LG    0.77    0.17    6.80    0.18       9
 420          UI      13      12      25      50      72      75      97     105     104     102
 421          UI      88      92      71      72      51      43      36      35      23      20
 422          UI      15      15      11      12       7       7       7       5       2       2
 423          UI       1       2       1       2       1       2       2       1       2       1
 424          UI       2       1       2       2       0       0       0       0       0       0
              *

 425          KK    97-O  DIVERT
 426          KM   DIVERT RETENTION OUT OF MODEL DUE TO DEVELOPMENT
 427          KM   RETENTION CALCULATION BASED ON FCDMC METHODOLOGY - CALCULATED VALUE IS 13.0
 428          KM   80% OF CALCULATED VALUE (10.4) IS APPLIED HERE - JTB
 429          DT   97RET    10.4     0.0
 430          DI     0.0 10000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
 431          DQ     0.0 10000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

 432          KK   FRO10RETRIEVE
 433          KM   RETRIEVE HYDROGRAPH FROM O10
 434          DR    TOP9
              *

 435          KK  O10-P9   ROUTE
 436          KM   ROUTE HYDROGRAPH FROM O10 TO P9 (CHANNEL 010-P9)
 437          RS       1    FLOW     0.0     0.0
 438          RC   0.050   0.050   0.050    1492  0.0020    0.00
 439          RX    0.00  200.00  235.00  251.00  263.00  279.00  314.00  349.00
 440          RY   12.00   10.00    8.00    0.00    0.00    8.00   10.00   12.00
              *

 441          KK      P9 COMBINE  P9-P10
 442          KM   COMBINE ROUTED HYDROGRAPH FROM P8 WITH DIVERTED HYDROGRAPH FROM O10 WITH RUNO
 443          HC       3
              *
1                                          HEC-1 INPUT                                          PAGE 13

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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444          KK  P9-P10   ROUTE
445          KM   ROUTE HYDROGRAPH FROM P9 TO P10 (CHANNEL A)
446          RS       5    FLOW     0.0     0.0
447          RC   0.100   0.100   0.100    3952  0.0050    0.00
448          RX    0.00  250.00  500.00  750.00 1000.00 1333.30 1666.60 2000.00
449          RY   10.00    7.50    5.00    2.50    0.00    3.30    6.60   10.00
             *

450          KK     100   BASIN
451          KM   S-GRAPH TYPE=AGRICULTURE
452          BA   0.582
453          LG    1.00    0.23    6.20    0.25       0
454          UI      11      12      16      25      47      66      60      88      84      96
455          UI      95      96      88      80      84      75      60      65      46      42
456          UI      34      33      29      22      18      17      14      12      11      10
457          UI       9       6       7       6       7       2       2       1       1       2
458          UI       1       2       1       1       2       1       2       1       2       1
459          UI       1       0       0       0       0       0       0       0       0       0
             *

460          KK     P10 COMBINE
461          KM   COMBINE ROUTED HYDROGRAPH FROM P9 WITH RUNOFF FROM 100 @ P10
462          HC       2
             *

463          KK      99   BASIN
464          KM   ******************************************************************************
465          KM   **   SUB-WATERSHED N-B   ******************************************************
466          KM   ******************************************************************************
467          KM   S-GRAPH TYPE=AGRICULTURE
468          KM   S-GRAPH TYPE MODIFIED BY DIBBLE ENGINEERING FOR ADMP HYDROLOGY UPDATE - JTB
469          BA   0.948
470          LG    0.19    0.26    6.00    0.22       7
471          UI      80     274     423     669     459     291     124      70      23      18
472          UI       0       0       0       0       0       0       0       0       0       0
             *

473          KK     101   BASIN
474          KM   ******************************************************************************
475          KM   **   SUB-WATERSHED Q   ******************************************************
476          KM   ******************************************************************************
477          KM   S-GRAPH TYPE=AGRICULTURE
478          BA   0.381
479          LG    0.55    0.15    7.00    0.18       6
480          UI      11      17      42      57      67      82     112     138     106      88
481          UI      71      58      43      24      19      15      11       5       4       3
482          UI       3       3       4       0       0       0       0       0       0       0
483          UI       0       0       0       0       0       0       0       0       0       0
             *
1                                        HEC-1 INPUT                                          PAGE 14

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

484          KK   101-O  DIVERT
485          KM   DIVERT RETENTION OUT OF MODEL DUE TO DEVELOPMENT
486          KM   RETENTION CALCULATION BASED ON FCDMC METHODOLOGY - CALCULATED VALUE IS 5.0
487          KM   80% OF CALCULATED VALUE (4.0) IS APPLIED HERE - JTB
488          DT  101RET     4.0     0.0
489          DI     0.0 10000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
490          DQ     0.0 10000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

491          KK    BICK
492          KM   ******************************************************************************
493          KM   **   SUB-WATERSHED K   ******************************************************
494          KM   ******************************************************************************
495          KM   FALSE BASIN TO SIMULATE INFLOW FROM BIC
496          BA   0.001
497          ZR  =QI A=BIC BIC B=42799 LAT STRUCT C=FLOW-WEIR D=02JAN1994 E=15MIN F=BIC-100-06E
             *

498          KK   K7SK8   ROUTE
499          KM   ROUTE INFLOW FROM BIC CONCENTRATED AT K7S TO K8 (CHANNEL A)
500          RS       1    FLOW     0.0     0.0
501          RC   0.100   0.100   0.100    8240  0.0050    0.00
502          RX    0.00  250.00  500.00  750.00 1000.00 1333.30 1666.60 2000.00
503          RY   10.00    7.50    5.00    2.50    0.00    3.30    6.60   10.00
             *

504          KK      90   BASIN
505          KM   S-GRAPH TYPE=AGRICULTURE
506          BA   1.055
507          LG    0.87    0.15    9.70    0.08       7
508          UI      21      21      33      52      94     126     120     163     170     179
509          UI     180     180     153     152     163     112     122      97      82      67
510          UI      60      61      41      35      31      27      24      20      19      16
```

```
511          UI      12      12      12      12       3       2       3       3       2       3
512          UI       3       2       3       3       2       3       3       2       3       3
513          UI       2       0       0       0       0       0       0       0       0       0
             *

514          KK      K8 COMBINE
515          KM   COMBINE ROUTED HYDROGRAPH FROM K7S WITH RUNOFF FROM 90 @ K8
516          HC       2
             *

517          KK    BICL
518          KM   ******************************************************************************
519          KM   **   SUB-WATERSHED L   ***********************************************************
520          KM   ******************************************************************************
521          KM   FALSE BASIN TO SIMULATE INFLOW FROM BIC
522          BA   0.001
523          ZR  =QI A=BIC BIC B=47195 LAT STRUCT C=FLOW-WEIR D=02JAN1994 E=15MIN F=BIC-100-06E
             *
1                                          HEC-1 INPUT                                          PAGE 15

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


524          KK   L5SL6   ROUTE
525          KM   ROUTE INFLOW FROM BIC CONCENTRATED AT L5S TO L6 (CHANNEL A)
526          RS       1    FLOW     0.0     0.0
527          RC   0.100   0.100   0.100    9280  0.0050    0.00
528          RX    0.00  250.00  500.00  750.00 1000.00 1333.30 1666.60 2000.00
529          RY   10.00    7.50    5.00    2.50    0.00    3.30    6.60   10.00
             *

530          KK      91   BASIN
531          KM   S-GRAPH TYPE=PHOENIX VALLEY
532          KM   S-GRAPH TYPE MODIFIED BY DIBBLE ENGINEERING FOR ADMP HYDROLOGY UPDATE - JTB
533          BA   1.189
534          LG    0.55    0.16    8.40    0.09      15
535          UI      25      25      57      97     122     140     160     185     223     296
536          UI     308     249     213     189     159     137     119      87      57      44
537          UI      40      31      25      22       7       8       8       7       8       8
             *

538          KK    91-O  DIVERT
539          KM   DIVERT RETENTION OUT OF MODEL DUE TO DEVELOPMENT
540          KM   RETENTION CALCULATION BASED ON FCDMC METHODOLOGY - CALCULATED VALUE IS 38.8
541          KM   80% OF CALCULATED VALUE (31.0) IS APPLIED HERE - JTB
542          DT   91RET    31.0     0.0
543          DI     0.0 10000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
544          DQ     0.0 10000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

545          KK      L6 COMBINE
546          KM   COMBINE ROUTED HYDROGRAPH FROM L5S WITH RUNOFF FROM 91 @ L6
547          HC       2
548          ZZ
1
             SCHEMATIC DIAGRAM OF STREAM NETWORK
 INPUT
  LINE      (V) ROUTING          (--->) DIVERSION OR PUMP FLOW

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

    32        BICM
                 V
                 V
    39      M4S6TH
                 .
                 .
    45           .         4th
                 .           .
                 .           .
    52           .           .-------> TO4THS
    50           .      TO4THS
                 .           V
                 .           V
    57           .      4TH6TH
                 .           .
                 .           .
    63           .           .         6th
                 .           .           .
                 .           .           .
    68        6thA.......................
                 .
                 .
    73           .-------> TO7THS
    71      TO7THS
                 V
                 V
    78      6TH8TH
                 .
```

```
              .
 84           .         8th
              .           .
              .           .
 89        8thA............
              .
              .
 94           .-------> TOCEN1
 92       TOCEN
              V
              V
 99      8TH9TH
              .
              .
105           .        9thE
              .           .
              .           .
110           .           .        9thW
              .           .           .
              .           .           .
115         9th........................
              .
              .
120           .-------> TOCEN2
118      TOCEN2
              .
              .
125           .        BICN
              .          V
              .          V
132           .       N6S-D
              .           .
              .           .
138           .           .        BICO
              .           .          V
              .           .          V
145           .           .       O8SO9
              .           .           .
              .           .           .
151           .           .           .          93
              .           .           .           .
              .           .           .           .
159           .           .          O9............
              .           .           V
              .           .           V
162           .           .       O9O10
              .           .           .
              .           .           .
168           .           .           .          95
              .           .           .           .
              .           .           .           .
178           .           .         O10............
              .           .           .
              .           .           .
183           .           .           .------->    TOP9
181           .           .        TOP9
              .           .          V
              .           .          V
188           .           .       O10DR
              .           .           .
              .           .           .
194           .           .           .      CENTRE
              .           .           .           .
              .           .           .           .
201           .           .           .           .           .<-------  TOCEN2
199           .           .           .           .      FRM9TH
              .           .           .           .           V
              .           .           .           .           V
202           .           .           .           .      9THCEN
              .           .           .           .           .
              .           .           .           .           .
210           .           .           .           .           .           .<-------  TOCEN1
208           .           .           .           .           .      FRM8TH
              .           .           .           .           .           V
              .           .           .           .           .           V
211           .           .           .           .           .      8THCEN
              .           .           .           .           .           .
              .           .           .           .           .           .
217           .           .           .      CENTRA........................
              .           .           .           .
              .           .           .           .
222           .           .           .           .------->   TODRN
220           .           .           .      TOBELO
              .           .           .           V
              .           .           .           V
227           .           .           .      CENBEL
              .           .           .           .
              .           .           .           .
233           .           .           .           .      BELOAT
```

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                .          .          .          .          .
                .          .          .          .          .
 238            .          .          .     BELOAA...........
                .          .          .          V
                .          .          .          V
 241            .          .          .     BELDRN
                .          .          .          .
                .          .          .          .
 247            .          .          .          .     BAYLIS
                .          .          .          .          V
                .          .          .          .          V
 252            .          .          .          .     DETDRN
                .          .          .          .          .
                .          .          .          .          .
 258            .          .          .          .          .          92
                .          .          .          .          .          .
                .          .          .          .          .          .
 265            .          .          .          .          .          .       DRAIN
                .          .          .          .          .          .          .
                .          .          .          .          .          .          .
 274            .          .          .          .          .          .          .-------> DRNRET
 270            .          .          .          .          .          .       DRN-O
                .          .          .          .          .          .          .
                .          .          .          .          .          .          .
 279            .          .          .          .          .          .          .          .<-------   TODRN
 277            .          .          .          .          .          .          .     FRMCEN
                .          .          .          .          .          .          .          V
                .          .          .          .          .          .          .          V
 280            .          .          .          .          .          .          .     CENDRN
                .          .          .          .          .          .          .          .
                .          .          .          .          .          .          .          .
 286            .     DRAINA.....................................................................
                .          V
                .          V
 289            .      DRNM5
                .          .
                .          .
 295            .          .       4thS
                .          .          .
                .          .          .
 302            .          .          .          .<-------  TO4THS
 300            .          .          .     FRM4TH
                .          .          .          V
                .          .          .          V
 303            .          .          .      4TH4S
                .          .          .          .
                .          .          .          .
 309            .          .      4thSA...........
                .          .          V
                .          .          V
 312            .          .     4TH7TH
                .          .          .
                .          .          .
 318            .          .          .        7th
                .          .          .          .
                .          .          .          .
 325            .          .          .          .          .<-------  TO7THS
 323            .          .          .          .     FRM6TH
                .          .          .          .          V
                .          .          .          .          V
 326            .          .          .          .     6TH7TH
                .          .          .          .          .
                .          .          .          .          .
 332            .          .      7thSA.......................
                .          .          V
                .          .          V
 335            .          .      7THM5
                .          .          .
                .          .          .
 341            .          .          .         98
                .          .          .          .
                .          .          .          .
 353            .          .          .          .------->   98RET
 349            .          .          .       98-O
                .          .          .          .
                .          .          .          .
 356            .         M5........................
                .          .
                .          .
 359            .          .       BICP
                .          .          V
                .          .          V
 366            .          .      P6SP7
                .          .          .
                .          .          .
 372            .          .          .         94
                .          .          .          .
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 381            .          .         P7............
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                 .          .          V
                 .          .          V
   384           .          .       P7-P8
                 .          .          .
                 .          .          .
   390           .          .          .          96
                 .          .          .           .
                 .          .          .           .
   404           .          .          .           .-------->   96RET
   400           .          .          .        96-O
                 .          .          .           .
                 .          .          .           .
   407           .          .         P8............
                 .          .          V
                 .          .          V
   410           .          .       P8-P9
                 .          .          .
                 .          .          .
   416           .          .          .          97
                 .          .          .           .
                 .          .          .           .
   429           .          .          .           .-------->   97RET
   425           .          .          .        97-O
                 .          .          .           .
                 .          .          .           .
   434           .          .          .           .          .<-------    TOP9
   432           .          .          .           .       FRO10
                 .          .          .           .           V
                 .          .          .           .           V
   435           .          .          .           .      O10-P9
                 .          .          .           .           .
                 .          .          .           .           .
   441           .          .         P9........................
                 .          .          V
                 .          .          V
   444           .          .      P9-P10
                 .          .          .
                 .          .          .
   450           .          .          .         100
                 .          .          .           .
                 .          .          .           .
   460           .          .        P10............
                 .          .          .
                 .          .          .
   463           .          .          .          99
                 .          .          .           .
                 .          .          .           .
   473           .          .          .           .         101
                 .          .          .           .           .
                 .          .          .           .           .
   488           .          .          .           .           .-------->  101RET
   484           .          .          .           .       101-O
                 .          .          .           .           .
                 .          .          .           .           .
   491           .          .          .           .           .        BICK
                 .          .          .           .           .           V
                 .          .          .           .           .           V
   498           .          .          .           .           .       K7SK8
                 .          .          .           .           .           .
                 .          .          .           .           .           .
   504           .          .          .           .           .           .          90
                 .          .          .           .           .           .           .
                 .          .          .           .           .           .           .
   514           .          .          .           .           .          K8............
                 .          .          .           .           .           .
                 .          .          .           .           .           .
   517           .          .          .           .           .           .        BICL
                 .          .          .           .           .           .           V
                 .          .          .           .           .           .           V
   524           .          .          .           .           .           .       L5SL6
                 .          .          .           .           .           .           .
                 .          .          .           .           .           .           .
   530           .          .          .           .           .           .           .          91
                 .          .          .           .           .           .           .           .
                 .          .          .           .           .           .           .           .
   542           .          .          .           .           .           .           .           .-------->   91RET
   538           .          .          .           .           .           .           .        91-O
                 .          .          .           .           .           .           .           .
                 .          .          .           .           .           .           .           .
   545           .          .          .           .           .           .          L6............
```

(***) 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   28FEB08  TIME  16:53:19  *                                    *          (916) 756-1104              *
```

```
*                                       *                                                       *                                       *
*****************************************                                                       *****************************************


                                FCDMC
                                0607BASE_EXST_6HR - Buckeye ADMP Existing Conditions Hydrology Update
                                Major Basin: 01
                                100 Year - Return Period
                                6 Hour Storm
                                Multiple Storms
                                Unit Hydrograph: S-Graph
                                01/09/2008

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

    IT          HYDROGRAPH TIME DATA
                       NMIN          15  MINUTES IN COMPUTATION INTERVAL
                      IDATE      2JAN94  STARTING DATE
                      ITIME        0000  STARTING TIME
                         NQ         400  NUMBER OF HYDROGRAPH ORDINATES
                     NDDATE      6JAN94  ENDING DATE
                     NDTIME        0345  ENDING TIME
                      ICENT          19  CENTURY MARK

                  COMPUTATION INTERVAL    0.25 HOURS
                       TOTAL TIME BASE   99.75 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

 12 JD          INDEX STORM NO. 1
                       STRM        3.30  PRECIPITATION DEPTH
                       TRDA        0.01  TRANSPOSITION DRAINAGE AREA

 13 PI            PRECIPITATION PATTERN
                     0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                     0.01      0.02      0.02      0.08      0.16      0.46      0.08      0.02      0.02      0.01
                     0.01      0.01      0.01      0.01

 16 JD          INDEX STORM NO. 2
                       STRM        3.28  PRECIPITATION DEPTH
                       TRDA        0.50  TRANSPOSITION DRAINAGE AREA

 17 PI            PRECIPITATION PATTERN
                     0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                     0.01      0.02      0.02      0.08      0.16      0.46      0.08      0.02      0.02      0.01
                     0.01      0.01      0.01      0.01

 20 JD          INDEX STORM NO. 3
                       STRM        3.26  PRECIPITATION DEPTH
                       TRDA        1.00  TRANSPOSITION DRAINAGE AREA

 21 PI            PRECIPITATION PATTERN
                     0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                     0.01      0.02      0.03      0.08      0.18      0.37      0.10      0.04      0.03      0.01
                     0.01      0.01      0.01      0.01

 24 JD          INDEX STORM NO. 4
                       STRM        3.17  PRECIPITATION DEPTH
                       TRDA        5.00  TRANSPOSITION DRAINAGE AREA

 25 PI            PRECIPITATION PATTERN
                     0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                     0.02      0.02      0.04      0.09      0.19      0.23      0.14      0.07      0.04      0.02
                     0.01      0.01      0.01      0.01

 28 JD          INDEX STORM NO. 5
                       STRM        3.10  PRECIPITATION DEPTH
                       TRDA       10.00  TRANSPOSITION DRAINAGE AREA

 29 PI            PRECIPITATION PATTERN
                     0.01      0.01      0.01      0.02      0.01      0.01      0.01      0.01      0.01      0.02
                     0.01      0.02      0.05      0.08      0.18      0.21      0.13      0.07      0.04      0.03
                     0.01      0.01      0.01      0.01
 -----DSS---ZOPEN:  Existing File Opened,  File: J:\2006\10-0607\DESIGN~2\DRAINA~1\HEC-RAS\Model\A1.DSS
                    Unit: 71;  DSS Versions - Software: 6-LD, File: 6-LD
      ----- Entering ZRRTSX for unit 71 -----
```

```
Pathname: /BIC BIC/52599 LAT STRUCT/FLOW-WEIR//15MIN/BIC-100-06E/
        Time Window set.  Interval:    15  Number of data values:      1
        Starting date and time:  Jan 1, 1994  2400  (  34334 1440)
        Ending   date and time:  Jan 1, 1994  2400  (  34334 1440)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /BIC BIC/52599 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/BIC-100-06E/
        Number of actual data: 2976  Header length:   0
        Compression:   0  Quality:   0  Double: F
-----DSS--- ZREAD Unit  71; Vers.    1:  /BIC BIC/52599 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/BIC-100-06E/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:    1    JULS:   34334  ISTIME:  1440
        NLDATA: 2976   JULSD:   34334
        JULS: 01JAN94       JULSD: 01JAN94
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:   96  NDATA: 2976  NREAD:    1  ILIM:    1
      ----- Exiting ZRRTS, Number of data values:      1,  Status:  0
        Offset:       0,  Units: CFS     ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
Pathname: /BIC BIC/52599 LAT STRUCT/FLOW-WEIR//15MIN/BIC-100-06E/
        Time Window set.  Interval:    15  Number of data values:    401
        Starting date and time:  Jan 1, 1994  2400  (  34334 1440)
        Ending   date and time:  Jan 6, 1994  0400  (  34339  240)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /BIC BIC/52599 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/BIC-100-06E/
        Number of actual data: 2976  Header length:   0
        Compression:   0  Quality:   0  Double: F
-----DSS--- ZREAD Unit  71; Vers.    1:  /BIC BIC/52599 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/BIC-100-06E/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:  401    JULS:   34334  ISTIME:  1440
        NLDATA: 2976   JULSD:   34334
        JULS: 01JAN94       JULSD: 01JAN94
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:   96  NDATA: 2976  NREAD:  401  ILIM:  401
      ----- Exiting ZRRTS, Number of data values:    401,  Status:  1
        Offset:       0,  Units: CFS     ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
Pathname: /BIC BIC/58999 LAT STRUCT/FLOW-WEIR//15MIN/BIC-100-06E/
        Time Window set.  Interval:    15  Number of data values:      1
        Starting date and time:  Jan 1, 1994  2400  (  34334 1440)
        Ending   date and time:  Jan 1, 1994  2400  (  34334 1440)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /BIC BIC/58999 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/BIC-100-06E/
        Number of actual data: 2976  Header length:   0
        Compression:   0  Quality:   0  Double: F
-----DSS--- ZREAD Unit  71; Vers.    1:  /BIC BIC/58999 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/BIC-100-06E/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:    1    JULS:   34334  ISTIME:  1440
        NLDATA: 2976   JULSD:   34334
        JULS: 01JAN94       JULSD: 01JAN94
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:   96  NDATA: 2976  NREAD:    1  ILIM:    1
      ----- Exiting ZRRTS, Number of data values:      1,  Status:  0
        Offset:       0,  Units: CFS     ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
Pathname: /BIC BIC/58999 LAT STRUCT/FLOW-WEIR//15MIN/BIC-100-06E/
        Time Window set.  Interval:    15  Number of data values:    401
        Starting date and time:  Jan 1, 1994  2400  (  34334 1440)
        Ending   date and time:  Jan 6, 1994  0400  (  34339  240)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /BIC BIC/58999 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/BIC-100-06E/
        Number of actual data: 2976  Header length:   0
        Compression:   0  Quality:   0  Double: F
-----DSS--- ZREAD Unit  71; Vers.    1:  /BIC BIC/58999 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/BIC-100-06E/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:  401    JULS:   34334  ISTIME:  1440
        NLDATA: 2976   JULSD:   34334
        JULS: 01JAN94       JULSD: 01JAN94
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:   96  NDATA: 2976  NREAD:  401  ILIM:  401
      ----- Exiting ZRRTS, Number of data values:    401,  Status:  1
        Offset:       0,  Units: CFS     ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
Pathname: /BIC BIC/63799 LAT STRUCT/FLOW-WEIR//15MIN/BIC-100-06E/
        Time Window set.  Interval:    15  Number of data values:      1
        Starting date and time:  Jan 1, 1994  2400  (  34334 1440)
        Ending   date and time:  Jan 1, 1994  2400  (  34334 1440)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /BIC BIC/63799 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/BIC-100-06E/
        Number of actual data: 2976  Header length:   0
        Compression:   0  Quality:   0  Double: F
-----DSS--- ZREAD Unit  71; Vers.    1:  /BIC BIC/63799 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/BIC-100-06E/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:    1    JULS:   34334  ISTIME:  1440
        NLDATA: 2976   JULSD:   34334
```

```
        JULS: 01JAN94       JULSD: 01JAN94
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:   96  NDATA: 2976  NREAD:    1  ILIM:    1
      ----- Exiting ZRRTS, Number of data values:      1,  Status:  0
        Offset:       0,  Units: CFS     ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
Pathname: /BIC BIC/63799 LAT STRUCT/FLOW-WEIR//15MIN/BIC-100-06E/
        Time Window set.  Interval:    15  Number of data values:    401
        Starting date and time:  Jan 1, 1994  2400  (  34334 1440)
        Ending   date and time:  Jan 6, 1994  0400  (  34339  240)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /BIC BIC/63799 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/BIC-100-06E/
        Number of actual data: 2976  Header length:   0
        Compression:   0  Quality:   0  Double: F
-----DSS--- ZREAD Unit  71; Vers.    1:  /BIC BIC/63799 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/BIC-100-06E/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:  401    JULS:   34334  ISTIME:  1440
        NLDATA: 2976   JULSD:   34334
        JULS: 01JAN94       JULSD: 01JAN94
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:   96  NDATA: 2976  NREAD:  401  ILIM:  401
      ----- Exiting ZRRTS, Number of data values:    401,  Status:  1
        Offset:       0,  Units: CFS     ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
Pathname: /BIC BIC/67395 LAT STRUCT/FLOW-WEIR//15MIN/BIC-100-06E/
        Time Window set.  Interval:    15  Number of data values:      1
        Starting date and time:  Jan 1, 1994  2400  (  34334 1440)
        Ending   date and time:  Jan 1, 1994  2400  (  34334 1440)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /BIC BIC/67395 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/BIC-100-06E/
        Number of actual data: 2976  Header length:   0
        Compression:   0  Quality:   0  Double: F
-----DSS--- ZREAD Unit  71; Vers.    1:  /BIC BIC/67395 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/BIC-100-06E/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:    1    JULS:   34334  ISTIME:  1440
        NLDATA: 2976   JULSD:   34334
        JULS: 01JAN94       JULSD: 01JAN94
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:   96  NDATA: 2976  NREAD:    1  ILIM:    1
      ----- Exiting ZRRTS, Number of data values:      1,  Status:  0
        Offset:       0,  Units: CFS     ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
Pathname: /BIC BIC/67395 LAT STRUCT/FLOW-WEIR//15MIN/BIC-100-06E/
        Time Window set.  Interval:    15  Number of data values:    401
        Starting date and time:  Jan 1, 1994  2400  (  34334 1440)
        Ending   date and time:  Jan 6, 1994  0400  (  34339  240)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /BIC BIC/67395 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/BIC-100-06E/
        Number of actual data: 2976  Header length:   0
        Compression:   0  Quality:   0  Double: F
-----DSS--- ZREAD Unit  71; Vers.    1:  /BIC BIC/67395 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/BIC-100-06E/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:  401    JULS:   34334  ISTIME:  1440
        NLDATA: 2976   JULSD:   34334
        JULS: 01JAN94       JULSD: 01JAN94
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:   96  NDATA: 2976  NREAD:  401  ILIM:  401
      ----- Exiting ZRRTS, Number of data values:    401,  Status:  1
        Offset:       0,  Units: CFS     ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
Pathname: /BIC BIC/42799 LAT STRUCT/FLOW-WEIR//15MIN/BIC-100-06E/
        Time Window set.  Interval:    15  Number of data values:      1
        Starting date and time:  Jan 1, 1994  2400  (  34334 1440)
        Ending   date and time:  Jan 1, 1994  2400  (  34334 1440)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /BIC BIC/42799 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/BIC-100-06E/
        Number of actual data: 2976  Header length:   0
        Compression:   0  Quality:   0  Double: F
-----DSS--- ZREAD Unit  71; Vers.    1:  /BIC BIC/42799 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/BIC-100-06E/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:    1    JULS:   34334  ISTIME:  1440
        NLDATA: 2976   JULSD:   34334
        JULS: 01JAN94       JULSD: 01JAN94
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:   96  NDATA: 2976  NREAD:    1  ILIM:    1
      ----- Exiting ZRRTS, Number of data values:      1,  Status:  0
        Offset:       0,  Units: CFS     ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
Pathname: /BIC BIC/42799 LAT STRUCT/FLOW-WEIR//15MIN/BIC-100-06E/
        Time Window set.  Interval:    15  Number of data values:    401
        Starting date and time:  Jan 1, 1994  2400  (  34334 1440)
        Ending   date and time:  Jan 6, 1994  0400  (  34339  240)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /BIC BIC/42799 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/BIC-100-06E/
```

```
        Number of actual data: 2976  Header length:   0
        Compression:   0  Quality:   0  Double: F
-----DSS--- ZREAD Unit  71; Vers.    1:  /BIC BIC/42799 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/BIC-100-06E/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:  401    JULS:   34334  ISTIME:  1440
        NLDATA: 2976   JULSD:   34334
        JULS: 01JAN94       JULSD: 01JAN94
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:   96  NDATA: 2976  NREAD:  401  ILIM:  401
      ----- Exiting ZRRTS, Number of data values:    401,  Status:  1
        Offset:       0,  Units: CFS     ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
Pathname: /BIC BIC/47195 LAT STRUCT/FLOW-WEIR//15MIN/BIC-100-06E/
        Time Window set.  Interval:    15  Number of data values:      1
        Starting date and time:  Jan 1, 1994  2400  (  34334 1440)
        Ending   date and time:  Jan 1, 1994  2400  (  34334 1440)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /BIC BIC/47195 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/BIC-100-06E/
        Number of actual data: 2976  Header length:   0
        Compression:   0  Quality:   0  Double: F
-----DSS--- ZREAD Unit  71; Vers.    1:  /BIC BIC/47195 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/BIC-100-06E/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:    1    JULS:   34334  ISTIME:  1440
        NLDATA: 2976   JULSD:   34334
        JULS: 01JAN94       JULSD: 01JAN94
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:   96  NDATA: 2976  NREAD:    1  ILIM:    1
      ----- Exiting ZRRTS, Number of data values:      1,  Status:  0
        Offset:       0,  Units: CFS     ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
Pathname: /BIC BIC/47195 LAT STRUCT/FLOW-WEIR//15MIN/BIC-100-06E/
        Time Window set.  Interval:    15  Number of data values:    401
        Starting date and time:  Jan 1, 1994  2400  (  34334 1440)
        Ending   date and time:  Jan 6, 1994  0400  (  34339  240)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /BIC BIC/47195 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/BIC-100-06E/
        Number of actual data: 2976  Header length:   0
        Compression:   0  Quality:   0  Double: F
-----DSS--- ZREAD Unit  71; Vers.    1:  /BIC BIC/47195 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/BIC-100-06E/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:  401    JULS:   34334  ISTIME:  1440
        NLDATA: 2976   JULSD:   34334
        JULS: 01JAN94       JULSD: 01JAN94
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:   96  NDATA: 2976  NREAD:  401  ILIM:  401
      ----- Exiting ZRRTS, Number of data values:    401,  Status:  1
        Offset:       0,  Units: CFS     ,  Type:INST-VAL
1
                                        RUNOFF SUMMARY
                                   FLOW IN CUBIC FEET PER SECOND
                                TIME IN HOURS,  AREA IN SQUARE MILES

                                    PEAK   TIME OF     AVERAGE FLOW FOR MAXIMUM PERIOD      BASIN     MAXIMUM     TIME OF
        OPERATION        STATION    FLOW    PEAK                                           AREA      STAGE     MAX STAGE
+                                                       6-HOUR     24-HOUR     72-HOUR

        HYDROGRAPH AT
+                          BICM      29.   15.25          15.          4.          1.       0.00

        ROUTED TO
+                        M4S6TH      29.   15.25          15.          4.          1.       0.00

        HYDROGRAPH AT
+                           4th     141.    4.50          22.          6.          2.       0.08

        DIVERSION TO
+                        TO4THS      71.    4.50          11.          3.          1.       0.08

        HYDROGRAPH AT
+                        TO4THS      71.    4.50          11.          3.          1.       0.08

        ROUTED TO
+                        4TH6TH      67.    4.50          11.          3.          1.       0.08

        HYDROGRAPH AT
+                           6th     116.    4.25          16.          4.          1.       0.06

        3 COMBINED AT
+                          6thA     162.    4.25          27.         11.          4.       0.14

        DIVERSION TO
+                        TO7THS      81.    4.25          14.          5.          2.       0.14

        HYDROGRAPH AT
+                        TO7THS      81.    4.25          14.          5.          2.       0.14

        ROUTED TO
```

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| + | | 6TH8TH | 82. | 4.50 | 14. | 5. | 2. | 0.14 |
| | HYDROGRAPH AT | | | | | | | |
| + | | 8th | 123. | 4.50 | 22. | 6. | 2. | 0.08 |
| | 2 COMBINED AT | | | | | | | |
| + | | 8thA | 205. | 4.50 | 36. | 11. | 4. | 0.22 |
| | DIVERSION TO | | | | | | | |
| + | | TOCEN1 | 102. | 4.50 | 18. | 5. | 2. | 0.22 |
| | HYDROGRAPH AT | | | | | | | |
| + | | TOCEN | 102. | 4.50 | 18. | 5. | 2. | 0.22 |
| | ROUTED TO | | | | | | | |
| + | | 8TH9TH | 97. | 4.50 | 18. | 5. | 2. | 0.22 |
| | HYDROGRAPH AT | | | | | | | |
| + | | 9thE | 193. | 4.25 | 26. | 6. | 2. | 0.09 |
| | HYDROGRAPH AT | | | | | | | |
| + | | 9thW | 128. | 4.50 | 21. | 5. | 2. | 0.08 |
| | 3 COMBINED AT | | | | | | | |
| + | | 9th | 376. | 4.50 | 65. | 17. | 6. | 0.40 |
| | DIVERSION TO | | | | | | | |
| + | | TOCEN2 | 188. | 4.50 | 32. | 9. | 3. | 0.40 |
| | HYDROGRAPH AT | | | | | | | |
| + | | TOCEN2 | 188. | 4.50 | 32. | 9. | 3. | 0.40 |
| | HYDROGRAPH AT | | | | | | | |
| + | | BICN | 164. | 9.25 | 153. | 80. | 32. | 0.00 |
| | ROUTED TO | | | | | | | |
| + | | N6S-D | 123. | 14.50 | 117. | 73. | 31. | 0.00 |
| | HYDROGRAPH AT | | | | | | | |
| + | | BICO | 52. | 8.75 | 27. | 7. | 2. | 0.00 |
| | ROUTED TO | | | | | | | |
| + | | O8SO9 | 25. | 11.25 | 19. | 7. | 2. | 0.00 |
| | HYDROGRAPH AT | | | | | | | |
| + | | 93 | 126. | 5.75 | 52. | 13. | 4. | 0.38 |
| | 2 COMBINED AT | | | | | | | |
| + | | O9 | 126. | 5.75 | 56. | 20. | 7. | 0.38 |
| | ROUTED TO | | | | | | | |
| + | | O9O10 | 34. | 11.50 | 33. | 19. | 7. | 0.38 |
| | HYDROGRAPH AT | | | | | | | |
| + | | 95 | 147. | 6.50 | 87. | 24. | 8. | 0.52 |
| | 2 COMBINED AT | | | | | | | |
| + | | O10 | 144. | 6.50 | 97. | 40. | 14. | 0.90 |
| | DIVERSION TO | | | | | | | |
| + | | TOP9 | 72. | 6.50 | 48. | 20. | 7. | 0.90 |
| | HYDROGRAPH AT | | | | | | | |
| + | | TOP9 | 72. | 6.50 | 48. | 20. | 7. | 0.90 |
| | ROUTED TO | | | | | | | |
| + | | O10DR | 48. | 13.25 | 38. | 19. | 7. | 0.90 |
| | HYDROGRAPH AT | | | | | | | |
| + | | CENTRE | 124. | 4.25 | 19. | 5. | 2. | 0.07 |
| | HYDROGRAPH AT | | | | | | | |
| + | | FRM9TH | 188. | 4.50 | 32. | 9. | 3. | 0.40 |
| | ROUTED TO | | | | | | | |
| + | | 9THCEN | 188. | 4.50 | 32. | 9. | 3. | 0.40 |
| | HYDROGRAPH AT | | | | | | | |
| + | | FRM8TH | 102. | 4.50 | 18. | 5. | 2. | 0.22 |
| | ROUTED TO | | | | | | | |
| + | | 8THCEN | 93. | 4.75 | 18. | 5. | 2. | 0.22 |
| | 3 COMBINED AT | | | | | | | |
| + | | CENTRA | 397. | 4.50 | 69. | 19. | 6. | 0.07 |
| | DIVERSION TO | | | | | | | |
| + | | TODRN | 198. | 4.50 | 35. | 9. | 3. | 0.07 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| + | HYDROGRAPH AT | TOBELO | 198. | 4.50 | 35. | 9. | 3. | 0.07 |
| + | ROUTED TO | CENBEL | 181. | 4.75 | 34. | 9. | 3. | 0.07 |
| + | HYDROGRAPH AT | BELOAT | 82. | 4.50 | 13. | 3. | 1. | 0.05 |
| + | 2 COMBINED AT | BELOAA | 249. | 4.50 | 47. | 13. | 4. | 0.12 |
| + | ROUTED TO | BELDRN | 244. | 4.75 | 47. | 13. | 4. | 0.12 |
| + | HYDROGRAPH AT | BAYLIS | 53. | 4.00 | 5. | 1. | 0. | 0.02 |
| + | ROUTED TO | DETDRN | 36. | 4.25 | 5. | 1. | 0. | 0.02 |
| + | HYDROGRAPH AT | 92 | 276. | 6.50 | 166. | 44. | 15. | 1.01 |
| + | HYDROGRAPH AT | DRAIN | 163. | 4.75 | 32. | 8. | 3. | 0.12 |
| + | DIVERSION TO | DRNRET | 91. | 4.25 | 10. | 3. | 1. | 0.12 |
| + | HYDROGRAPH AT | DRN-O | 163. | 4.75 | 22. | 5. | 2. | 0.12 |
| + | HYDROGRAPH AT | FRMCEN | 198. | 4.50 | 35. | 9. | 3. | 0.07 |
| + | ROUTED TO | CENDRN | 122. | 4.75 | 33. | 9. | 3. | 0.07 |
| + | 7 COMBINED AT | DRAINA | 538. | 5.00 | 286. | 155. | 61. | 2.16 |
| + | ROUTED TO | DRNM5 | 378. | 7.00 | 279. | 154. | 61. | 2.16 |
| + | HYDROGRAPH AT | 4thS | 207. | 4.75 | 41. | 10. | 3. | 0.14 |
| + | HYDROGRAPH AT | FRM4TH | 71. | 4.50 | 11. | 3. | 1. | 0.08 |
| + | ROUTED TO | 4TH4S | 68. | 4.50 | 11. | 3. | 1. | 0.08 |
| + | 2 COMBINED AT | 4thSA | 261. | 4.75 | 53. | 13. | 4. | 0.14 |
| + | ROUTED TO | 4TH7TH | 254. | 4.75 | 53. | 13. | 4. | 0.14 |
| + | HYDROGRAPH AT | 7th | 198. | 4.50 | 31. | 8. | 3. | 0.13 |
| + | HYDROGRAPH AT | FRM6TH | 81. | 4.25 | 14. | 5. | 2. | 0.14 |
| + | ROUTED TO | 6TH7TH | 76. | 4.50 | 14. | 5. | 2. | 0.14 |
| + | 3 COMBINED AT | 7thSA | 475. | 4.50 | 97. | 26. | 9. | 0.27 |
| + | ROUTED TO | 7THM5 | 400. | 5.00 | 96. | 26. | 9. | 0.27 |
| + | HYDROGRAPH AT | 98 | 236. | 5.25 | 90. | 23. | 8. | 0.39 |
| + | DIVERSION TO | 98RET | 102. | 4.50 | 10. | 3. | 1. | 0.39 |
| + | HYDROGRAPH AT | 98-O | 236. | 5.25 | 81. | 20. | 7. | 0.39 |
| + | 3 COMBINED AT | M5 | 676. | 5.25 | 418. | 194. | 74. | 2.82 |
| + | HYDROGRAPH AT | BICP | 159. | 8.50 | 62. | 16. | 5. | 0.00 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | ROUTED TO | | | | | | | |
| + | | P6SP7 | 85. | 10.00 | 54. | 16. | 5. | 0.00 |
| | HYDROGRAPH AT | | | | | | | |
| + | | 94 | 244. | 5.75 | 113. | 29. | 10. | 0.72 |
| | 2 COMBINED AT | | | | | | | |
| + | | P7 | 244. | 5.75 | 135. | 45. | 15. | 0.72 |
| | ROUTED TO | | | | | | | |
| + | | P7-P8 | 215. | 7.25 | 128. | 45. | 15. | 0.72 |
| | HYDROGRAPH AT | | | | | | | |
| + | | 96 | 234. | 6.50 | 136. | 37. | 12. | 0.91 |
| | DIVERSION TO | | | | | | | |
| + | | 96RET | 160. | 5.50 | 27. | 7. | 2. | 0.91 |
| | HYDROGRAPH AT | | | | | | | |
| + | | 96-O | 234. | 6.50 | 117. | 30. | 10. | 0.91 |
| | 2 COMBINED AT | | | | | | | |
| + | | P8 | 392. | 7.25 | 227. | 72. | 24. | 1.63 |
| | ROUTED TO | | | | | | | |
| + | | P8-P9 | 296. | 10.25 | 195. | 71. | 24. | 1.63 |
| | HYDROGRAPH AT | | | | | | | |
| + | | 97 | 177. | 5.75 | 88. | 23. | 8. | 0.50 |
| | DIVERSION TO | | | | | | | |
| + | | 97RET | 132. | 5.25 | 21. | 5. | 2. | 0.50 |
| | HYDROGRAPH AT | | | | | | | |
| + | | 97-O | 177. | 5.75 | 71. | 18. | 6. | 0.50 |
| | HYDROGRAPH AT | | | | | | | |
| + | | FRO10 | 72. | 6.50 | 48. | 20. | 7. | 0.90 |
| | ROUTED TO | | | | | | | |
| + | | O10-P9 | 71. | 6.75 | 48. | 20. | 7. | 0.90 |
| | 3 COMBINED AT | | | | | | | |
| + | | P9 | 325. | 10.25 | 221. | 104. | 35. | 2.13 |
| | ROUTED TO | | | | | | | |
| + | | P9-P10 | 313. | 11.00 | 220. | 103. | 35. | 2.13 |
| | HYDROGRAPH AT | | | | | | | |
| + | | 100 | 117. | 6.75 | 69. | 19. | 6. | 0.58 |
| | 2 COMBINED AT | | | | | | | |
| + | | P10 | 316. | 11.00 | 241. | 115. | 40. | 2.72 |
| | HYDROGRAPH AT | | | | | | | |
| + | | 99 | 1001. | 4.75 | 179. | 45. | 15. | 0.95 |
| | HYDROGRAPH AT | | | | | | | |
| + | | 101 | 240. | 5.75 | 76. | 19. | 6. | 0.38 |
| | DIVERSION TO | | | | | | | |
| + | | 101RET | 81. | 4.50 | 8. | 2. | 1. | 0.38 |
| | HYDROGRAPH AT | | | | | | | |
| + | | 101-O | 240. | 5.75 | 69. | 17. | 6. | 0.38 |
| | HYDROGRAPH AT | | | | | | | |
| + | | BICK | 459. | 9.00 | 331. | 107. | 43. | 0.00 |
| | ROUTED TO | | | | | | | |
| + | | K7SK8 | 350. | 10.75 | 269. | 105. | 42. | 0.00 |
| | HYDROGRAPH AT | | | | | | | |
| + | | 90 | 303. | 6.50 | 177. | 49. | 16. | 1.05 |
| | 2 COMBINED AT | | | | | | | |
| + | | K8 | 390. | 10.25 | 343. | 152. | 58. | 1.06 |
| | HYDROGRAPH AT | | | | | | | |
| + | | BICL | 85. | 14.50 | 82. | 57. | 37. | 0.00 |
| | ROUTED TO | | | | | | | |
| + | | L5SL6 | 77. | 17.25 | 74. | 54. | 36. | 0.00 |
| | HYDROGRAPH AT | | | | | | | |
| + | | 91 | 567. | 6.50 | 253. | 65. | 22. | 1.19 |
| | DIVERSION TO | | | | | | | |

```
+                          91RET       331.    5.50          63.         16.          5.       1.19

         HYDROGRAPH AT
+                           91-O       567.    6.50         199.         50.         17.       1.19

         2 COMBINED AT
+                             L6       577.    6.50         226.        101.         53.       1.19


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


   -----DSS---ZCLOSE Unit:  71,   File: J:\2006\10-0607\DESIGN~2\DRAINA~1\HEC-RAS\Model\A1.DSS
             Pointer Utilization:  1.44
             Number of Records:   2120
             File Size:  11295.1  Kbytes
             Percent Inactive:   0.0
```

# HEC-1 Existing Conditions

- BGW, 100-Yr, 6-Hr

```
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   28FEB08  TIME  16:53:06  *                                    *           (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        FCDMC
        2           ID        0607BASE_EXST_6HR - Buckeye ADMP Existing Conditions Hydrology Update
        3           ID        Major Basin: 02
        4           ID        100 Year - Return Period
        5           ID        6 Hour Storm
        6           ID        Multiple Storms
        7           ID        Unit Hydrograph: S-Graph
        8           ID        01/09/2008
                    * ***************************************************************************
                    *  Original Model prepared as: Buckeye/Sun Valley ADMS - November 2004
                    *                              by PBS&J - Modelers: Jacob Lesue & Wen Chen
                    * ************* THIS MODEL: Major Basin 02, Model Area BGW *********************
                    *  100-year 6-hour
                    *  NEW FILE NAME:  "BGW1006EX.DAT"
                    *  Existing Conditions
                    *  Area 1 - BIC to Gila (West)
                    *  Major Basin Key:  01=BGE, 02=BGW, 03=FRE, 04=FRW, 05=RBE, 06=RBW, 07=AREA2
                    *  Rainfall Loss Method - Green & Ampt
                    *  Unit Hydrograph Method - FCDMC S-Graph
                    *  Channel Routing Method - Normal Depth
                    *  Soil Data - USDA SCS Soil Survey (1972 & 1981)
                    *  Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
                    *  Retention volume for newly developed areas accounted for with FCDMC
                    *  storage methodology equation - V=C(P/12)A, where C=0.71 & P=2.8
                    * ***************************************************************************
                    *  UPDATED BY DIBBLE ENGINEERING, SEPTEMBER 2007
                    *  Land Use Updated using - FCDMC GIS Data: mag_landuse (2005)
                    * ***************************************************************************
                    *
                    *DIAGRAM
                    *
        9           IT      15 02JAN94       0     400
       10           IO       5
       11           IN      15 02JAN94       0
                    *
                    *
       12           JD   3.300  0.0100
                    * 6-hour distribution, pattern 1.0
       13           PC   0.000   0.008   0.016   0.025   0.033   0.041   0.050   0.058   0.066   0.074
       14           PC   0.087   0.099   0.118   0.138   0.216   0.377   0.834   0.911   0.931   0.950
       15           PC   0.962   0.972   0.983   0.991   1.000
       16           JD   3.280  0.5000
                    * 6-hour distribution, pattern 1.0
       17           PC   0.000   0.008   0.016   0.025   0.033   0.041   0.050   0.058   0.066   0.074
       18           PC   0.087   0.099   0.118   0.138   0.216   0.377   0.834   0.911   0.931   0.950
       19           PC   0.962   0.972   0.983   0.991   1.000
       20           JD   3.257     1.0
                    * 6-hour distribution, pattern 1.4
       21           PC   0.000   0.008   0.016   0.025   0.033   0.041   0.050   0.058   0.066   0.075
       22           PC   0.087   0.099   0.119   0.148   0.230   0.407   0.778   0.881   0.919   0.945
       23           PC   0.957   0.968   0.980   0.990   1.000
```

```
  24          JD   3.168     5.0
              * 6-hour distribution, pattern 2.3
  25          PC   0.000   0.011   0.017   0.027   0.039   0.049   0.060   0.070   0.080   0.091
  26          PC   0.103   0.118   0.139   0.183   0.270   0.458   0.686   0.823   0.889   0.929
1                                          HEC-1 INPUT                                                PAGE  2

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

  27          PC   0.949   0.962   0.974   0.988   1.000
  28          JD   3.102    10.0
              * 6-hour distribution, pattern 2.7
  29          PC   0.000   0.013   0.019   0.029   0.044   0.057   0.069   0.081   0.094   0.107
  30          PC   0.122   0.137   0.160   0.205   0.289   0.466   0.677   0.807   0.877   0.919
  31          PC   0.947   0.961   0.974   0.987   1.000
              *
              *

  32          KK    BICE
  33          KM   ******************************************************************************
  34          KM   **   SUB-WATERSHED E   ******************************************************
  35          KM   ******************************************************************************
  36          KM   FALSE BASIN TO SIMULATE INFLOW FROM BIC
  37          BA  0.0001
  38          ZR  =QI A=BIC BIC B=4395 LAT STRUCT C=FLOW-WEIR D=02JAN1994 E=15MIN F=BIC-100-06E
              *

  39          KK  E2S-E3   ROUTE     E2S
  40          KM   ROUTE INFLOW FROM BIC CONCENTRATED AT E2S TO E3 (CHANNEL A)
  41          RS       1    FLOW     0.0     0.0
  42          RC   0.100   0.100   0.100    9549  0.0030    0.00
  43          RX    0.00  250.00  500.00  750.00 1000.00 1333.30 1666.60 2000.00
  44          RY   10.00    7.50    5.00    2.50    0.00    3.30    6.60   10.00
              *
              *

  45          KK      84   BASIN
  46          KM   S-GRAPH TYPE=AGRICULTURE
  47          BA   0.877
  48          LG    0.99    0.15    9.70    0.07       0
  49          UI      15      14      15      31      42      67      90      78     100     116
  50          UI     124     125     125     124     115     104     110     109      79      81
  51          UI      80      58      56      45      42      47      28      27      24      21
  52          UI      19      18      13      13      14      10       9       8       9       8
  53          UI       7       1       2       2       2       2       2       2       1       2
  54          UI       2       0       0       0       0       0       0       0       0       0
              *

  55          KK      E3 COMBINE
  56          KM   COMBINE ROUTED HYDROGRAPH FROM E2S WITH RUNOFF FROM 84 @ E3
  57          HC       2
              *

  58          KK   BICFB
  59          KM   ******************************************************************************
  60          KM   **   SUB-WATERSHEDS F AND G   ********************************************
  61          KM   ******************************************************************************
  62          KM   FALSE BASIN TO SIMULATE INFLOW FROM BIC
  63          BA    0.01
  64          ZR  =QI A=BIC BIC B=14995 LAT STRUCT C=FLOW-WEIR D=02JAN1994 E=15MIN F=BIC-100-06E
              *
1                                          HEC-1 INPUT                                                PAGE  3

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

  65          KK  F6BS7B   ROUTE    F6BS
  66          KM   ROUTE INFLOW FROM BIC CONCENTRATED AT F6BS TO F7B (CHANNEL A)
  67          RS       1    FLOW     0.0     0.0
  68          RC   0.100   0.100   0.100    3160  0.0070    0.00
  69          RX    0.00  250.00  500.00  750.00 1000.00 1333.30 1666.60 2000.00
  70          RY   10.00    7.50    5.00    2.50    0.00    3.30    6.60   10.00
              *

  71          KK     85B   BASIN
  72          KM   S-GRAPH TYPE=AGRICULTURE
  73          BA   0.745
  74          LG    0.93    0.25    5.70    0.30       2
  75          UI      17      16      31      51      92      95     128     130     142     142
  76          UI     138     118     125     105      93      82      65      52      49      41
  77          UI      31      26      22      20      15      15      12       9      10      10
  78          UI       4       3       2       2       2       2       2       2       2       2
  79          UI       2       2       3       2       2       2       2       2       0       0
              *

  80          KK     F7B COMBINE  F7B-F8
  81          KM   COMBINE ROUTED HYDROGRAPH FROM F6BS WITH RUNOFF FROM 85B @ F7B
  82          HC       2
              *
```

```
 83          KK  F7B-F8   ROUTE     F7B
 84          KM   ROUTE HYDROGRAPH FROM F7B TO F8 (CHANNEL A)
 85          RS       8    FLOW     0.0     0.0
 86          RC   0.100   0.100   0.100    6484  0.0060    0.00
 87          RX    0.00  250.00  500.00  750.00 1000.00 1333.30 1666.60 2000.00
 88          RY   10.00    7.50    5.00    2.50    0.00    3.30    6.60   10.00
             *

 89          KK    BICG
 90          KM   FALSE BASIN TO SIMULATE INFLOW FROM BIC
 91          BA    0.01
 92          ZR  =QI A=BIC BIC B=21999 LAT STRUCT C=FLOW-WEIR D=02JAN1994 E=15MIN F=BIC-100-06E
             *

 93          KK  G8S-G9   ROUTE     G8S
 94          KM   ROUTE INFLOW FROM BIC CONCENTRATED AT G8S TO G9 (CHANNEL A)
 95          RS       1    FLOW     0.0     0.0
 96          RC   0.100   0.100   0.100    5482  0.0050    0.00
 97          RX    0.00  250.00  500.00  750.00 1000.00 1333.30 1666.60 2000.00
 98          RY   10.00    7.50    5.00    2.50    0.00    3.30    6.60   10.00
             *

 99          KK      86   BASIN
100          KM   S-GRAPH TYPE=AGRICULTURE
101          BA   0.440
102          LG    0.91    0.15    8.00    0.11       2
103          UI      14      20      46      80      98     113     119     112     102      88
104          UI      78      56      42      39      25      21      17      12      11       8
105          UI       8       5       2       2       1       2       2       2       1       2
106          UI       2       2       2       1       0       0       0       0       0       0
             *
```



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

107          KK      G9 COMBINE   G9-F8
108          KM   COMBINE ROUTED HYDROGRAPH FROM G8S WITH RUNOFF FROM 86 @ G9
109          HC       2
             *

110          KK   G9-F8   ROUTE      G9
111          KM   ROUTE HYDROGRAPH FROM G9 TO F8 (CHANNEL A)
112          RS      13    FLOW     0.0     0.0
113          RC   0.100   0.100   0.100    9228  0.0040    0.00
114          RX    0.00  250.00  500.00  750.00 1000.00 1333.30 1666.60 2000.00
115          RY   10.00    7.50    5.00    2.50    0.00    3.30    6.60   10.00
             *

116          KK   BICFA
117          KM   FALSE BASIN TO SIMULATE INFLOW FROM BIC
118          BA  0.0001
119          ZR  =QI A=BIC BIC B=11199 LAT STRUCT C=FLOW-WEIR D=02JAN1994 E=15MIN F=BIC-100-06E
             *

120          KK  F6AS7A   ROUTE    F6AS
121          KM   ROUTE INFLOW FROM BIC CONCENTRATED AT F6AS TO F7A (CHANNEL A)
122          RS       1    FLOW     0.0     0.0
123          RC   0.100   0.100   0.100    2921  0.0110    0.00
124          RX    0.00  250.00  500.00  750.00 1000.00 1333.30 1666.60 2000.00
125          RY   10.00    7.50    5.00    2.50    0.00    3.30    6.60   10.00
             *

126          KK     85A   BASIN
127          KM   S-GRAPH TYPE=AGRICULTURE
128          BA   0.216
129          LG    1.00    0.15    7.30    0.17       0
130          UI       8      14      39      50      65      69      63      61      45      36
131          UI      26      21      14      10       8       7       5       4       2       1
132          UI       1       1       1       1       2       1       1       1       1       0
             *

133          KK     F7A COMBINE  F7A-F8
134          KM   COMBINE ROUTED HYDROGRAPH FROM F6AS WITH RUNOFF FROM 85A @ F7A
135          HC       2
             *

136          KK  F7A-F8   ROUTE     F7A
137          KM   ROUTE HYDROGRAPH FROM F7A TO F8 (CHANNEL A)
138          RS       7    FLOW     0.0     0.0
139          RC   0.100   0.100   0.100   10378  0.0060    0.00
140          RX    0.00  250.00  500.00  750.00 1000.00 1333.30 1666.60 2000.00
141          RY   10.00    7.50    5.00    2.50    0.00    3.30    6.60   10.00
             *
```



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

```
KK     105   BASIN
KM   S-GRAPH TYPE=AGRICULTURE
BA   0.997
LG    0.98    0.15    8.40    0.11       0
UI      18      17      20      38      56      92     106     104     138     139
UI     150     149     151     143     125     131     133      94      98      92
UI      70      63      52      53      47      34      30      28      22      22
UI      17      17      16      12      11      10      10      10       5       3
UI       2       2       2       3       2       2       2       3       2       2
UI       2       0       0       0       0       0       0       0       0       0
*

KK     104   BASIN
KM   S-GRAPH TYPE=AGRICULTURE
BA   1.012
LG    0.99    0.17    6.80    0.19       0
UI      17      17      16      34      45      75      99      91     110     128
UI     141     141     142     142     135     119     118     131      97      89
UI     100      70      64      55      48      52      41      32      28      27
UI      21      21      18      15      15      15      10       9      10       9
UI      10       4       2       3       2       2       2       2       2       2
UI       2       0       0       0       0       0       0       0       0       0
*

KK      F8 COMBINE
KM   COMBINE ROUTED HYDROGRAPH FROM G9, F7A, AND F7B WITH RUNOFF FROM 104 AND 105
HC       5
*

KK    BICH
KM   ******************************************************************************
KM   **   SUB-WATERSHED H   ********************************************************
KM   ******************************************************************************
KM   FALSE BASIN TO SIMULATE INFLOW FROM BIC
BA    0.01
ZR  =QI A=BIC BIC B=24799 LAT STRUCT C=FLOW-WEIR D=02JAN1994 E=15MIN F=BIC-100-06E
*

KK  H7S-H8   ROUTE     H7S
KM   ROUTE INFLOW FROM BIC CONCENTRATED AT H7S TO H8 (CHANNEL A)
RS       1    FLOW     0.0     0.0
RC   0.100   0.100   0.100    9427  0.0040    0.00
RX    0.00  250.00  500.00  750.00 1000.00 1333.30 1666.60 2000.00
RY   10.00    7.50    5.00    2.50    0.00    3.30    6.60   10.00
*

KK      87   BASIN
KM   S-GRAPH TYPE=AGRICULTURE
BA   0.913
LG    1.00    0.15    9.70    0.07       0
UI      17      17      22      36      65      94      98     111     134     144
UI     145     144     144     123     120     134      94      94      89      67
UI      61      50      51      41      32      28      24      21      20      15
UI      16      14      10      10      10      10       6       2       2       2
```



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

UI       3       2       2       2       2       2       2       3       2       2
UI       2       0       0       0       0       0       0       0       0       0
*

KK      H8 COMBINE   H8-H9
KM   COMBINE ROUTED HYDROGRAPH FROM H7S WITH RUNOFF FROM 87 @ H8
HC       2
*

KK   H8-H9   ROUTE      H8
KM   ROUTE HYDROGRAPH FROM H8 TO H9 (CHANNEL A)
RS       5    FLOW     0.0     0.0
RC   0.100   0.100   0.100    5170  0.0050    0.00
RX    0.00  250.00  500.00  750.00 1000.00 1333.30 1666.60 2000.00
RY   10.00    7.50    5.00    2.50    0.00    3.30    6.60   10.00
*

KK     106   BASIN
KM   S-GRAPH TYPE=AGRICULTURE
BA   1.209
LG    1.00    0.15    7.60    0.15       0
UI      19      20      19      38      49      82     109     112     121     152
UI     154     164     165     164     165     142     137     147     136     103
UI     109     103      77      74      59      55      62      41      37      31
UI      30      25      24      20      18      18      17      11      11      11
UI      11      11       6       3       2       3       2       3       2       3
UI       2       0       0       0       0       0       0       0       0       0
*

KK      H9 COMBINE
KM   COMBINE ROUTED HYDROGRAPH FROM H8 WITH RUNOFF FROM 106 @ H9
```

```
 209          HC       2
              *

 210          KK    BICJ
 211          KM   ******************************************************************************
 212          KM   **   SUB-WATERSHED J AND I  ************************************************
 213          KM   ******************************************************************************
 214          KM   FALSE BASIN TO SIMULATE INFLOW FROM BIC
 215          BA    0.01
 216          ZR  =QI A=BIC BIC B=36399 LAT STRUCT C=FLOW-WEIR D=02JAN1994 E=15MIN F=BIC-100-06E
              *

 217          KK  J6S-J7   ROUTE     J6S
 218          KM   ROUTE INFLOW FROM BIC CONCENTRATED AT J6S TO J7 (CHANNEL A)
 219          RS       1    FLOW     0.0     0.0
 220          RC   0.100   0.100   0.100    7532  0.0050    0.00
 221          RX    0.00  250.00  500.00  750.00 1000.00 1333.30 1666.60 2000.00
 222          RY   10.00    7.50    5.00    2.50    0.00    3.30    6.60   10.00
              *
1                                          HEC-1 INPUT                                          PAGE  7

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

 223          KK      89   BASIN
 224          KM   S-GRAPH TYPE=AGRICULTURE
 225          BA   0.963
 226          LG    0.99    0.15    9.70    0.07       0
 227          UI      19      18      25      39      73     105     101     127     143     155
 228          UI     156     154     151     130     135     132      97     106      84      70
 229          UI      60      52      58      35      31      30      23      23      18      17
 230          UI      16      12      10      11      11       9       3       2       2       3
 231          UI       2       2       2       3       2       2       3       2       2       3
 232          UI       2       0       0       0       0       0       0       0       0       0
              *

 233          KK      J7 COMBINE   J7-J8
 234          KM   COMBINE ROUTED HYDROGRAPH FROM J6S WITH RUNOFF FROM 89 @ J7
 235          HC       2
              *

 236          KK   J7-J8   ROUTE      J7
 237          KM   ROUTE HYDROGRAPH FROM J7 TO J8 (CHANNEL Outlet to Gila)
 238          RS       2    FLOW     0.0     0.0
 239          RC   0.035   0.050   0.035    6030  0.0050    0.00
 240          RX    0.00    5.00   15.00   25.00   45.00   55.00   65.00   70.00
 241          RY   12.00   12.00    6.00    0.00    0.00    6.00   12.00   12.00
              *

 242          KK    BICI
 243          KM   FALSE BASIN TO SIMULATE INFLOW FROM BIC
 244          BA    0.01
 245          ZR  =QI A=BIC BIC B=33399 LAT STRUCT C=FLOW-WEIR D=02JAN1994 E=15MIN F=BIC-100-06E
              *

 246          KK  I6S-I7   ROUTE     I6S
 247          KM   ROUTE INFLOW FROM BIC CONCENTRATED AT I6S TO I7 (CHANNEL A)
 248          RS       1    FLOW     0.0     0.0
 249          RC   0.100   0.100   0.100    5514  0.0060    0.00
 250          RX    0.00  250.00  500.00  750.00 1000.00 1333.30 1666.60 2000.00
 251          RY   10.00    7.50    5.00    2.50    0.00    3.30    6.60   10.00
              *

 252          KK      88   BASIN
 253          KM   S-GRAPH TYPE=AGRICULTURE
 254          BA   0.765
 255          LG    0.99    0.15    9.70    0.07       0
 256          UI      15      15      23      37      67      90      85     118     120     129
 257          UI     128     130     112     109     119      83      85      76      59      50
 258          UI      44      47      29      26      24      19      18      14      15      12
 259          UI       9       9       8       9       3       2       2       2       2       2
 260          UI       2       2       2       2       2       2       2       2       2       2
 261          UI       2       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

 262          KK      I7 COMBINE   I7-I8
 263          KM   COMBINE ROUTED HYDROGRAPH FROM I6S WITH RUNOFF FROM 88 @ I7
 264          HC       2
              *

 265          KK   I7-I8   ROUTE      I7
 266          KM   ROUTE HYDROGRAPH FROM I7 TO I8 (CHANNEL A)
 267          RS       3    FLOW     0.0     0.0
 268          RC   0.100   0.100   0.100    2839  0.0110    0.00
 269          RX    0.00  250.00  500.00  750.00 1000.00 1333.30 1666.60 2000.00
```

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270          RY   10.00    7.50    5.00    2.50    0.00    3.30    6.60   10.00
             *

271          KK     102   BASIN
272          KM   S-GRAPH TYPE=AGRICULTURE
273          BA   0.520
274          LG    0.99    0.15    8.40    0.10       0
275          UI      12      12      23      40      68      67      90      99     101     101
276          UI      95      84      94      64      70      49      43      35      36      23
277          UI      20      17      15      12      11      10       7       6       7       5
278          UI       1       2       1       2       1       2       1       2       1       2
279          UI       1       2       1       2       1       2       1       0       0       0
             *

280          KK      I8 COMBINE   I8-J8
281          KM   COMBINE ROUTED HYDROGRAPH FROM I7 WITH RUNOFF FROM 102 @ I8
282          HC       2
             *

283          KK   I8-J8   ROUTE      I8
284          KM   ROUTE HYDROGRAPH FROM I8 TO J8 (CHANNEL Outlet to Gila)
285          RS       2    FLOW     0.0     0.0
286          RC   0.035   0.050   0.035    1438  0.0020    0.00
287          RX    0.00    5.00   15.00   25.00   45.00   55.00   65.00   70.00
288          RY   12.00   12.00    6.00    0.00    0.00    6.00   12.00   12.00
             *

289          KK     103   BASIN
290          KM   S-GRAPH TYPE=AGRICULTURE
291          BA   0.507
292          LG    0.84    0.23    6.20    0.24       3
293          UI      17      24      60      94     118     140     141     128     123      95
294          UI      86      60      50      38      28      21      17      15      10      10
295          UI       8       3       2       2       2       2       2       2       2       2
296          UI       2       2       2       0       0       0       0       0       0       0
             *

297          KK      J8 COMBINE
298          KM   COMBINE ROUTED HYDROGRAPH FROM I8 AND J7 WITH RUNOFF FROM 103 @ J8
299          HC       3
             *
1                                          HEC-1 INPUT                                          PAGE  9

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


300          KK     107   BASIN
301          KM   S-GRAPH TYPE=AGRICULTURE
302          BA   0.484
303          LG    1.00    0.17    6.80    0.21       0
304          UI      14      18      38      79      83     111     120     120     107     104
305          UI      85      79      55      45      42      27      23      17      15      13
306          UI      10       8       8       4       2       2       1       2       2       2
307          UI       2       1       2       2       2       1       2       0       0       0
308          ZZ
1
             SCHEMATIC DIAGRAM OF STREAM NETWORK
 INPUT
  LINE       (V) ROUTING          (--->) DIVERSION OR PUMP FLOW

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

    32         BICE
                  V
                  V
    39       E2S-E3
                  .
                  .
    45            .          84
                  .           .
                  .           .
    55           E3............
                  .
                  .
    58            .       BICFB
                  .           V
                  .           V
    65            .      F6BS7B
                  .           .
                  .           .
    71            .           .         85B
                  .           .           .
                  .           .           .
    80            .         F7B............
                  .           V
                  .           V
    83            .      F7B-F8
                  .           .
                  .           .
```

```
 89          .           .        BICG
             .           .          V
             .           .          V
 93          .           .      G8S-G9
             .           .          .
             .           .          .
 99          .           .          .          86
             .           .          .           .
             .           .          .           .
107          .           .         G9............
             .           .          V
             .           .          V
110          .           .       G9-F8
             .           .          .
             .           .          .
116          .           .          .      BICFA
             .           .          .          V
             .           .          .          V
120          .           .          .     F6AS7A
             .           .          .          .
             .           .          .          .
126          .           .          .          .         85A
             .           .          .          .           .
             .           .          .          .           .
133          .           .          .        F7A............
             .           .          .          V
             .           .          .          V
136          .           .          .     F7A-F8
             .           .          .          .
             .           .          .          .
142          .           .          .          .         105
             .           .          .          .           .
             .           .          .          .           .
152          .           .          .          .           .         104
             .           .          .          .           .           .
             .           .          .          .           .           .
162          .         F8.......................................................
             .           .
             .           .
165          .           .        BICH
             .           .          V
             .           .          V
172          .           .      H7S-H8
             .           .          .
             .           .          .
178          .           .          .          87
             .           .          .           .
             .           .          .           .
188          .           .         H8............
             .           .          V
             .           .          V
191          .           .       H8-H9
             .           .          .
             .           .          .
197          .           .          .         106
             .           .          .           .
             .           .          .           .
207          .           .         H9............
             .           .          .
             .           .          .
210          .           .          .       BICJ
             .           .          .          V
             .           .          .          V
217          .           .          .     J6S-J7
             .           .          .          .
             .           .          .          .
223          .           .          .          .          89
             .           .          .          .           .
             .           .          .          .           .
233          .           .          .         J7............
             .           .          .          V
             .           .          .          V
236          .           .          .      J7-J8
             .           .          .          .
             .           .          .          .
242          .           .          .          .        BICI
             .           .          .          .           V
             .           .          .          .           V
246          .           .          .          .      I6S-I7
             .           .          .          .           .
             .           .          .          .           .
252          .           .          .          .           .          88
             .           .          .          .           .           .
             .           .          .          .           .           .
262          .           .          .          .          I7............
             .           .          .          .           V
             .           .          .          .           V
265          .           .          .          .        I7-I8
             .           .          .          .           .
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                .          .          .          .          .
  271           .          .          .          .          .        102
                .          .          .          .          .          .
                .          .          .          .          .          .
  280           .          .          .          .         I8............
                .          .          .          .          V
                .          .          .          .          V
  283           .          .          .          .       I8-J8
                .          .          .          .          .
                .          .          .          .          .
  289           .          .          .          .          .        103
                .          .          .          .          .          .
                .          .          .          .          .          .
  297           .          .          .         J8......................
                .          .          .          .
                .          .          .          .
  300           .          .          .          .        107

 (***) 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   28FEB08  TIME  16:53:06   *                                    *           (916) 756-1104             *
 *                                       *                                    *                                      *
 *****************************************                                    ****************************************


                                FCDMC
                                0607BASE_EXST_6HR - Buckeye ADMP Existing Conditions Hydrology Update
                                Major Basin: 02
                                100 Year - Return Period
                                6 Hour Storm
                                Multiple Storms
                                Unit Hydrograph: S-Graph
                                01/09/2008

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

     IT          HYDROGRAPH TIME DATA
                        NMIN         15  MINUTES IN COMPUTATION INTERVAL
                       IDATE     2JAN94  STARTING DATE
                       ITIME       0000  STARTING TIME
                          NQ        400  NUMBER OF HYDROGRAPH ORDINATES
                      NDDATE     6JAN94  ENDING DATE
                      NDTIME       0345  ENDING TIME
                       ICENT         19  CENTURY MARK

                 COMPUTATION INTERVAL    0.25 HOURS
                      TOTAL TIME BASE   99.75 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

  12 JD          INDEX STORM NO. 1
                       STRM       3.30  PRECIPITATION DEPTH
                       TRDA       0.01  TRANSPOSITION DRAINAGE AREA

  13 PI            PRECIPITATION PATTERN
                     0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                     0.01      0.02      0.02      0.08      0.16      0.46      0.08      0.02      0.02      0.01
                     0.01      0.01      0.01      0.01

  16 JD          INDEX STORM NO. 2
                       STRM       3.28  PRECIPITATION DEPTH
                       TRDA       0.50  TRANSPOSITION DRAINAGE AREA

  17 PI            PRECIPITATION PATTERN
                     0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                     0.01      0.02      0.02      0.08      0.16      0.46      0.08      0.02      0.02      0.01
                     0.01      0.01      0.01      0.01

  20 JD          INDEX STORM NO. 3
                       STRM       3.26  PRECIPITATION DEPTH
                       TRDA       1.00  TRANSPOSITION DRAINAGE AREA
```

```
  21 PI            PRECIPITATION PATTERN
                      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                      0.01      0.02      0.03      0.08      0.18      0.37      0.10      0.04      0.03      0.01
                      0.01      0.01      0.01      0.01

  24 JD          INDEX STORM NO. 4
                        STRM        3.17  PRECIPITATION DEPTH
                        TRDA        5.00  TRANSPOSITION DRAINAGE AREA

  25 PI            PRECIPITATION PATTERN
                      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                      0.02      0.02      0.04      0.09      0.19      0.23      0.14      0.07      0.04      0.02
                      0.01      0.01      0.01      0.01

  28 JD          INDEX STORM NO. 5
                        STRM        3.10  PRECIPITATION DEPTH
                        TRDA       10.00  TRANSPOSITION DRAINAGE AREA

  29 PI            PRECIPITATION PATTERN
                      0.01      0.01      0.01      0.02      0.01      0.01      0.01      0.01      0.01      0.02
                      0.01      0.02      0.05      0.08      0.18      0.21      0.13      0.07      0.04      0.03
                      0.01      0.01      0.01      0.01
   -----DSS---ZOPEN:  Existing File Opened,  File: J:\2006\10-0607\DESIGN~2\DRAINA~1\HEC-RAS\Model\A1.DSS
                      Unit: 71;  DSS Versions - Software: 6-LD, File: 6-LD
       ----- Entering ZRRTSX for unit 71 -----
Pathname: /BIC BIC/4395 LAT STRUCT/FLOW-WEIR//15MIN/BIC-100-06E/
       Time Window set.  Interval:    15  Number of data values:      1
       Starting date and time:  Jan 1, 1994  2400  (  34334 1440)
       Ending   date and time:  Jan 1, 1994  2400  (  34334 1440)
       Input time offset:      0
       After ZRDINF, Record found: T
       Pathname: /BIC BIC/4395 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/BIC-100-06E/
       Number of actual data: 2976  Header length:   0
       Compression:   0  Quality:   0  Double: F
-----DSS--- ZREAD Unit  71; Vers.    1:  /BIC BIC/4395 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/BIC-100-06E/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
       NSTART:    1   NVALS:    1    JULS:   34334  ISTIME:  1440
       NLDATA: 2976   JULSD:   34334
       JULS: 01JAN94       JULSD: 01JAN94
       Quality Read: F,  Quality Requested: F
       ---ZRRTSB Calculations:  NPOS:   96  NDATA: 2976  NREAD:    1  ILIM:    1
      ----- Exiting ZRRTS, Number of data values:      1,  Status:  0
       Offset:       0,  Units: CFS     ,  Type:INST-VAL
       ----- Entering ZRRTSX for unit 71 -----
Pathname: /BIC BIC/4395 LAT STRUCT/FLOW-WEIR//15MIN/BIC-100-06E/
       Time Window set.  Interval:    15  Number of data values:    401
       Starting date and time:  Jan 1, 1994  2400  (  34334 1440)
       Ending   date and time:  Jan 6, 1994  0400  (  34339  240)
       Input time offset:      0
       After ZRDINF, Record found: T
       Pathname: /BIC BIC/4395 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/BIC-100-06E/
       Number of actual data: 2976  Header length:   0
       Compression:   0  Quality:   0  Double: F
-----DSS--- ZREAD Unit  71; Vers.    1:  /BIC BIC/4395 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/BIC-100-06E/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
       NSTART:    1   NVALS:  401    JULS:   34334  ISTIME:  1440
       NLDATA: 2976   JULSD:   34334
       JULS: 01JAN94       JULSD: 01JAN94
       Quality Read: F,  Quality Requested: F
       ---ZRRTSB Calculations:  NPOS:   96  NDATA: 2976  NREAD:  401  ILIM:  401
      ----- Exiting ZRRTS, Number of data values:    401,  Status:  1
       Offset:       0,  Units: CFS     ,  Type:INST-VAL
       ----- Entering ZRRTSX for unit 71 -----
Pathname: /BIC BIC/14995 LAT STRUCT/FLOW-WEIR//15MIN/BIC-100-06E/
       Time Window set.  Interval:    15  Number of data values:      1
       Starting date and time:  Jan 1, 1994  2400  (  34334 1440)
       Ending   date and time:  Jan 1, 1994  2400  (  34334 1440)
       Input time offset:      0
       After ZRDINF, Record found: T
       Pathname: /BIC BIC/14995 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/BIC-100-06E/
       Number of actual data: 2976  Header length:   0
       Compression:   0  Quality:   0  Double: F
-----DSS--- ZREAD Unit  71; Vers.    1:  /BIC BIC/14995 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/BIC-100-06E/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
       NSTART:    1   NVALS:    1    JULS:   34334  ISTIME:  1440
       NLDATA: 2976   JULSD:   34334
       JULS: 01JAN94       JULSD: 01JAN94
       Quality Read: F,  Quality Requested: F
       ---ZRRTSB Calculations:  NPOS:   96  NDATA: 2976  NREAD:    1  ILIM:    1
      ----- Exiting ZRRTS, Number of data values:      1,  Status:  0
       Offset:       0,  Units: CFS     ,  Type:INST-VAL
       ----- Entering ZRRTSX for unit 71 -----
Pathname: /BIC BIC/14995 LAT STRUCT/FLOW-WEIR//15MIN/BIC-100-06E/
       Time Window set.  Interval:    15  Number of data values:    401
       Starting date and time:  Jan 1, 1994  2400  (  34334 1440)
       Ending   date and time:  Jan 6, 1994  0400  (  34339  240)
       Input time offset:      0
       After ZRDINF, Record found: T
```

```
        Pathname: /BIC BIC/14995 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/BIC-100-06E/
        Number of actual data: 2976  Header length:   0
        Compression:   0  Quality:   0  Double: F
-----DSS--- ZREAD Unit  71; Vers.    1:  /BIC BIC/14995 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/BIC-100-06E/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:  401    JULS:   34334  ISTIME:  1440
        NLDATA: 2976   JULSD:   34334
        JULS: 01JAN94       JULSD: 01JAN94
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:   96  NDATA: 2976  NREAD:  401  ILIM:  401
      ----- Exiting ZRRTS, Number of data values:    401,  Status:  1
        Offset:       0,  Units: CFS     ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
Pathname: /BIC BIC/21999 LAT STRUCT/FLOW-WEIR//15MIN/BIC-100-06E/
        Time Window set.  Interval:    15  Number of data values:      1
        Starting date and time:  Jan 1, 1994  2400  (  34334 1440)
        Ending   date and time:  Jan 1, 1994  2400  (  34334 1440)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /BIC BIC/21999 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/BIC-100-06E/
        Number of actual data: 2976  Header length:   0
        Compression:   0  Quality:   0  Double: F
-----DSS--- ZREAD Unit  71; Vers.    1:  /BIC BIC/21999 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/BIC-100-06E/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:    1    JULS:   34334  ISTIME:  1440
        NLDATA: 2976   JULSD:   34334
        JULS: 01JAN94       JULSD: 01JAN94
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:   96  NDATA: 2976  NREAD:    1  ILIM:    1
      ----- Exiting ZRRTS, Number of data values:      1,  Status:  0
        Offset:       0,  Units: CFS     ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
Pathname: /BIC BIC/21999 LAT STRUCT/FLOW-WEIR//15MIN/BIC-100-06E/
        Time Window set.  Interval:    15  Number of data values:    401
        Starting date and time:  Jan 1, 1994  2400  (  34334 1440)
        Ending   date and time:  Jan 6, 1994  0400  (  34339  240)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /BIC BIC/21999 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/BIC-100-06E/
        Number of actual data: 2976  Header length:   0
        Compression:   0  Quality:   0  Double: F
-----DSS--- ZREAD Unit  71; Vers.    1:  /BIC BIC/21999 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/BIC-100-06E/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:  401    JULS:   34334  ISTIME:  1440
        NLDATA: 2976   JULSD:   34334
        JULS: 01JAN94       JULSD: 01JAN94
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:   96  NDATA: 2976  NREAD:  401  ILIM:  401
      ----- Exiting ZRRTS, Number of data values:    401,  Status:  1
        Offset:       0,  Units: CFS     ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
Pathname: /BIC BIC/11199 LAT STRUCT/FLOW-WEIR//15MIN/BIC-100-06E/
        Time Window set.  Interval:    15  Number of data values:      1
        Starting date and time:  Jan 1, 1994  2400  (  34334 1440)
        Ending   date and time:  Jan 1, 1994  2400  (  34334 1440)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /BIC BIC/11199 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/BIC-100-06E/
        Number of actual data: 2976  Header length:   0
        Compression:   0  Quality:   0  Double: F
-----DSS--- ZREAD Unit  71; Vers.    1:  /BIC BIC/11199 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/BIC-100-06E/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:    1    JULS:   34334  ISTIME:  1440
        NLDATA: 2976   JULSD:   34334
        JULS: 01JAN94       JULSD: 01JAN94
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:   96  NDATA: 2976  NREAD:    1  ILIM:    1
      ----- Exiting ZRRTS, Number of data values:      1,  Status:  0
        Offset:       0,  Units: CFS     ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
Pathname: /BIC BIC/11199 LAT STRUCT/FLOW-WEIR//15MIN/BIC-100-06E/
        Time Window set.  Interval:    15  Number of data values:    401
        Starting date and time:  Jan 1, 1994  2400  (  34334 1440)
        Ending   date and time:  Jan 6, 1994  0400  (  34339  240)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /BIC BIC/11199 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/BIC-100-06E/
        Number of actual data: 2976  Header length:   0
        Compression:   0  Quality:   0  Double: F
-----DSS--- ZREAD Unit  71; Vers.    1:  /BIC BIC/11199 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/BIC-100-06E/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:  401    JULS:   34334  ISTIME:  1440
        NLDATA: 2976   JULSD:   34334
        JULS: 01JAN94       JULSD: 01JAN94
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:   96  NDATA: 2976  NREAD:  401  ILIM:  401
      ----- Exiting ZRRTS, Number of data values:    401,  Status:  1
        Offset:       0,  Units: CFS     ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
```

```
Pathname: /BIC BIC/24799 LAT STRUCT/FLOW-WEIR//15MIN/BIC-100-06E/
        Time Window set.  Interval:    15  Number of data values:      1
        Starting date and time:  Jan 1, 1994  2400  (  34334 1440)
        Ending   date and time:  Jan 1, 1994  2400  (  34334 1440)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /BIC BIC/24799 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/BIC-100-06E/
        Number of actual data: 2976  Header length:   0
        Compression:   0  Quality:   0  Double: F
-----DSS--- ZREAD Unit  71; Vers.    1:  /BIC BIC/24799 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/BIC-100-06E/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:    1    JULS:   34334  ISTIME:  1440
        NLDATA: 2976   JULSD:   34334
        JULS: 01JAN94       JULSD: 01JAN94
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:   96  NDATA: 2976  NREAD:    1  ILIM:    1
      ----- Exiting ZRRTS, Number of data values:      1,  Status:  0
        Offset:       0,  Units: CFS     ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
Pathname: /BIC BIC/24799 LAT STRUCT/FLOW-WEIR//15MIN/BIC-100-06E/
        Time Window set.  Interval:    15  Number of data values:    401
        Starting date and time:  Jan 1, 1994  2400  (  34334 1440)
        Ending   date and time:  Jan 6, 1994  0400  (  34339  240)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /BIC BIC/24799 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/BIC-100-06E/
        Number of actual data: 2976  Header length:   0
        Compression:   0  Quality:   0  Double: F
-----DSS--- ZREAD Unit  71; Vers.    1:  /BIC BIC/24799 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/BIC-100-06E/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:  401    JULS:   34334  ISTIME:  1440
        NLDATA: 2976   JULSD:   34334
        JULS: 01JAN94       JULSD: 01JAN94
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:   96  NDATA: 2976  NREAD:  401  ILIM:  401
      ----- Exiting ZRRTS, Number of data values:    401,  Status:  1
        Offset:       0,  Units: CFS     ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
Pathname: /BIC BIC/36399 LAT STRUCT/FLOW-WEIR//15MIN/BIC-100-06E/
        Time Window set.  Interval:    15  Number of data values:      1
        Starting date and time:  Jan 1, 1994  2400  (  34334 1440)
        Ending   date and time:  Jan 1, 1994  2400  (  34334 1440)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /BIC BIC/36399 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/BIC-100-06E/
        Number of actual data: 2976  Header length:   0
        Compression:   0  Quality:   0  Double: F
-----DSS--- ZREAD Unit  71; Vers.    1:  /BIC BIC/36399 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/BIC-100-06E/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:    1    JULS:   34334  ISTIME:  1440
        NLDATA: 2976   JULSD:   34334
        JULS: 01JAN94       JULSD: 01JAN94
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:   96  NDATA: 2976  NREAD:    1  ILIM:    1
      ----- Exiting ZRRTS, Number of data values:      1,  Status:  0
        Offset:       0,  Units: CFS     ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
Pathname: /BIC BIC/36399 LAT STRUCT/FLOW-WEIR//15MIN/BIC-100-06E/
        Time Window set.  Interval:    15  Number of data values:    401
        Starting date and time:  Jan 1, 1994  2400  (  34334 1440)
        Ending   date and time:  Jan 6, 1994  0400  (  34339  240)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /BIC BIC/36399 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/BIC-100-06E/
        Number of actual data: 2976  Header length:   0
        Compression:   0  Quality:   0  Double: F
-----DSS--- ZREAD Unit  71; Vers.    1:  /BIC BIC/36399 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/BIC-100-06E/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:  401    JULS:   34334  ISTIME:  1440
        NLDATA: 2976   JULSD:   34334
        JULS: 01JAN94       JULSD: 01JAN94
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:   96  NDATA: 2976  NREAD:  401  ILIM:  401
      ----- Exiting ZRRTS, Number of data values:    401,  Status:  1
        Offset:       0,  Units: CFS     ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
Pathname: /BIC BIC/33399 LAT STRUCT/FLOW-WEIR//15MIN/BIC-100-06E/
        Time Window set.  Interval:    15  Number of data values:      1
        Starting date and time:  Jan 1, 1994  2400  (  34334 1440)
        Ending   date and time:  Jan 1, 1994  2400  (  34334 1440)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /BIC BIC/33399 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/BIC-100-06E/
        Number of actual data: 2976  Header length:   0
        Compression:   0  Quality:   0  Double: F
-----DSS--- ZREAD Unit  71; Vers.    1:  /BIC BIC/33399 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/BIC-100-06E/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:    1    JULS:   34334  ISTIME:  1440
        NLDATA: 2976   JULSD:   34334
```

```
        JULS: 01JAN94       JULSD: 01JAN94
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:   96  NDATA: 2976  NREAD:    1  ILIM:    1
      ----- Exiting ZRRTS, Number of data values:     1,  Status:  0
        Offset:       0,  Units: CFS     ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
 Pathname: /BIC BIC/33399 LAT STRUCT/FLOW-WEIR//15MIN/BIC-100-06E/
        Time Window set.  Interval:    15  Number of data values:    401
        Starting date and time:  Jan 1, 1994  2400  (  34334 1440)
        Ending   date and time:  Jan 6, 1994  0400  (  34339  240)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /BIC BIC/33399 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/BIC-100-06E/
        Number of actual data: 2976  Header length:   0
        Compression:   0  Quality:   0  Double: F
 -----DSS--- ZREAD Unit  71; Vers.    1:  /BIC BIC/33399 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/BIC-100-06E/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:  401    JULS:   34334  ISTIME:  1440
        NLDATA: 2976   JULSD:   34334
        JULS: 01JAN94       JULSD: 01JAN94
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:   96  NDATA: 2976  NREAD:  401  ILIM:  401
      ----- Exiting ZRRTS, Number of data values:    401,  Status:  1
        Offset:       0,  Units: CFS     ,  Type:INST-VAL
1
                                                RUNOFF SUMMARY
                                          FLOW IN CUBIC FEET PER SECOND
                                        TIME IN HOURS,  AREA IN SQUARE MILES

                                    PEAK   TIME OF     AVERAGE FLOW FOR MAXIMUM PERIOD      BASIN     MAXIMUM     TIME OF
        OPERATION       STATION     FLOW    PEAK                                           AREA      STAGE     MAX STAGE
+                                                        6-HOUR     24-HOUR     72-HOUR

        HYDROGRAPH AT
+                          BICE       0.    0.00          0.          0.          0.       0.00

        ROUTED TO
+                        E2S-E3       0.    0.00          0.          0.          0.       0.00

        HYDROGRAPH AT
+                            84     192.    7.00        127.         36.         12.       0.88

        2 COMBINED AT
+                            E3     192.    7.00        127.         36.         12.       0.88

        HYDROGRAPH AT
+                         BICFB     223.   12.00        171.         49.         16.       0.01

        ROUTED TO
+                        F6BS7B     212.   12.75        163.         49.         16.       0.01

        HYDROGRAPH AT
+                           85B     165.    6.25         88.         23.          8.       0.75

        2 COMBINED AT
+                           F7B     214.   12.75        167.         73.         24.       0.75

        ROUTED TO
+                        F7B-F8     208.   14.50        163.         73.         24.       0.75

        HYDROGRAPH AT
+                          BICG     101.   12.50         63.         16.          5.       0.01

        ROUTED TO
+                        G8S-G9      70.   14.00         52.         16.          5.       0.01

        HYDROGRAPH AT
+                            86     191.    5.50         75.         19.          6.       0.44

        2 COMBINED AT
+                            G9     191.    5.50         75.         35.         12.       0.45

        ROUTED TO
+                         G9-F8     138.    8.50         69.         35.         12.       0.45

        HYDROGRAPH AT
+                         BICFA       0.    0.00          0.          0.          0.       0.00

        ROUTED TO
+                        F6AS7A       0.    0.00          0.          0.          0.       0.00

        HYDROGRAPH AT
+                           85A      98.    5.25         33.          8.          3.       0.22

        2 COMBINED AT
+                           F7A      98.    5.25         33.          8.          3.       0.22

        ROUTED TO
+                        F7A-F8      47.    8.75         28.          8.          3.       0.22
```

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| + | HYDROGRAPH AT | 105 | 214. | 7.00 | 136. | 38. | 13. | 1.00 |
| + | HYDROGRAPH AT | 104 | 176. | 7.00 | 117. | 33. | 11. | 1.01 |
| + | 5 COMBINED AT | F8 | 529. | 8.25 | 356. | 171. | 57. | 3.43 |
| + | HYDROGRAPH AT | BICH | 5. | 11.75 | 1. | 0. | 0. | 0.01 |
| + | ROUTED TO | H7S-H8 | 1. | 13.00 | 1. | 0. | 0. | 0.01 |
| + | HYDROGRAPH AT | 87 | 220. | 6.50 | 135. | 37. | 12. | 0.91 |
| + | 2 COMBINED AT | H8 | 220. | 6.50 | 135. | 38. | 13. | 0.92 |
| + | ROUTED TO | H8-H9 | 203. | 8.00 | 129. | 38. | 13. | 0.92 |
| + | HYDROGRAPH AT | 106 | 215. | 7.00 | 146. | 42. | 14. | 1.21 |
| + | 2 COMBINED AT | H9 | 382. | 7.50 | 255. | 76. | 25. | 2.13 |
| + | HYDROGRAPH AT | BICJ | 278. | 9.50 | 227. | 92. | 37. | 0.01 |
| + | ROUTED TO | J6S-J7 | 222. | 11.50 | 196. | 90. | 37. | 0.01 |
| + | HYDROGRAPH AT | 89 | 238. | 6.50 | 144. | 39. | 13. | 0.96 |
| + | 2 COMBINED AT | J7 | 251. | 7.75 | 240. | 128. | 50. | 0.97 |
| + | ROUTED TO | J7-J8 | 247. | 11.25 | 239. | 128. | 50. | 0.97 |
| + | HYDROGRAPH AT | BICI | 118. | 11.00 | 100. | 31. | 10. | 0.01 |
| + | ROUTED TO | I6S-I7 | 100. | 13.25 | 86. | 31. | 10. | 0.01 |
| + | HYDROGRAPH AT | 88 | 200. | 6.75 | 117. | 32. | 11. | 0.76 |
| + | 2 COMBINED AT | I7 | 200. | 6.75 | 125. | 63. | 21. | 0.77 |
| + | ROUTED TO | I7-I8 | 195. | 7.00 | 124. | 63. | 21. | 0.77 |
| + | HYDROGRAPH AT | 102 | 155. | 6.25 | 81. | 21. | 7. | 0.52 |
| + | 2 COMBINED AT | I8 | 318. | 7.00 | 189. | 82. | 27. | 1.29 |
| + | ROUTED TO | I8-J8 | 314. | 7.00 | 189. | 82. | 27. | 1.29 |
| + | HYDROGRAPH AT | 103 | 196. | 5.50 | 75. | 19. | 6. | 0.51 |
| + | 3 COMBINED AT | J8 | 598. | 6.50 | 438. | 220. | 81. | 2.78 |
| + | HYDROGRAPH AT | 107 | 163. | 5.75 | 69. | 18. | 6. | 0.48 |

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

```
-----DSS---ZCLOSE Unit:  71,   File: J:\2006\10-0607\DESIGN~2\DRAINA~1\HEC-RAS\Model\A1.DSS
          Pointer Utilization:  1.44
          Number of Records:   2120
          File Size:  11295.1  Kbytes
```

```
Percent Inactive:   0.0
```

# HEC-1 Existing Conditions

- FRE, 100-Yr, 6-Hr

```
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   28FEB08  TIME  16:16:22   *                                                    *           (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        FCDMC
          2           ID        0607BASE_EXST_6HR - Buckeye ADMP Existing Conditions Hydrology Update
          3           ID        Major Basin: 03
          4           ID        100 Year - Return Period
          5           ID        6 Hour Storm
          6           ID        Multiple Storms
          7           ID        Unit Hydrograph: S-Graph
          8           ID        01/09/2008
                      * ******************************************************************************
                      *  Original Model prepared as: Buckeye/Sun Valley ADMS - November 2004
                      *                              by PBS&J - Modelers: Jacob Lesue & Wen Chen
                      * ************* THIS MODEL: Major Basin 03, Model Area FRE *********************
                      *  100-year 6-hour
                      *  NEW FILE NAME:  "FRE1006EX.DAT"
                      *  Existing Conditions
                      *  Area 1 - FRS to RID (East)
                      *  Major Basin Key:  01=BGE, 02=BGW, 03=FRE, 04=FRW, 05=RBE, 06=RBW, 07=AREA2
                      *  Rainfall Loss Method - Green & Ampt
                      *  Unit Hydrograph Method - FCDMC S-Graph
                      *  Channel Routing Method - Normal Depth
                      *  Soil Data - USDA SCS Soil Survey (1972 & 1981)
                      *  Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
                      *  Retention volume for newly developed areas accounted for with FCDMC
                      *  storage methodology equation - V=C(P/12)A, where C=0.71 & P=2.8
                      * ******************************************************************************
                      *  UPDATED BY DIBBLE ENGINEERING, SEPTEMBER 2007
                      *  Land Use Updated using - FCDMC GIS Data: mag_landuse (2005)
                      * ******************************************************************************
                      *
                      *DIAGRAM
                      *
          9           IT      15 02JAN94       0     400
         10           IO       5
         11           IN      15 02JAN94       0
                      *
                      *
         12           JD   3.300  0.0100
                      * 6-hour distribution, pattern 1.0
         13           PC   0.000   0.008   0.016   0.025   0.033   0.041   0.050   0.058   0.066   0.074
         14           PC   0.087   0.099   0.118   0.138   0.216   0.377   0.834   0.911   0.931   0.950
         15           PC   0.962   0.972   0.983   0.991   1.000
         16           JD   3.280  0.5000
                      * 6-hour distribution, pattern 1.0
         17           PC   0.000   0.008   0.016   0.025   0.033   0.041   0.050   0.058   0.066   0.074
         18           PC   0.087   0.099   0.118   0.138   0.216   0.377   0.834   0.911   0.931   0.950
         19           PC   0.962   0.972   0.983   0.991   1.000
         20           JD   3.257     1.0
                      * 6-hour distribution, pattern 1.4
         21           PC   0.000   0.008   0.016   0.025   0.033   0.041   0.050   0.058   0.066   0.075
         22           PC   0.087   0.099   0.119   0.148   0.230   0.407   0.778   0.881   0.919   0.945
         23           PC   0.957   0.968   0.980   0.990   1.000
```

```
  24          JD   3.168     5.0
              * 6-hour distribution, pattern 2.3
  25          PC   0.000   0.011   0.017   0.027   0.039   0.049   0.060   0.070   0.080   0.091
  26          PC   0.103   0.118   0.139   0.183   0.270   0.458   0.686   0.823   0.889   0.929
1                                          HEC-1 INPUT                                          PAGE  2

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

  27          PC   0.949   0.962   0.974   0.988   1.000
  28          JD   3.102    10.0
              * 6-hour distribution, pattern 2.7
  29          PC   0.000   0.013   0.019   0.029   0.044   0.057   0.069   0.081   0.094   0.107
  30          PC   0.122   0.137   0.160   0.205   0.289   0.466   0.677   0.807   0.877   0.919
  31          PC   0.947   0.961   0.974   0.987   1.000
              *
              *

  32          KK       6   BASIN
  33          KM   ******************************************************************************
  34          KM   **   SUB-WATERSHED J   ******************************************************
  35          KM   ******************************************************************************
  36          KM   S-GRAPH TYPE=DESERT RANGELAND
  37          BA   0.318
  38          LG    0.35    0.35    4.80    0.24       1
  39          UI     738       0       0       0       0       0       0       0       0       0
              *

  40          KK   J1-J2   ROUTE      J1
  41          KM   ROUTE HYDROGRAPH FROM J1 TO J2 (CHANNEL A)
  42          RS       3    FLOW     0.0     0.0
  43          RC   0.035   0.035   0.035    4136  0.0040    0.00
  44          RX    0.00  250.00  500.00  750.00 1000.00 1333.30 1666.60 2000.00
  45          RY   10.00    7.50    5.00    2.50    0.00    3.30    6.60   10.00
              *

  46          KK       8   BASIN
  47          KM   S-GRAPH TYPE=DESERT RANGELAND
  48          BA   0.414
  49          LG    0.37    0.32    4.10    0.48       9
  50          UI     131     406     312     130      54      20      12       0       0       0
              *

  51          KK     8-O  DIVERT
  52          KM   RETENTION CALCULATION BASED ON FCDMC METHODOLOGY - CALCULATED VALUE IS 8.7
  53          KM   80% OF CALCULATED VALUE (6.9) IS APPLIED HERE - JTB
  54          DT    8RET     6.9     0.0
  55          DI     0.0 10000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
  56          DQ     0.0 10000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

  57          KK      J2 COMBINE   J2-J3
  58          KM   COMBINE ROUTED HYDROGRAPH FROM J1 WITH RUNOFF FROM 8 @ J2
  59          HC       2
              *

  60          KK   J2-J3   ROUTE      J2
  61          KM         HYDROGRAPH FROM J2 TO J3 (CHANNEL B)
  62          RS       2    FLOW     0.0     0.0
  63          RC   0.100   0.020   0.100    3196  0.0080    0.00
  64          RX    0.00 1000.00 1006.00 1010.00 1050.00 1054.00 1060.00 2060.00
  65          RY   10.00    0.00    0.00    1.00    1.00    0.00    0.00   10.00
              *
1                                          HEC-1 INPUT                                          PAGE  3

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

  66          KK      20   BASIN
  67          KM   S-GRAPH TYPE=PHOENIX VALLEY
  68          KM   S-GRAPH TYPE MODIFIED BY DIBBLE ENGINEERING FOR ADMP HYDROLOGY UPDATE - JTB
  69          BA   0.665
  70          LG    0.42    0.25    3.95    0.40      34
  71          UI      28      92     153     202     315     302     220     160     106      50
  72          UI      37      20       9       9       9       0       0       0       0       0
              *

  73          KK    20-O  DIVERT
  74          KM   RETENTION CALCULATION BASED ON FCDMC METHODOLOGY - CALCULATED VALUE IS 54.0
  75          KM   80% OF CALCULATED VALUE (43.2) IS APPLIED HERE - JTB
  76          DT   20RET    43.2     0.0
  77          DI     0.0 10000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
  78          DQ     0.0 10000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

  79          KK      J3 COMBINE
  80          KM   COMBINE ROUTED HYDROGRAPH FROM J2 WITH RUNOFF FROM 20 @ J3
  81          KO       3
  82          ZW   A=FRE B=J3 C=FLOW E=15MIN F=100y6h-ex
  83          HC       2
```

```
                 *

  84             KK       7   BASIN
  85             KM   ******************************************************************************
  86             KM   **   SUB-WATERSHED K   ******************************************************
  87             KM   ******************************************************************************
  88             KM   S-GRAPH TYPE=DESERT RANGELAND
  89             BA   0.446
  90             LG    0.35    0.35    3.88    0.40       1
  91             UI     949     190       0       0       0       0       0       0       0       0
                 *

  92             KK   K1-K2   ROUTE      K1
  93             KM   ROUTE HYDROGRAPH FROM K1 TO K2 (CHANNEL A)
  94             RS       2    FLOW     0.0     0.0
  95             RC   0.035   0.035   0.035    4162  0.0110    0.00
  96             RX    0.00  250.00  500.00  750.00 1000.00 1333.30 1666.60 2000.00
  97             RY   10.00    7.50    5.00    2.50    0.00    3.30    6.60   10.00
                 *

  98             KK       9   BASIN
  99             KM   S-GRAPH TYPE=DESERT RANGELAND
 100             BA   0.612
 101             LG    0.31    0.32    4.00    0.51      16
 102             UI     964     537      71       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

 103             KK     9-O  DIVERT
 104             KM   RETENTION CALCULATION BASED ON FCDMC METHODOLOGY - CALCULATED VALUE IS 9.5
 105             KM   80% OF CALCULATED VALUE (7.6) IS APPLIED HERE - JTB
 106             DT    9RET     7.6     0.0
 107             DI     0.0 10000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
 108             DQ     0.0 10000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
                 *

 109             KK      K2 COMBINE   K2-K3
 110             KM   COMBINE ROUTED HYDROGRAPH FROM K1 WITH RUNOFF FROM 9 @ K2
 111             HC       2
                 *

 112             KK   K2-K3   ROUTE      K2
 113             KM   ROUTE HYDROGRAPH FROM K2 TO K3 (CHANNEL A)
 114             RS       3    FLOW     0.0     0.0
 115             RC   0.100   0.100   0.100    2882  0.0090    0.00
 116             RX    0.00  250.00  500.00  750.00 1000.00 1333.30 1666.60 2000.00
 117             RY   10.00    7.50    5.00    2.50    0.00    3.30    6.60   10.00
                 *

 118             KK     21B   BASIN
 119             KM   S-GRAPH TYPE=AGRICULTURE
 120             BA   0.273
 121             LG    0.90    0.26    4.00    0.69       3
 122             UI       9      15      36      53      71      79      79      68      66      52
 123             UI      40      30      26      17      13      11       9       7       5       5
 124             UI       1       1       2       1       1       1       1       1       2       1
 125             UI       1       0       0       0       0       0       0       0       0       0
                 *

 126             KK     21A   BASIN
 127             KM   S-GRAPH TYPE=PHOENIX VALLEY
 128             KM   S-GRAPH TYPE MODIFIED BY DIBBLE ENGINEERING FOR ADMP HYDROLOGY UPDATE - JTB
 129             BA   0.366
 130             LG    0.25    0.25    4.00    0.55      45
 131             UI      79     230     357     188      60      19      10       0       0       0
                 *

 132             KK   21A-O  DIVERT
 133             KM   RETENTION CALCULATION BASED ON FCDMC METHODOLOGY - CALCULATED VALUE IS 38.6
 134             KM   80% OF CALCULATED VALUE (30.9) IS APPLIED HERE - JTB
 135             DT  21ARET    30.9     0.0
 136             DI     0.0 10000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
 137             DQ     0.0 10000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
                 *

 138             KK      K3 COMBINE
 139             KM   COMBINE ROUTED HYDROGRAPH FROM K2 WITH RUNOFF FROM 21A AND 21B @ K3
 140             KO       3
 141             ZW   A=FRE B=K3 C=FLOW E=15MIN F=100y6h-ex
 142             HC       3
                 *
1                                          HEC-1 INPUT                                          PAGE  5

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

```
143          KK      10   BASIN
144          KM   ******************************************************************************
145          KM   **   SUB-WATERSHED L   ***********************************************************
146          KM   ******************************************************************************
147          KM   S-GRAPH TYPE=PHOENIX VALLEY
148          BA   1.174
149          LG    0.29    0.28    4.15    0.40      27
150          UI     182     557    1008     718     354     132      42      29       0       0
             *

151          KK   L1-L2   ROUTE      L1
152          KM   ROUTE HYDROGRAPH FROM L1 TO L2 (CHANNEL B)
153          RS       3    FLOW     0.0     0.0
154          RC   0.100   0.020   0.100    2844  0.0100    0.00
155          RX    0.00 1000.00 1006.00 1010.00 1050.00 1054.00 1060.00 2060.00
156          RY   10.00    0.00    0.00    1.00    1.00    0.00    0.00   10.00
             *

157          KK      22   BASIN
158          KM   S-GRAPH TYPE=AGRICULTURE
159          BA   0.557
160          LG    0.99    0.25    4.00    0.55       0
161          UI      12      12      18      31      55      68      71      88      98      99
162          UI      98      94      81      87      74      63      62      46      40      34
163          UI      35      23      20      18      14      14      10      11       8       7
164          UI       6       7       5       2       1       2       1       2       1       2
165          UI       1       2       1       2       1       2       1       1       2       1
166          UI       2       0       0       0       0       0       0       0       0       0
             *

167          KK      L2 COMBINE
168          KM   COMBINE ROUTED HYDROGRAPH FROM L1 WITH RUNOFF FROM 22 @ L2
169          KO       3
170          ZW   A=FRE B=L2 C=FLOW E=15MIN F=100y6h-ex
171          HC       2
             *

172          KK     11C   BASIN
173          KM   ******************************************************************************
174          KM   **   SUB-WATERSHED N   ***********************************************************
175          KM   ******************************************************************************
176          KM   S-GRAPH TYPE=DESERT RANGELAND
177          KM   S-GRAPH TYPE MODIFIED BY DIBBLE ENGINEERING FOR ADMP HYDROLOGY UPDATE - JTB
178          BA   0.343
179          LG    0.33    0.33    3.95    0.40       8
180          UI     531     307      42       0       0       0       0       0       0       0
             *

181          KK   11C-O  DIVERT
182          KM   DIVERT RETENTION OUT OF MODEL DUE TO DEVELOPMENT
183          KM   RETENTION CALCULATION BASED ON FCDMC METHODOLOGY - CALCULATED VALUE IS 7.8
184          KM   80% OF CALCULATED VALUE (6.2) IS APPLIED HERE - JTB
185          DT  11CRET     6.2     0.0
186          DI     0.0 10000.0     0.0     0.0     0.0     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

187          DQ     0.0 10000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

188          KK  N1C-N2   ROUTE     N1C
189          KM   ROUTE HYDROGRAPH FROM N1C TO N2 (CHANNEL A)
190          RS       3    FLOW     0.0     0.0
191          RC   0.100   0.100   0.100    3084  0.0100    0.00
192          RX    0.00  250.00  500.00  750.00 1000.00 1333.30 1666.60 2000.00
193          RY   10.00    7.50    5.00    2.50    0.00    3.30    6.60   10.00
             *

194          KK     11A   BASIN
195          KM   S-GRAPH TYPE=PHOENIX VALLEY
196          BA   0.571
197          LG    0.28    0.28    5.00    0.31      23
198          UI     784     639       0       0       0       0       0       0       0       0
             *

199          KK   11A-O  DIVERT
200          KM   ADMS MODELED 38.23 AC-FT OF RETENTION FOR DEVELOPED AREA
201          KM   90.1 ACRES HAVE BEEN DEVELOPED SINCE ADMS
202          KM   RETENTION CALCULATION BASED ON FCDMC METHODOLOGY - CALCULATED VALUE IS 14.9
203          KM   80% OF CALCULATED VALUE (11.9) IS APPLIED HERE - JTB
204          KM   ADDITIONAL 11.9 A-F ADDED TO ORIGINAL 38.23 A-F FOR A TOTAL OF 50.2 A-F (JTB)
205          DT  11ARET    50.2     0.0
206          DI     0.0 10000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
207          DQ     0.0 10000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

208          KK  N1A-1B   ROUTE     N1A
209          KM   ROUTE HYDROGRAPH FROM N1A TO N1B (CHANNEL N1A-N1B)
```

```
210          RS       3    FLOW     0.0     0.0
211          RC   0.050   0.050   0.050    6236  0.0090    0.00
212          RX   10.00   16.00   26.00   56.00  106.00  197.00  289.00  380.00
213          RY  1032.0 1032.00 1030.00 1028.00 1030.00 1030.67 1031.33 1032.00
             *

214          KK     11B   BASIN
215          KM   S-GRAPH TYPE=PHOENIX VALLEY
216          BA   0.581
217          LG    0.29    0.29    4.30    0.45      18
218          UI     213     662     465     123      27       0       0       0       0       0
             *

219          KK   11B-O  DIVERT
220          KM   DIVERT RETENTION OUT OF MODEL DUE TO DEVELOPMENT
221          KM   RETENTION CALCULATION BASED ON FCDMC METHODOLOGY - CALCULATED VALUE IS 37.8
222          KM   80% OF CALCULATED VALUE (30.2) IS APPLIED HERE - JTB
223          DT  11BRET    30.2     0.0
224          DI     0.0 10000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
225          DQ     0.0 10000.0     0.0     0.0     0.0     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

226          KK     N1B COMBINE  N1B-N2
227          KM   COMBINE ROUTED HYDROGRAPH FROM N1A WITH RUNOFF FROM 11B @ N1B
228          HC       2
             *

229          KK  N1B-N2   ROUTE     N1B
230          KM   ROUTE HYDROGRAPH FROM N1B TO N2 (CHANNEL B)
231          RS       6    FLOW     0.0     0.0
232          RC   0.100   0.020   0.100    6967  0.0030    0.00
233          RX    0.00 1000.00 1006.00 1010.00 1050.00 1054.00 1060.00 2060.00
234          RY   10.00    0.00    0.00    1.00    1.00    0.00    0.00   10.00
             *

235          KK      23   BASIN
236          KM   S-GRAPH TYPE=PHOENIX VALLEY
237          KM   S-GRAPH TYPE MODIFIED BY DIBBLE ENGINEERING FOR ADMP HYDROLOGY UPDATE - JTB
238          BA   0.524
239          LG    0.25    0.25    3.95    0.40      30
240          UI      87     262     468     311     141      56      14      13       0       0
             *

241          KK    23-O  DIVERT
242          KM   DIVERT RETENTION OUT OF MODEL DUE TO DEVELOPMENT
243          KM   TOTAL RETENTION VOLUME FROM MONTE VERDE DRAINAGE REPORT OF 59 AC-FT.
244          KM   80% OF TOTAL VOLUME (47.2 AC-FT) DIVERTED OUT OF MODEL - JTB
245          DT   23RET    47.2     0.0
246          DI     0.0 10000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
247          DQ     0.0 10000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

248          KK      N2 COMBINE
249          KM   COMBINE ROUTED HYDROGRAPH FROM N1C AND N1B WITH RUNOFF FROM 23 @ N2
250          KO       3
251          ZW   A=FRE B=N2 C=FLOW E=15MIN F=100y6h-ex
252          HC       3
             *

253          KK      12   BASIN
254          KM   ***************************************************************************
255          KM   **   SUB-WATERSHED O   ******************************************************
256          KM   ***************************************************************************
257          KM   S-GRAPH TYPE=PHOENIX VALLEY
258          BA   0.736
259          LG    0.26    0.26    4.45    0.43      27
260          UI     475    1091     289      42       0       0       0       0       0       0
             *

261          KK    12-O  DIVERT
262          KM   ADMS MODELED 49.02 AC-FT OF RETENTION FOR DEVELOPED AREA
263          KM   33.9 ACRES HAVE BEEN DEVELOPED SINCE ADMS
264          KM   RETENTION CALCULATION BASED ON FCDMC METHODOLOGY - CALCULATED VALUE IS 5.6
265          KM   80% OF CALCULATED VALUE (4.5) IS APPLIED HERE - JTB
266          KM   ADDITIONAL 4.5 A-F ADDED TO ORIGINAL 49.02 A-F FOR A TOTAL OF 53.5 A-F (JTB)
267          DT   12RET    53.5     0.0
1                                          HEC-1 INPUT                                          PAGE  8

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

268          DI     0.0 10000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
269          DQ     0.0 10000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

270          KK   O1-O2   ROUTE      O1
```

```
271          KM   ROUTE HYDROGRAPH FROM O1 TO O2 (CHANNEL A)
272          RS       3    FLOW     0.0     0.0
273          RC   0.035   0.035   0.035    2744  0.0130    0.00
274          RX    0.00  250.00  500.00  750.00 1000.00 1333.30 1666.60 2000.00
275          RY   10.00    7.50    5.00    2.50    0.00    3.30    6.60   10.00
             *

276          KK      13   BASIN
277          KM   S-GRAPH TYPE=PHOENIX VALLEY
278          BA   0.501
279          LG    0.25    0.25    5.10    0.31      30
280          UI     647     594       0       0       0       0       0       0       0       0
             *

281          KK    13-O  DIVERT
282          KM   HYDROGRAPH DIVERTED TO RETENTION BASINS
283          KM   THIS DIVERSION WAS PREPARED FOR THE ORIGINAL ADMS MODEL
284          DT   13RET    41.1     0.0
285          DI     0.0 10000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
286          DQ     0.0 10000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

287          KK      O2 COMBINE   O2-O3
288          KM   COMBINE ROUTED HYDROGRAPH FROM O1 WITH RUNOFF FROM 13 @ O2
289          HC       2
             *

290          KK   O2-O3   ROUTE      O2
291          KM   ROUTE HYDROGRAPH FROM O2 TO O3 (CHANNEL A)
292          RS       2    FLOW     0.0     0.0
293          RC   0.025   0.025   0.025    2815  0.0110    0.00
294          RX    0.00  250.00  500.00  750.00 1000.00 1333.30 1666.60 2000.00
295          RY   10.00    7.50    5.00    2.50    0.00    3.30    6.60   10.00
             *

296          KK      24   BASIN
297          KM   S-GRAPH TYPE=PHOENIX VALLEY
298          KM   S-GRAPH TYPE MODIFIED BY DIBBLE ENGINEERING FOR ADMP HYDROLOGY UPDATE - JTB
299          BA   0.489
300          LG    0.30    0.25    4.60    0.37       7
301          UI     520     662      73       0       0       0       0       0       0       0
             *

302          KK      O3 COMBINE   O3-O4
303          KM   COMBINE ROUTED HYDROGRAPH FROM O2 WITH RUNOFF FROM 24 @ O3
304          HC       2
             *
1                                          HEC-1 INPUT                                          PAGE  9

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

305          KK   O3-O4   ROUTE      O3
306          KM   ROUTE HYDROGRAPH FROM O3 TO O4 (CHANNEL A)
307          RS       7    FLOW     0.0     0.0
308          RC   0.100   0.100   0.100    4483  0.0020    0.00
309          RX    0.00  250.00  500.00  750.00 1000.00 1333.30 1666.60 2000.00
310          RY   10.00    7.50    5.00    2.50    0.00    3.30    6.60   10.00
             *

311          KK      25   BASIN
312          KM   S-GRAPH TYPE=PHOENIX VALLEY
313          BA   0.274
314          LG    0.29    0.29    4.15    0.49      18
315          UI      89     282     234      77      17       0       0       0       0       0
             *

316          KK    25-O  DIVERT
317          KM   DIVERT RETENTION OUT OF MODEL DUE TO DEVELOPMENT
318          KM   TOTAL RETENTION VOLUME FROM BENTRIDGE DRAINAGE REPORT OF 25 AC-FT.
319          KM   80% OF TOTAL VOLUME (20.0 AC-FT) DIVERTED OUT OF MODEL - JTB
320          DT   25RET    20.0     0.0
321          DI     0.0 10000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
322          DQ     0.0 10000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

323          KK      O4 COMBINE
324          KM   COMBINE ROUTED HYDROGRAPH FROM O3 WITH RUNOFF FROM 25 @ O4
325          KO       3
326          ZW   A=FRE B=O4 C=FLOW E=15MIN F=100y6h-ex
327          HC       2
             *

328          KK     14A   BASIN
329          KM   ***************************************************************************
330          KM   **   SUB-WATERSHED P   ****************************************************
331          KM   ***************************************************************************
332          KM   S-GRAPH TYPE=PHOENIX VALLEY
333          BA   0.692
```

```
 334          LG    0.26    0.26    4.25    0.48      26
 335          UI     218     693     602     204      47       0       0       0       0       0
              *

 336          KK   14A-O  DIVERT
 337          KM   ADMS MODELED 45.83 AC-FT OF RETENTION FOR DEVELOPED AREA
 338          KM   30.2 ACRES HAVE BEEN DEVELOPED SINCE ADMS
 339          KM   RETENTION CALCULATION BASED ON FCDMC METHODOLOGY - CALCULATED VALUE IS 5.0
 340          KM   80% OF CALCULATED VALUE (4.0) IS APPLIED HERE - JTB
 341          KM   ADDITIONAL 4.0 A-F ADDED TO ORIGINAL 45.8 A-F FOR A TOTAL OF 49.8 A-F (JTB)
 342          DT  14ARET    49.8     0.0
 343          DI     0.0 10000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
 344          DQ     0.0 10000.0     0.0     0.0     0.0     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

 345          KK  P1A-1B   ROUTE     P1A
 346          KM   ROUTE HYDROGRAPH FROM P1A TO P1B (CHANNEL A)
 347          RS       3    FLOW     0.0     0.0
 348          RC   0.035   0.035   0.035    3129  0.0100    0.00
 349          RX    0.00  250.00  500.00  750.00 1000.00 1333.30 1666.60 2000.00
 350          RY   10.00    7.50    5.00    2.50    0.00    3.30    6.60   10.00
              *

 351          KK     14B   BASIN
 352          KM   S-GRAPH TYPE=PHOENIX VALLEY
 353          KM   S-GRAPH TYPE MODIFIED BY DIBBLE ENGINEERING FOR ADMP HYDROLOGY UPDATE - JTB
 354          BA   0.502
 355          LG    0.25    0.25    4.15    0.52      30
 356          UI     449     736      97       0       0       0       0       0       0       0
              *

 357          KK   14B-O  DIVERT
 358          KM   ADMS MODELED 30.68 AC-FT OF RETENTION FOR DEVELOPED AREA
 359          KM   83.5 ACRES HAVE BEEN DEVELOPED (PLANNED) SINCE ADMS
 360          KM   RETENTION CALCULATION BASED ON FCDMC METHODOLOGY - CALCULATED VALUE IS 13.8
 361          KM   80% OF CALCULATED VALUE (11.1) IS APPLIED HERE - JTB
 362          KM   ADDITIONAL 11.1 A-F ADDED TO ORIGINAL 30.7 A-F FOR A TOTAL OF 41.7 A-F (JTB)
 363          DT  14BRET    41.7     0.0
 364          DI     0.0 10000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
 365          DQ     0.0 10000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

 366          KK     P1B COMBINE  P1B-P2
 367          KM   COMBINE ROUTED HYDROGRAPH FROM P1A WITH RUNOFF FROM 14B @ P1B
 368          HC       2
              *

 369          KK  P1B-P2   ROUTE     P1B
 370          KM   ROUTE HYDROGRAPH FROM P1B TO P2 (CHANNEL A)
 371          RS       2    FLOW     0.0     0.0
 372          RC   0.025   0.025   0.025    4032  0.0070    0.00
 373          RX    0.00  250.00  500.00  750.00 1000.00 1333.30 1666.60 2000.00
 374          RY   10.00    7.50    5.00    2.50    0.00    3.30    6.60   10.00
              *

 375          KK      26   BASIN
 376          KM   S-GRAPH TYPE=PHOENIX VALLEY
 377          BA   0.524
 378          LG    0.30    0.26    4.00    0.40       9
 379          UI     298     751     256      39       0       0       0       0       0       0
              *

 380          KK      P2 COMBINE    zzz6
 381          KM   COMBINE ROUTED HYDROGRAPH FROM P1B WITH RUNOFF FROM 26 @ P2
 382          KO       3
 383          ZW   A=FRE B=P2 C=FLOW E=15MIN F=100y6h-ex
 384          HC       2
              *
1                                          HEC-1 INPUT                                          PAGE 11

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

 385          KK      83   BASIN
 386          KM   ******************************************************************************
 387          KM   **   SUB-WATERSHED Q   ******************************************************
 388          KM   ******************************************************************************
 389          KM   S-GRAPH TYPE=PHOENIX VALLEY
 390          KM   S-GRAPH TYPE MODIFIED BY DIBBLE ENGINEERING FOR ADMP HYDROLOGY UPDATE - JTB
 391          BA   0.675
 392          LG    0.25    0.25    5.40    0.27      30
 393          UI     121     360     624     388     159      59      18       0       0       0
              *

 394          KK    83-O  DIVERT
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```
          395          KM   HYDROGRAPH DIVERTED TO RETENTION BASINS
          396          KM   THIS DIVERSION WAS PREPARED FOR THE ORIGINAL ADMS MODEL
          397          DT   83RET    32.0     0.0
          398          DI     0.0 10000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
          399          DQ     0.0 10000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
                       *
          400          ZZ
1
                 SCHEMATIC DIAGRAM OF STREAM NETWORK
 INPUT
  LINE      (V) ROUTING          (--->) DIVERSION OR PUMP FLOW

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

    32           6
                 V
                 V
    40       J1-J2
                 .
                 .
    46           .           8
                 .           .
                 .           .
    54           .           .------->    8RET
    51           .         8-O
                 .           .
                 .           .
    57          J2............
                 V
                 V
    60       J2-J3
                 .
                 .
    66           .          20
                 .           .
                 .           .
    76           .           .------->   20RET
    73           .        20-O
                 .           .
                 .           .
    79          J3............
                 .
                 .
    84           .           7
                 .           V
                 .           V
    92           .       K1-K2
                 .           .
                 .           .
    98           .           .           9
                 .           .           .
                 .           .           .
   106           .           .           .------->    9RET
   103           .           .         9-O
                 .           .           .
                 .           .           .
   109           .          K2............
                 .           V
                 .           V
   112           .       K2-K3
                 .           .
                 .           .
   118           .           .         21B
                 .           .           .
                 .           .           .
   126           .           .           .         21A
                 .           .           .           .
                 .           .           .           .
   135           .           .           .           .------->  21ARET
   132           .           .           .       21A-O
                 .           .           .           .
                 .           .           .           .
   138           .          K3........................
                 .           .
                 .           .
   143           .           .          10
                 .           .           V
                 .           .           V
   151           .           .       L1-L2
                 .           .           .
                 .           .           .
   157           .           .           .          22
                 .           .           .           .
                 .           .           .           .
   167           .           .          L2............
                 .           .           .
                 .           .           .
   172           .           .           .         11C
                 .           .           .           .
```

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                                                  .
185                                               .-------> 11CRET
181                                         11C-O
                                                V
                                                V
188                                         N1C-N2
                                                .
                                                .
194                                             .        11A
                                                .          .
                                                .          .
205                                             .          .-------> 11ARET
199                                             .      11A-O
                                                .          V
                                                .          V
208                                             .     N1A-1B
                                                .          .
                                                .          .
214                                             .          .        11B
                                                .          .          .
                                                .          .          .
223                                             .          .          .-------> 11BRET
219                                             .          .      11B-O
                                                .          .          .
                                                .          .          .
226                                             .        N1B...........
                                                .          V
                                                .          V
229                                             .     N1B-N2
                                                .          .
                                                .          .
235                                             .          .         23
                                                .          .          .
                                                .          .          .
245                                             .          .          .-------> 23RET
241                                             .          .       23-O
                                                .          .          .
                                                .          .          .
248                                           N2......................
                                                .
                                                .
253                                             .         12
                                                .          .
                                                .          .
267                                             .          .-------> 12RET
261                                             .       12-O
                                                .          V
                                                .          V
270                                             .      O1-O2
                                                .          .
                                                .          .
276                                             .          .         13
                                                .          .          .
                                                .          .          .
284                                             .          .          .-------> 13RET
281                                             .          .       13-O
                                                .          .          .
                                                .          .          .
287                                             .         O2...........
                                                .          V
                                                .          V
290                                             .      O2-O3
                                                .          .
                                                .          .
296                                             .          .         24
                                                .          .          .
                                                .          .          .
302                                             .         O3...........
                                                .          V
                                                .          V
305                                             .      O3-O4
                                                .          .
                                                .          .
311                                             .          .         25
                                                .          .          .
                                                .          .          .
320                                             .          .          .-------> 25RET
316                                             .          .       25-O
                                                .          .          .
                                                .          .          .
323                                             .         O4...........
                                                .          .
                                                .          .
328                                             .          .        14A
                                                .          .          .
                                                .          .          .
342                                             .          .          .-------> 14ARET
336                                             .          .      14A-O
                                                .          .          V
```

```
                .         .         .         .         .         V
  345           .         .         .         .         .     P1A-1B
                .         .         .         .         .         .
                .         .         .         .         .         .
  351           .         .         .         .         .         .        14B
                .         .         .         .         .         .         .
                .         .         .         .         .         .         .
  363           .         .         .         .         .         .         .-------> 14BRET
  357           .         .         .         .         .         .      14B-O
                .         .         .         .         .         .         .
                .         .         .         .         .         .         .
  366           .         .         .         .         .       P1B...........
                .         .         .         .         .         V
                .         .         .         .         .         V
  369           .         .         .         .         .     P1B-P2
                .         .         .         .         .         .
                .         .         .         .         .         .
  375           .         .         .         .         .         .         26
                .         .         .         .         .         .         .
                .         .         .         .         .         .         .
  380           .         .         .         .         .        P2...........
                .         .         .         .         .         .
                .         .         .         .         .         .
  385           .         .         .         .         .         .         83
                .         .         .         .         .         .         .
                .         .         .         .         .         .         .
  397           .         .         .         .         .         .         .------->  83RET
  394           .         .         .         .         .         .      83-O

 (***) 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   28FEB08  TIME  16:16:22   *                                                    *           (916) 756-1104             *
 *                                       *                                                    *                                      *
 *****************************************                                                    ****************************************


                                FCDMC
                                0607BASE_EXST_6HR - Buckeye ADMP Existing Conditions Hydrology Update
                                Major Basin: 03
                                100 Year - Return Period
                                6 Hour Storm
                                Multiple Storms
                                Unit Hydrograph: S-Graph
                                01/09/2008

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

     IT          HYDROGRAPH TIME DATA
                        NMIN          15  MINUTES IN COMPUTATION INTERVAL
                       IDATE      2JAN94  STARTING DATE
                       ITIME        0000  STARTING TIME
                          NQ         400  NUMBER OF HYDROGRAPH ORDINATES
                      NDDATE      6JAN94  ENDING DATE
                      NDTIME        0345  ENDING TIME
                       ICENT          19  CENTURY MARK

                 COMPUTATION INTERVAL    0.25 HOURS
                      TOTAL TIME BASE   99.75 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

  12 JD          INDEX STORM NO. 1
                       STRM        3.30  PRECIPITATION DEPTH
                       TRDA        0.01  TRANSPOSITION DRAINAGE AREA

  13 PI            PRECIPITATION PATTERN
                     0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                     0.01      0.02      0.02      0.08      0.16      0.46      0.08      0.02      0.02      0.01
                     0.01      0.01      0.01      0.01

  16 JD          INDEX STORM NO. 2
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                    STRM        3.28  PRECIPITATION DEPTH
                    TRDA        0.50  TRANSPOSITION DRAINAGE AREA

  17 PI          PRECIPITATION PATTERN
                    0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                    0.01      0.02      0.02      0.08      0.16      0.46      0.08      0.02      0.02      0.01
                    0.01      0.01      0.01      0.01

  20 JD         INDEX STORM NO. 3
                    STRM        3.26  PRECIPITATION DEPTH
                    TRDA        1.00  TRANSPOSITION DRAINAGE AREA

  21 PI          PRECIPITATION PATTERN
                    0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                    0.01      0.02      0.03      0.08      0.18      0.37      0.10      0.04      0.03      0.01
                    0.01      0.01      0.01      0.01

  24 JD         INDEX STORM NO. 4
                    STRM        3.17  PRECIPITATION DEPTH
                    TRDA        5.00  TRANSPOSITION DRAINAGE AREA

  25 PI          PRECIPITATION PATTERN
                    0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                    0.02      0.02      0.04      0.09      0.19      0.23      0.14      0.07      0.04      0.02
                    0.01      0.01      0.01      0.01

  28 JD         INDEX STORM NO. 5
                    STRM        3.10  PRECIPITATION DEPTH
                    TRDA       10.00  TRANSPOSITION DRAINAGE AREA

  29 PI          PRECIPITATION PATTERN
                    0.01      0.01      0.01      0.02      0.01      0.01      0.01      0.01      0.01      0.02
                    0.01      0.02      0.05      0.08      0.18      0.21      0.13      0.07      0.04      0.03
                    0.01      0.01      0.01      0.01


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


            **************
            *            *
  79 KK     *        J3  *      COMBINE
            *            *
            **************

  81 KO         OUTPUT CONTROL VARIABLES
                    IPRNT           3  PRINT CONTROL
                    IPLOT           0  PLOT CONTROL
                    QSCAL          0.  HYDROGRAPH PLOT SCALE

  83 HC         HYDROGRAPH COMBINATION
                    ICOMP           2  NUMBER OF HYDROGRAPHS TO COMBINE

                                                                  ***

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

                      HYDROGRAPH AT STATION       J3
                    TRANSPOSITION AREA      0.0 SQ MI

  PEAK FLOW     TIME                        MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                        (CFS)
+     630.      5.25                170.         42.         14.          10.
                    (INCHES)      1.129       1.131       1.131        1.131
                     (AC-FT)       84.         84.         84.          84.

                    CUMULATIVE AREA =    1.40 SQ MI


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

                      HYDROGRAPH AT STATION       J3
                    TRANSPOSITION AREA      0.5 SQ MI

  PEAK FLOW     TIME                        MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                        (CFS)
+     608.      5.25                167.         42.         14.          10.
                    (INCHES)      1.113       1.114       1.114        1.114
                     (AC-FT)       83.         83.         83.          83.

                    CUMULATIVE AREA =    1.40 SQ MI


     ***            ***            ***            ***            ***
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                        HYDROGRAPH AT STATION       J3
                      TRANSPOSITION AREA      1.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                         (CFS)
+     574.      5.50                150.         38.         13.           9.
                      (INCHES)     0.999       1.001       1.001        1.001
                       (AC-FT)      74.         75.         75.          75.

                       CUMULATIVE AREA =    1.40 SQ MI


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

                        HYDROGRAPH AT STATION       J3
                      TRANSPOSITION AREA      5.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                         (CFS)
+     375.      5.75                113.         28.          9.           7.
                      (INCHES)     0.754       0.756       0.756        0.756
                       (AC-FT)      56.         56.         56.          56.

                       CUMULATIVE AREA =    1.40 SQ MI


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

                        HYDROGRAPH AT STATION       J3
                      TRANSPOSITION AREA     10.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                         (CFS)
+     355.      5.75                 97.         24.          8.           6.
                      (INCHES)     0.647       0.648       0.648        0.648
                       (AC-FT)      48.         48.         48.          48.

                       CUMULATIVE AREA =    1.40 SQ MI

   -----DSS---ZOPEN:  Existing File Opened,  File: J:\2006\10-0607\DESIGN~2\DRAINA~1\HEC-RAS\Model\A1.DSS
                      Unit: 71;  DSS Versions - Software: 6-LD, File: 6-LD
 -----DSS---ZWRITE Unit  71; Vers.    1:  /FRE/J3/FLOW/01JAN1994/15MIN/100Y6H-EX/
       ***            ***            ***            ***            ***


                       INTERPOLATED HYDROGRAPH AT       J3

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                         (CFS)
+     548.      5.50                146.         36.         12.           9.
                      (INCHES)     0.970       0.972       0.972        0.972
                       (AC-FT)      72.         72.         72.          72.

                       CUMULATIVE AREA =    1.40 SQ MI


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


            **************
            *            *
  138 KK    *        K3  *      COMBINE
            *            *
            **************

  140 KO          OUTPUT CONTROL VARIABLES
                        IPRNT           3  PRINT CONTROL
                        IPLOT           0  PLOT CONTROL
                        QSCAL          0.  HYDROGRAPH PLOT SCALE

  142 HC          HYDROGRAPH COMBINATION
                        ICOMP           3  NUMBER OF HYDROGRAPHS TO COMBINE

                                                                  ***

       ***            ***            ***            ***            ***
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                    HYDROGRAPH AT STATION       K3
                  TRANSPOSITION AREA      0.0 SQ MI

  PEAK FLOW     TIME                        MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                     (CFS)
+    1351.      4.75                221.         55.         18.          13.
                  (INCHES)      1.209       1.213       1.213        1.213
                   (AC-FT)      109.         110.        110.         110.

                   CUMULATIVE AREA =    1.70 SQ MI


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

                    HYDROGRAPH AT STATION       K3
                  TRANSPOSITION AREA      0.5 SQ MI

  PEAK FLOW     TIME                        MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                     (CFS)
+    1338.      4.75                218.         55.         18.          13.
                  (INCHES)      1.193       1.197       1.197        1.197
                   (AC-FT)      108.         108.        108.         108.

                   CUMULATIVE AREA =    1.70 SQ MI


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

                    HYDROGRAPH AT STATION       K3
                  TRANSPOSITION AREA      1.0 SQ MI

  PEAK FLOW     TIME                        MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                     (CFS)
+    1125.      4.75                192.         48.         16.          12.
                  (INCHES)      1.054       1.058       1.058        1.058
                   (AC-FT)       95.          96.         96.          96.

                   CUMULATIVE AREA =    1.70 SQ MI


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

                    HYDROGRAPH AT STATION       K3
                  TRANSPOSITION AREA      5.0 SQ MI

  PEAK FLOW     TIME                        MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                     (CFS)
+     648.      4.75                141.         35.         12.           9.
                  (INCHES)      0.773       0.776       0.776        0.776
                   (AC-FT)       70.          70.         70.          70.

                   CUMULATIVE AREA =    1.70 SQ MI


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

                    HYDROGRAPH AT STATION       K3
                  TRANSPOSITION AREA     10.0 SQ MI

  PEAK FLOW     TIME                        MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                     (CFS)
+     561.      4.75                121.         30.         10.           7.
                  (INCHES)      0.662       0.665       0.665        0.665
                   (AC-FT)       60.          60.         60.          60.

                   CUMULATIVE AREA =    1.70 SQ MI

-----DSS---ZWRITE Unit  71; Vers.    1:  /FRE/K3/FLOW/01JAN1994/15MIN/100Y6H-EX/
      ***             ***             ***             ***             ***


                   INTERPOLATED HYDROGRAPH AT       K3

  PEAK FLOW     TIME                        MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                     (CFS)
+     968.      4.75                176.         44.         15.          11.
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                    (INCHES)     0.962       0.965       0.965       0.965
                     (AC-FT)      87.         87.         87.         87.

                    CUMULATIVE AREA =    1.70 SQ MI



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


            **************
            *            *
  167 KK    *        L2  *      COMBINE
            *            *
            **************

  169 KO          OUTPUT CONTROL VARIABLES
                        IPRNT           3  PRINT CONTROL
                        IPLOT           0  PLOT CONTROL
                        QSCAL          0.  HYDROGRAPH PLOT SCALE

  171 HC          HYDROGRAPH COMBINATION
                        ICOMP           2  NUMBER OF HYDROGRAPHS TO COMBINE

                                                                  ***

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

                          HYDROGRAPH AT STATION       L2
                        TRANSPOSITION AREA      0.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                            (CFS)
+    1505.      4.75                306.         80.         27.          19.
                        (INCHES)     1.641       1.709       1.709       1.709
                         (AC-FT)      152.        158.        158.        158.

                        CUMULATIVE AREA =    1.73 SQ MI


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

                          HYDROGRAPH AT STATION       L2
                        TRANSPOSITION AREA      0.5 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                            (CFS)
+    1491.      4.75                303.         79.         26.          19.
                        (INCHES)     1.626       1.693       1.693       1.693
                         (AC-FT)      150.        156.        156.        156.

                        CUMULATIVE AREA =    1.73 SQ MI


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

                          HYDROGRAPH AT STATION       L2
                        TRANSPOSITION AREA      1.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                            (CFS)
+    1322.      4.75                278.         72.         24.          17.
                        (INCHES)     1.493       1.553       1.553       1.553
                         (AC-FT)      138.        143.        143.        143.

                        CUMULATIVE AREA =    1.73 SQ MI


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

                          HYDROGRAPH AT STATION       L2
                        TRANSPOSITION AREA      5.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                            (CFS)
+     997.      4.75                229.         60.         20.          14.
                        (INCHES)     1.230       1.281       1.281       1.281
                         (AC-FT)      114.        118.        118.        118.

                        CUMULATIVE AREA =    1.73 SQ MI
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      ***             ***             ***             ***             ***

                        HYDROGRAPH AT STATION       L2
                      TRANSPOSITION AREA     10.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     892.      4.75                210.         55.         18.          13.
                       (INCHES)    1.129       1.177       1.177        1.177
                        (AC-FT)     104.        109.        109.         109.

                       CUMULATIVE AREA =    1.73 SQ MI

 -----DSS---ZWRITE Unit  71; Vers.    1:  /FRE/L2/FLOW/01JAN1994/15MIN/100Y6H-EX/
      ***             ***             ***             ***             ***


                       INTERPOLATED HYDROGRAPH AT       L2

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+    1265.      4.75                269.         70.         23.          17.
                       (INCHES)    1.446       1.505       1.505        1.505
                        (AC-FT)     134.        139.        139.         139.

                       CUMULATIVE AREA =    1.73 SQ MI


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


            **************
            *            *
  248 KK    *        N2  *      COMBINE
            *            *
            **************

  250 KO          OUTPUT CONTROL VARIABLES
                        IPRNT           3  PRINT CONTROL
                        IPLOT           0  PLOT CONTROL
                        QSCAL          0.  HYDROGRAPH PLOT SCALE

  252 HC          HYDROGRAPH COMBINATION
                        ICOMP           3  NUMBER OF HYDROGRAPHS TO COMBINE

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

                        HYDROGRAPH AT STATION       N2
                      TRANSPOSITION AREA      0.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     448.      5.00                131.         35.         12.           8.
                       (INCHES)    0.603       0.639       0.639        0.639
                        (AC-FT)      65.         69.         69.          69.

                       CUMULATIVE AREA =    2.02 SQ MI


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

                        HYDROGRAPH AT STATION       N2
                      TRANSPOSITION AREA      0.5 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     443.      5.00                127.         34.         11.           8.
                       (INCHES)    0.586       0.623       0.623        0.623
                        (AC-FT)      63.         67.         67.          67.

                       CUMULATIVE AREA =    2.02 SQ MI


      ***             ***             ***             ***             ***
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                        HYDROGRAPH AT STATION       N2
                      TRANSPOSITION AREA      1.0 SQ MI

  PEAK FLOW     TIME                        MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                         (CFS)
+     323.      5.00                102.         28.          9.           7.
                      (INCHES)     0.472       0.508       0.508        0.508
                       (AC-FT)      51.         55.         55.          55.

                       CUMULATIVE AREA =    2.02 SQ MI


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

                        HYDROGRAPH AT STATION       N2
                      TRANSPOSITION AREA      5.0 SQ MI

  PEAK FLOW     TIME                        MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                         (CFS)
+     174.      4.75                 54.         15.          5.           4.
                      (INCHES)     0.248       0.271       0.271        0.271
                       (AC-FT)      27.         29.         29.          29.

                       CUMULATIVE AREA =    2.02 SQ MI


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

                        HYDROGRAPH AT STATION       N2
                      TRANSPOSITION AREA     10.0 SQ MI

  PEAK FLOW     TIME                        MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                         (CFS)
+     140.      4.75                 39.         11.          4.           3.
                      (INCHES)     0.180       0.202       0.202        0.202
                       (AC-FT)      19.         22.         22.          22.

                       CUMULATIVE AREA =    2.02 SQ MI

 -----DSS---ZWRITE Unit  71; Vers.    1:  /FRE/N2/FLOW/01JAN1994/15MIN/100Y6H-EX/
       ***            ***            ***            ***            ***


                       INTERPOLATED HYDROGRAPH AT       N2

  PEAK FLOW     TIME                        MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                         (CFS)
+     271.      5.00                 89.         24.          8.           6.
                      (INCHES)     0.409       0.441       0.441        0.441
                       (AC-FT)      44.         48.         48.          48.

                       CUMULATIVE AREA =    2.02 SQ MI


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


            **************
            *            *
  323 KK    *        O4  *      COMBINE
            *            *
            **************

  325 KO          OUTPUT CONTROL VARIABLES
                        IPRNT           3  PRINT CONTROL
                        IPLOT           0  PLOT CONTROL
                        QSCAL          0.  HYDROGRAPH PLOT SCALE

  327 HC          HYDROGRAPH COMBINATION
                        ICOMP           2  NUMBER OF HYDROGRAPHS TO COMBINE

                                                                  ***

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

                        HYDROGRAPH AT STATION       O4
                      TRANSPOSITION AREA      0.0 SQ MI
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  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                      6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                                    (CFS)
+     592.      5.50                175.         45.         15.          11.
                            (INCHES)     0.814       0.829       0.829       0.829
                             (AC-FT)      87.         88.         88.          88.

                             CUMULATIVE AREA =    2.00 SQ MI


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

                              HYDROGRAPH AT STATION       O4
                            TRANSPOSITION AREA      0.5 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                      6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                                    (CFS)
+     575.      5.50                171.         44.         15.          11.
                            (INCHES)     0.797       0.812       0.812       0.812
                             (AC-FT)      85.         87.         87.          87.

                             CUMULATIVE AREA =    2.00 SQ MI


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

                              HYDROGRAPH AT STATION       O4
                            TRANSPOSITION AREA      1.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                      6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                                    (CFS)
+     453.      5.75                147.         38.         13.           9.
                            (INCHES)     0.684       0.698       0.698       0.698
                             (AC-FT)      73.         74.         74.          74.

                             CUMULATIVE AREA =    2.00 SQ MI


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

                              HYDROGRAPH AT STATION       O4
                            TRANSPOSITION AREA      5.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                      6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                                    (CFS)
+     253.      5.75                 95.         25.          8.           6.
                            (INCHES)     0.441       0.456       0.456       0.456
                             (AC-FT)      47.         49.         49.          49.

                             CUMULATIVE AREA =    2.00 SQ MI


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

                              HYDROGRAPH AT STATION       O4
                            TRANSPOSITION AREA     10.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                      6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                                    (CFS)
+     201.      5.75                 75.         20.          7.           5.
                            (INCHES)     0.348       0.363       0.363       0.363
                             (AC-FT)      37.         39.         39.          39.

                             CUMULATIVE AREA =    2.00 SQ MI

 -----DSS---ZWRITE Unit  71; Vers.    1:  /FRE/O4/FLOW/01JAN1994/15MIN/100Y6H-EX/
      ***             ***             ***             ***             ***


                             INTERPOLATED HYDROGRAPH AT       O4

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                      6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                                    (CFS)
+     382.      5.75                129.         33.         11.           8.
                            (INCHES)     0.597       0.612       0.612       0.612
                             (AC-FT)      64.         65.         65.          65.
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                        CUMULATIVE AREA =    2.00 SQ MI


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


            **************
            *            *
  380 KK    *        P2  *      COMBINE    zzz6
            *            *
            **************

  382 KO          OUTPUT CONTROL VARIABLES
                        IPRNT           3  PRINT CONTROL
                        IPLOT           0  PLOT CONTROL
                        QSCAL          0.  HYDROGRAPH PLOT SCALE

  384 HC          HYDROGRAPH COMBINATION
                        ICOMP           2  NUMBER OF HYDROGRAPHS TO COMBINE

                                                                  ***

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

                          HYDROGRAPH AT STATION       P2
                        TRANSPOSITION AREA      0.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                      6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                            (CFS)
+    1092.      4.25                 160.         40.         13.          10.
                        (INCHES)    0.868       0.873       0.873        0.873
                         (AC-FT)     79.         80.         80.          80.

                        CUMULATIVE AREA =    1.72 SQ MI


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

                          HYDROGRAPH AT STATION       P2
                        TRANSPOSITION AREA      0.5 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                      6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                            (CFS)
+    1080.      4.25                 157.         40.         13.          10.
                        (INCHES)    0.851       0.857       0.857        0.857
                         (AC-FT)     78.         78.         78.          78.

                        CUMULATIVE AREA =    1.72 SQ MI


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

                          HYDROGRAPH AT STATION       P2
                        TRANSPOSITION AREA      1.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                      6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                            (CFS)
+     884.      4.25                 136.         34.         11.           8.
                        (INCHES)    0.737       0.743       0.743        0.743
                         (AC-FT)     68.         68.         68.          68.

                        CUMULATIVE AREA =    1.72 SQ MI


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

                          HYDROGRAPH AT STATION       P2
                        TRANSPOSITION AREA      5.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                      6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                            (CFS)
+     568.      4.25                  87.         22.          7.           5.
                        (INCHES)    0.472       0.479       0.479        0.479
                         (AC-FT)     43.         44.         44.          44.

                        CUMULATIVE AREA =    1.72 SQ MI
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      ***             ***             ***             ***             ***

                        HYDROGRAPH AT STATION       P2
                      TRANSPOSITION AREA     10.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                                  (CFS)
+     501.      4.25                71.         18.          6.           4.
                              (INCHES)     0.382       0.389       0.389        0.389
                               (AC-FT)      35.         36.         36.          36.

                          CUMULATIVE AREA =    1.72 SQ MI

 -----DSS---ZWRITE Unit  71; Vers.    1:  /FRE/P2/FLOW/01JAN1994/15MIN/100Y6H-EX/
      ***             ***             ***             ***             ***


                          INTERPOLATED HYDROGRAPH AT       P2

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                                  (CFS)
+     778.      4.25               120.         30.         10.           7.
                              (INCHES)     0.648       0.654       0.654        0.654
                               (AC-FT)      59.         60.         60.          60.

                          CUMULATIVE AREA =    1.72 SQ MI

1
                                          RUNOFF SUMMARY
                                     FLOW IN CUBIC FEET PER SECOND
                                  TIME IN HOURS,  AREA IN SQUARE MILES

                                        PEAK   TIME OF     AVERAGE FLOW FOR MAXIMUM PERIOD      BASIN     MAXIMUM     TIME OF
          OPERATION        STATION      FLOW    PEAK                                          AREA      STAGE     MAX STAGE
+                                                                6-HOUR     24-HOUR     72-HOUR

          HYDROGRAPH AT
+                                6       961.    4.00          51.         13.          4.       0.32

          ROUTED TO
+                             J1-J2      400.    4.50          51.         13.          4.       0.32

          HYDROGRAPH AT
+                                8       554.    4.25          66.         17.          6.       0.41

          DIVERSION TO
+                             8RET       232.    4.00          14.          3.          1.       0.41

          HYDROGRAPH AT
+                              8-O       526.    4.25          53.         13.          4.       0.41

          2 COMBINED AT
+                               J2       782.    4.25          98.         25.          8.       0.73

          ROUTED TO
+                             J2-J3      550.    4.75          98.         25.          8.       0.73

          HYDROGRAPH AT
+                               20       554.    5.00         146.         37.         12.       0.67

          DIVERSION TO
+                             20RET      554.    5.00          87.         22.          7.       0.67

          HYDROGRAPH AT
+                              20-O      400.    5.50          61.         15.          5.       0.67

          2 COMBINED AT
+                               J3       548.    5.50         146.         36.         12.       1.40

          HYDROGRAPH AT
+                                7      1211.    4.00          69.         17.          6.       0.45

          ROUTED TO
+                             K1-K2      667.    4.25          69.         17.          6.       0.45

          HYDROGRAPH AT
+                                9      1236.    4.00         105.         26.          9.       0.61

          DIVERSION TO
+                             9RET       206.    3.75          15.          4.          1.       0.61

          HYDROGRAPH AT
+                              9-O      1229.    4.00          90.         22.          7.       0.61
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| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| + | 2 COMBINED AT | K2 | 1288. | 4.00 | 145. | 36. | 12. | 1.06 |
| + | ROUTED TO | K2-K3 | 925. | 4.50 | 145. | 36. | 12. | 1.06 |
| + | HYDROGRAPH AT | 21B | 84. | 5.25 | 31. | 8. | 3. | 0.27 |
| + | HYDROGRAPH AT | 21A | 579. | 4.50 | 88. | 22. | 7. | 0.37 |
| + | DIVERSION TO | 21ARET | 560. | 4.50 | 62. | 16. | 5. | 0.37 |
| + | HYDROGRAPH AT | 21A-O | 325. | 4.75 | 26. | 6. | 2. | 0.37 |
| + | 3 COMBINED AT | K3 | 968. | 4.75 | 176. | 44. | 15. | 1.70 |
| + | HYDROGRAPH AT | 10 | 1406. | 4.50 | 234. | 59. | 20. | 1.17 |
| + | ROUTED TO | L1-L2 | 1265. | 4.75 | 233. | 59. | 20. | 1.17 |
| + | HYDROGRAPH AT | 22 | 102. | 6.25 | 57. | 15. | 5. | 0.56 |
| + | 2 COMBINED AT | L2 | 1265. | 4.75 | 269. | 70. | 23. | 1.73 |
| + | HYDROGRAPH AT | 11C | 739. | 4.00 | 59. | 15. | 5. | 0.34 |
| + | DIVERSION TO | 11CRET | 136. | 4.00 | 13. | 3. | 1. | 0.34 |
| + | HYDROGRAPH AT | 11C-O | 603. | 4.00 | 47. | 12. | 4. | 0.34 |
| + | ROUTED TO | N1C-N2 | 281. | 4.75 | 47. | 12. | 4. | 0.34 |
| + | HYDROGRAPH AT | 11A | 1215. | 4.00 | 117. | 29. | 10. | 0.57 |
| + | DIVERSION TO | 11ARET | 1215. | 4.00 | 101. | 25. | 8. | 0.57 |
| + | HYDROGRAPH AT | 11A-O | 196. | 4.25 | 16. | 4. | 1. | 0.57 |
| + | ROUTED TO | N1A-1B | 72. | 5.00 | 16. | 4. | 1. | 0.57 |
| + | HYDROGRAPH AT | 11B | 946. | 4.25 | 107. | 27. | 9. | 0.58 |
| + | DIVERSION TO | 11BRET | 796. | 4.25 | 61. | 15. | 5. | 0.58 |
| + | HYDROGRAPH AT | 11B-O | 653. | 4.50 | 47. | 12. | 4. | 0.58 |
| + | 2 COMBINED AT | N1B | 565. | 4.50 | 49. | 12. | 4. | 1.15 |
| + | ROUTED TO | N1B-N2 | 94. | 6.50 | 45. | 12. | 4. | 1.15 |
| + | HYDROGRAPH AT | 23 | 774. | 4.50 | 118. | 30. | 10. | 0.52 |
| + | DIVERSION TO | 23RET | 774. | 4.50 | 95. | 24. | 8. | 0.52 |
| + | HYDROGRAPH AT | 23-O | 254. | 5.00 | 23. | 6. | 2. | 0.52 |
| + | 3 COMBINED AT | N2 | 271. | 5.00 | 89. | 24. | 8. | 2.02 |
| + | HYDROGRAPH AT | 12 | 1428. | 4.25 | 151. | 38. | 13. | 0.74 |
| + | DIVERSION TO | 12RET | 1151. | 4.25 | 108. | 27. | 9. | 0.74 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| + | HYDROGRAPH AT | 12-O | 514. | 4.50 | 44. | 11. | 4. | 0.74 |
| + | ROUTED TO | O1-O2 | 399. | 4.75 | 44. | 11. | 4. | 0.74 |
| + | HYDROGRAPH AT | 13 | 1089. | 4.00 | 111. | 28. | 9. | 0.50 |
| + | DIVERSION TO | 13RET | 1089. | 4.00 | 83. | 21. | 7. | 0.50 |
| + | HYDROGRAPH AT | 13-O | 483. | 4.25 | 28. | 7. | 2. | 0.50 |
| + | 2 COMBINED AT | O2 | 397. | 4.75 | 60. | 15. | 5. | 1.24 |
| + | ROUTED TO | O2-O3 | 346. | 4.75 | 58. | 15. | 5. | 1.24 |
| + | HYDROGRAPH AT | 24 | 909. | 4.25 | 88. | 22. | 7. | 0.49 |
| + | 2 COMBINED AT | O3 | 724. | 4.25 | 128. | 32. | 11. | 1.73 |
| + | ROUTED TO | O3-O4 | 382. | 5.75 | 125. | 32. | 11. | 1.73 |
| + | HYDROGRAPH AT | 25 | 419. | 4.25 | 50. | 13. | 4. | 0.27 |
| + | DIVERSION TO | 25RET | 419. | 4.25 | 40. | 10. | 3. | 0.27 |
| + | HYDROGRAPH AT | 25-O | 118. | 4.75 | 10. | 2. | 1. | 0.27 |
| + | 2 COMBINED AT | O4 | 382. | 5.75 | 129. | 33. | 11. | 2.00 |
| + | HYDROGRAPH AT | 14A | 1034. | 4.25 | 137. | 34. | 11. | 0.69 |
| + | DIVERSION TO | 14ARET | 1034. | 4.25 | 100. | 25. | 8. | 0.69 |
| + | HYDROGRAPH AT | 14A-O | 345. | 4.75 | 37. | 9. | 3. | 0.69 |
| + | ROUTED TO | P1A-1B | 303. | 5.00 | 37. | 9. | 3. | 0.69 |
| + | HYDROGRAPH AT | 14B | 1026. | 4.25 | 105. | 26. | 9. | 0.50 |
| + | DIVERSION TO | 14BRET | 820. | 4.25 | 84. | 21. | 7. | 0.50 |
| + | HYDROGRAPH AT | 14B-O | 206. | 4.25 | 21. | 5. | 2. | 0.50 |
| + | 2 COMBINED AT | P1B | 308. | 5.00 | 51. | 13. | 4. | 1.19 |
| + | ROUTED TO | P1B-P2 | 213. | 5.25 | 45. | 11. | 4. | 1.19 |
| + | HYDROGRAPH AT | 26 | 1047. | 4.25 | 95. | 24. | 8. | 0.52 |
| + | 2 COMBINED AT | P2 | 778. | 4.25 | 120. | 30. | 10. | 1.72 |
| + | HYDROGRAPH AT | 83 | 1010. | 4.50 | 153. | 38. | 13. | 0.68 |
| + | DIVERSION TO | 83RET | 750. | 4.25 | 65. | 16. | 5. | 0.68 |
| + | HYDROGRAPH AT | 83-O | 871. | 4.50 | 89. | 22. | 7. | 0.68 |

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

```
-----DSS---ZCLOSE Unit:  71,   File: J:\2006\10-0607\DESIGN~2\DRAINA~1\HEC-RAS\Model\A1.DSS
           Pointer Utilization:  0.25
           Number of Records:     11
           File Size:    145.1  Kbytes
           Percent Inactive:   0.0
```

# HEC-1 Existing Conditions

- FRW, 100-Yr, 6-Hr

```
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   28FEB08  TIME  16:16:09  *                                    *          (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        FCDMC
        2           ID        0607BASE_EXST_6HR - Buckeye ADMP Existing Conditions Hydrology Update
        3           ID        Major Basin: 04
        4           ID        100 Year - Return Period
        5           ID        6 Hour Storm
        6           ID        Multiple Storms
        7           ID        Unit Hydrograph: S-Graph
        8           ID        01/09/2008
                    * ******************************************************************************
                    *  Original Model prepared as: Buckeye/Sun Valley ADMS - November 2004
                    *                              by PBS&J - Modelers: Jacob Lesue & Wen Chen
                    * ************* THIS MODEL: Major Basin 04, Model Area FRW *********************
                    *  100-year 6-hour
                    *  NEW FILE NAME:  "FRW1006EX.DAT"
                    *  Existing Conditions
                    *  Area 1 - FRS to RID (West)
                    *  Major Basin Key:  01=BGE, 02=BGW, 03=FRE, 04=FRW, 05=RBE, 06=RBW, 07=AREA2
                    *  Rainfall Loss Method - Green & Ampt
                    *  Unit Hydrograph Method - FCDMC S-Graph
                    *  Channel Routing Method - Normal Depth
                    *  Soil Data - USDA SCS Soil Survey (1972 & 1981)
                    *  Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
                    *  Retention volume for newly developed areas accounted for with FCDMC
                    *  storage methodology equation - V=C(P/12)A, where C=0.71 & P=2.8
                    * ******************************************************************************
                    *  UPDATED BY DIBBLE ENGINEERING, SEPTEMBER 2007
                    *  Land Use Updated using - FCDMC GIS Data: mag_landuse (2005)
                    * ******************************************************************************
                    *
                    *DIAGRAM
                    *
        9           IT      15 02JAN94       0     400
       10           IO       5
       11           IN      15 02JAN94       0
                    *
                    *
       12           JD   3.300  0.0100
                    * 6-hour distribution, pattern 1.0
       13           PC   0.000   0.008   0.016   0.025   0.033   0.041   0.050   0.058   0.066   0.074
       14           PC   0.087   0.099   0.118   0.138   0.216   0.377   0.834   0.911   0.931   0.950
       15           PC   0.962   0.972   0.983   0.991   1.000
       16           JD   3.280  0.5000
                    * 6-hour distribution, pattern 1.0
       17           PC   0.000   0.008   0.016   0.025   0.033   0.041   0.050   0.058   0.066   0.074
       18           PC   0.087   0.099   0.118   0.138   0.216   0.377   0.834   0.911   0.931   0.950
       19           PC   0.962   0.972   0.983   0.991   1.000
       20           JD   3.257     1.0
                    * 6-hour distribution, pattern 1.4
       21           PC   0.000   0.008   0.016   0.025   0.033   0.041   0.050   0.058   0.066   0.075
       22           PC   0.087   0.099   0.119   0.148   0.230   0.407   0.778   0.881   0.919   0.945
       23           PC   0.957   0.968   0.980   0.990   1.000
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  24          JD   3.168     5.0
              * 6-hour distribution, pattern 2.3
  25          PC   0.000   0.011   0.017   0.027   0.039   0.049   0.060   0.070   0.080   0.091
  26          PC   0.103   0.118   0.139   0.183   0.270   0.458   0.686   0.823   0.889   0.929
1                                          HEC-1 INPUT                                          PAGE  2

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

  27          PC   0.949   0.962   0.974   0.988   1.000
  28          JD   3.102    10.0
              * 6-hour distribution, pattern 2.7
  29          PC   0.000   0.013   0.019   0.029   0.044   0.057   0.069   0.081   0.094   0.107
  30          PC   0.122   0.137   0.160   0.205   0.289   0.466   0.677   0.807   0.877   0.919
  31          PC   0.947   0.961   0.974   0.987   1.000
              *
              *

  32          KK     15A   BASIN
  33          KM   ******************************************************************************
  34          KM   **   SUB-WATERSHED F   ********************************************************
  35          KM   ******************************************************************************
  36          KM   S-GRAPH TYPE=DESERT RANGELAND
  37          BA   0.588
  38          LG    0.37    0.33    4.40    0.39       4
  39          UI     334     736     308      98      28       0       0       0       0       0
              *

  40          KK  F1A-1B   ROUTE     F1A
  41          KM   ROUTE HYDROGRAPH FROM F1A TO F1B (CHANNEL A)
  42          RS       6    FLOW     0.0     0.0
  43          RC   0.100   0.100   0.100    4678  0.0040    0.00
  44          RX    0.00  250.00  500.00  750.00 1000.00 1333.30 1666.60 2000.00
  45          RY   10.00    7.50    5.00    2.50    0.00    3.30    6.60   10.00
              *

  46          KK     15B   BASIN
  47          KM   S-GRAPH TYPE=AGRICULTURE
  48          BA   0.816
  49          LG    1.00    0.25    4.10    0.54       0
  50          UI      15      14      17      31      48      77      88      87     113     118
  51          UI     123     125     124     115     104     110     103      77      84      71
  52          UI      56      50      43      45      35      27      24      21      19      17
  53          UI      14      13      14       8       8       9       8       8       3       2
  54          UI       1       2       2       2       2       2       1       2       2       2
  55          UI       2       0       0       0       0       0       0       0       0       0
              *

  56          KK     F1B COMBINE
  57          KM   COMBINE ROUTED HYDROGRAPH FROM F1A WITH RUNOFF FROM 15B @ F1B
  58          KO       3
  59          ZW   A=FRW B=F1B C=FLOW E=15MIN F=100y6h-ex
  60          HC       2
              *

  61          KK       2   BASIN
  62          KM   ******************************************************************************
  63          KM   **   SUB-WATERSHED G   ********************************************************
  64          KM   ******************************************************************************
  65          KM   S-GRAPH TYPE=DESERT RANGELAND
  66          BA   1.233
  67          LG    0.36    0.33    3.95    0.44       9
  68          UI     386    1205     929     392     163      62      34       0       0       0
              *
1                                          HEC-1 INPUT                                          PAGE  3

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

  69          KK       1   BASIN
  70          KM   S-GRAPH TYPE=DESERT RANGELAND
  71          BA   1.626
  72          LG    0.54    0.32    4.30    0.40       1
  73          UI      56     107     255     378     483     528     517     440     341     260
  74          UI     199     152     114      91      67      52      39      35      14      13
              *

  75          KK      G2 COMBINE   G2-G3
  76          KM   COMBINE RUNOFF HYDROGRAPH FROM 1 AND 2 @ G2
  77          HC       2
              *

  78          KK   G2-G3   ROUTE      G2
  79          KM   ROUTE HYDROGRAPH FROM G1 TO G2 (CHANNEL A)
  80          RS       9    FLOW     0.0     0.0
  81          RC   0.100   0.100   0.100    3231  0.0050    0.00
  82          RX    0.00  250.00  500.00  750.00 1000.00 1333.30 1666.60 2000.00
  83          RY   10.00    7.50    5.00    2.50    0.00    3.30    6.60   10.00
              *
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 84          KK      16   BASIN
 85          KM   S-GRAPH TYPE=PHOENIX VALLEY
 86          BA   0.951
 87          LG    0.28    0.25    4.35    0.44      47
 88          UI      79     270     420     664     464     296     130      71      26      18
 89          UI       0       0       0       0       0       0       0       0       0       0
             *

 90          KK      G3 COMBINE
 91          KM   COMBINE ROUTED HYDROGRAPH FROM G2 WITH RUNOFF FROM 16 @ G3
 92          KO       3
 93          ZW   A=FRW B=G3 C=FLOW E=15MIN F=100y6h-ex
 94          HC       2
             *

 95          KK       4   BASIN
 96          KM   ******************************************************************************
 97          KM   **   SUB-WATERSHED H   ********************************************************
 98          KM   ******************************************************************************
 99          KM   S-GRAPH TYPE=DESERT RANGELAND
100          BA   0.549
101          LG    0.32    0.32    3.95    0.40      14
102          UI     312     687     288      91      27       0       0       0       0       0
             *
             *

103          KK     4-O  DIVERT
104          KM   RETENTION CALCULATION BASED ON FCDMC METHODOLOGY - CALCULATED VALUE IS 17.1
105          KM   80% OF CALCULATED VALUE (13.7) IS APPLIED HERE - JTB
106          DT    4RET    13.7     0.0
107          DI     0.0 10000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
108          DQ     0.0 10000.0     0.0     0.0     0.0     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

109          KK   H1-H2   ROUTE      H1
110          KM   ROUTE HYDROGRAPH FROM H1 TO H2 (CHANNEL C)
111          RS       2    FLOW     0.0     0.0
112          RC   0.035   0.035   0.035    5803  0.0050    0.00
113          RX    0.00    2.00   12.00  112.00  212.00  312.00  412.00  512.00
114          RY    5.00    5.00    0.00    1.00    2.00    3.00    4.00    5.00
             *

115          KK       3   BASIN
116          KM   S-GRAPH TYPE=DESERT RANGELAND
117          BA   1.648
118          LG    0.32    0.32    4.00    0.49      13
119          UI     358    1247    1338     698     331     153      67      38       0       0
             *

120          KK     3-O  DIVERT
121          KM   RETENTION CALCULATION BASED ON FCDMC METHODOLOGY - CALCULATED VALUE IS 46.6
122          KM   80% OF CALCULATED VALUE (37.3) IS APPLIED HERE - JTB
123          DT    3RET    37.3     0.0
124          DI     0.0 10000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
125          DQ     0.0 10000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

126          KK      H2 COMBINE   H2-H3
127          KM   COMBINE ROUTED HYDROGRAPH FROM H1 WITH RUNOFF FROM 3 @ H2
128          HC       2
             *

129          KK   H2-H3   ROUTE      H2
130          KM   ROUTE HYDROGRAPH FROM H2 TO H3 (CHANNEL B)
131          RS       2    FLOW     0.0     0.0
132          RC   0.100   0.020   0.100    3094  0.0070    0.00
133          RX    0.00 1000.00 1006.00 1010.00 1050.00 1054.00 1060.00 2060.00
134          RY   10.00    0.00    0.00    1.00    1.00    0.00    0.00   10.00
             *

135          KK      17   BASIN
136          KM   S-GRAPH TYPE=AGRICULTURE
137          BA   0.607
138          LG    0.25    0.25    4.00    0.55      30
139          UI      91     278     510     376     196      70      25      15       0       0
             *

140          KK    17-O  DIVERT
141          KM   RETENTION CALCULATION BASED ON FCDMC METHODOLOGY - CALCULATED VALUE IS 64.3
142          KM   80% OF CALCULATED VALUE (51.4) IS APPLIED HERE - JTB
143          DT   17RET    51.4     0.0
144          DI     0.0 10000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
145          DQ     0.0 10000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
             *
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1                                          HEC-1 INPUT                                                    PAGE  5

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


         146          KK      H3 COMBINE
         147          KM   COMBINE ROUTED HYDROGRAPH FROM H2 WITH RUNOFF FROM 17 @ H3
         148          KO       3
         149          ZW   A=FRW B=H3 C=FLOW E=15MIN F=100y6h-ex
         150          HC       2
                      *

         151          KK      5A   BASIN
         152          KM   ******************************************************************************
         153          KM   **   SUB-WATERSHED I   ******************************************************
         154          KM   ******************************************************************************
         155          KM   S-GRAPH TYPE=DESERT RANGELAND
         156          BA   1.172
         157          LG    0.32    0.31    4.30    0.44      19
         158          UI     273     933     947     474     221      99      39      28       0       0
                      *
                      *

         159          KK    5A-O  DIVERT
         160          KM   RETENTION CALCULATION BASED ON FCDMC METHODOLOGY - CALCULATED VALUE IS 51.0
         161          KM   80% OF CALCULATED VALUE (40.8) IS APPLIED HERE - JTB
         162          DT   5ARET    40.8     0.0
         163          DI     0.0 10000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
         164          DQ     0.0 10000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
                      *
                      *

         165          KK  I1AI2A   ROUTE     I1A
         166          KM   ROUTE HYDROGRAPH FROM I1A TO I2A (CHANNEL B)
         167          RS       3    FLOW     0.0     0.0
         168          RC   0.100   0.020   0.100    3508  0.0050    0.00
         169          RX    0.00 1000.00 1006.00 1010.00 1050.00 1054.00 1060.00 2060.00
         170          RY   10.00    0.00    0.00    1.00    1.00    0.00    0.00   10.00
                      *

         171          KK      18   BASIN
         172          KM   S-GRAPH TYPE=AGRICULTURE
         173          BA   0.796
         174          LG    0.25    0.25    4.15    0.52      30
         175          UI     120     369     672     493     250      92      32      20       0       0
                      *

         176          KK    18-O  DIVERT
         177          KM   RETENTION CALCULATION BASED ON FCDMC METHODOLOGY - CALCULATED VALUE IS 83.5
         178          KM   80% OF CALCULATED VALUE (66.8) IS APPLIED HERE - JTB
         179          DT   18RET    66.8     0.0
         180          DI     0.0 10000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
         181          DQ     0.0 10000.0     0.0     0.0     0.0     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


         182          KK     I2A COMBINE
         183          KM   COMBINE ROUTED HYDROGRAPH FROM I1A WITH RUNOFF FROM 18 @ I2A
         184          KO       3
         185          ZW   A=FRW B=I2A C=FLOW E=15MIN F=100y6h-ex
         186          HC       2
                      *

         187          KK      5B   BASIN
         188          KM   S-GRAPH TYPE=DESERT RANGELAND
         189          BA   0.576
         190          LG    0.36    0.35    4.50    0.32       1
         191          UI     259     679     356     127      43      18       0       0       0       0
                      *

         192          KK  I1BI2B   ROUTE     I1B
         193          KM   ROUTE HYDROGRAPH FROM I1B TO I2B (CHANNEL A)
         194          RS       1    FLOW     0.0     0.0
         195          RC   0.100   0.100   0.100    4972  0.0050    0.00
         196          RX    0.00  250.00  500.00  750.00 1000.00 1333.30 1666.60 2000.00
         197          RY   10.00    7.50    5.00    2.50    0.00    3.30    6.60   10.00
                      *

         198          KK      19   BASIN
         199          KM   S-GRAPH TYPE=AGRICULTURE
         200          BA   0.536
         201          LG    0.94    0.26    3.95    0.44       0
         202          UI      12      13      22      39      68      68      94      97     104     103
         203          UI      98      86      93      71      70      54      47      35      38      26
         204          UI      21      19      15      13      11      11       7       7       7       7
         205          UI       2       1       2       1       2       1       2       2       1       2
```

```
          206          UI       1       2       1       2       1       2       2       0       0       0
                       *

          207          KK     I2B COMBINE
          208          KM   COMBINE ROUTED HYDROGRAPH FROM I1B WITH RUNOFF FROM 19 @ I2B
          209          KO       3
          210          ZW   A=FRW B=I2B C=FLOW E=15MIN F=100y6h-ex
          211          HC       2
          212          ZZ
1
               SCHEMATIC DIAGRAM OF STREAM NETWORK
 INPUT
  LINE      (V) ROUTING          (--->) DIVERSION OR PUMP FLOW

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

   32          15A
                V
                V
   40       F1A-1B
                .
                .
   46           .         15B
                .           .
                .           .
   56          F1B...........
                .
                .
   61           .           2
                .           .
                .           .
   69           .           .           1
                .           .           .
                .           .           .
   75           .          G2...........
                .           V
                .           V
   78           .       G2-G3
                .           .
                .           .
   84           .           .          16
                .           .           .
                .           .           .
   90           .          G3...........
                .           .
                .           .
   95           .           .           4
                .           .           .
                .           .           .
  106           .           .           .-------->    4RET
  103           .           .         4-O
                .           .           V
                .           .           V
  109           .           .       H1-H2
                .           .           .
                .           .           .
  115           .           .           .           3
                .           .           .           .
                .           .           .           .
  123           .           .           .           .-------->    3RET
  120           .           .           .         3-O
                .           .           .           .
                .           .           .           .
  126           .           .          H2...........
                .           .           V
                .           .           V
  129           .           .       H2-H3
                .           .           .
                .           .           .
  135           .           .           .          17
                .           .           .           .
                .           .           .           .
  143           .           .           .           .-------->   17RET
  140           .           .           .        17-O
                .           .           .           .
                .           .           .           .
  146           .           .          H3...........
                .           .           .
                .           .           .
  151           .           .           .          5A
                .           .           .           .
                .           .           .           .
  162           .           .           .           .-------->   5ARET
  159           .           .           .        5A-O
                .           .           .           V
                .           .           .           V
  165           .           .           .      I1AI2A
                .           .           .           .
                .           .           .           .
```

```
  171          .          .          .          .         18
               .          .          .          .          .
               .          .          .          .          .
  179          .          .          .          .          .-------->   18RET
  176          .          .          .          .       18-O
               .          .          .          .          .
               .          .          .          .          .
  182          .          .          .       I2A............
               .          .          .          .
               .          .          .          .
  187          .          .          .          .         5B
               .          .          .          .          V
               .          .          .          .          V
  192          .          .          .          .     I1BI2B
               .          .          .          .          .
               .          .          .          .          .
  198          .          .          .          .          .          19
               .          .          .          .          .           .
               .          .          .          .          .           .
  207          .          .          .          .        I2B............

 (***) 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   28FEB08  TIME  16:16:09  *                                                    *          (916) 756-1104              *
 *                                      *                                                    *                                      *
 ****************************************                                                    ****************************************


                                FCDMC
                                0607BASE_EXST_6HR - Buckeye ADMP Existing Conditions Hydrology Update
                                Major Basin: 04
                                100 Year - Return Period
                                6 Hour Storm
                                Multiple Storms
                                Unit Hydrograph: S-Graph
                                01/09/2008

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

     IT          HYDROGRAPH TIME DATA
                        NMIN          15  MINUTES IN COMPUTATION INTERVAL
                       IDATE      2JAN94  STARTING DATE
                       ITIME        0000  STARTING TIME
                          NQ         400  NUMBER OF HYDROGRAPH ORDINATES
                      NDDATE      6JAN94  ENDING DATE
                      NDTIME        0345  ENDING TIME
                       ICENT          19  CENTURY MARK

                 COMPUTATION INTERVAL    0.25 HOURS
                      TOTAL TIME BASE   99.75 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

  12 JD          INDEX STORM NO. 1
                       STRM        3.30  PRECIPITATION DEPTH
                       TRDA        0.01  TRANSPOSITION DRAINAGE AREA

  13 PI            PRECIPITATION PATTERN
                     0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                     0.01      0.02      0.02      0.08      0.16      0.46      0.08      0.02      0.02      0.01
                     0.01      0.01      0.01      0.01

  16 JD          INDEX STORM NO. 2
                       STRM        3.28  PRECIPITATION DEPTH
                       TRDA        0.50  TRANSPOSITION DRAINAGE AREA

  17 PI            PRECIPITATION PATTERN
                     0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                     0.01      0.02      0.02      0.08      0.16      0.46      0.08      0.02      0.02      0.01
                     0.01      0.01      0.01      0.01
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  20 JD          INDEX STORM NO. 3
                       STRM        3.26  PRECIPITATION DEPTH
                       TRDA        1.00  TRANSPOSITION DRAINAGE AREA

  21 PI            PRECIPITATION PATTERN
                     0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                     0.01      0.02      0.03      0.08      0.18      0.37      0.10      0.04      0.03      0.01
                     0.01      0.01      0.01      0.01

  24 JD          INDEX STORM NO. 4
                       STRM        3.17  PRECIPITATION DEPTH
                       TRDA        5.00  TRANSPOSITION DRAINAGE AREA

  25 PI            PRECIPITATION PATTERN
                     0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                     0.02      0.02      0.04      0.09      0.19      0.23      0.14      0.07      0.04      0.02
                     0.01      0.01      0.01      0.01

  28 JD          INDEX STORM NO. 5
                       STRM        3.10  PRECIPITATION DEPTH
                       TRDA       10.00  TRANSPOSITION DRAINAGE AREA

  29 PI            PRECIPITATION PATTERN
                     0.01      0.01      0.01      0.02      0.01      0.01      0.01      0.01      0.01      0.02
                     0.01      0.02      0.05      0.08      0.18      0.21      0.13      0.07      0.04      0.03
                     0.01      0.01      0.01      0.01


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


            **************
            *            *
  56 KK     *      F1B   *      COMBINE
            *            *
            **************

  58 KO          OUTPUT CONTROL VARIABLES
                       IPRNT           3  PRINT CONTROL
                       IPLOT           0  PLOT CONTROL
                       QSCAL          0.  HYDROGRAPH PLOT SCALE

  60 HC          HYDROGRAPH COMBINATION
                       ICOMP           2  NUMBER OF HYDROGRAPHS TO COMBINE

                                                                  ***

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

                        HYDROGRAPH AT STATION      F1B
                      TRANSPOSITION AREA      0.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                         (CFS)
+     494.      5.25                177.         47.         16.          11.
                       (INCHES)     1.169       1.240       1.240        1.240
                        (AC-FT)      88.         93.         93.          93.

                        CUMULATIVE AREA =    1.40 SQ MI

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

                        HYDROGRAPH AT STATION      F1B
                      TRANSPOSITION AREA      0.5 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                         (CFS)
+     488.      5.25                175.         46.         15.          11.
                       (INCHES)     1.156       1.226       1.226        1.226
                        (AC-FT)      87.         92.         92.          92.

                        CUMULATIVE AREA =    1.40 SQ MI

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

                        HYDROGRAPH AT STATION      F1B
                      TRANSPOSITION AREA      1.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                         (CFS)
```

```
+     417.      5.25                150.         40.         13.          10.
                         (INCHES)    0.994       1.052       1.052        1.052
                          (AC-FT)     74.         79.         79.          79.

                          CUMULATIVE AREA =    1.40 SQ MI


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

                           HYDROGRAPH AT STATION      F1B
                         TRANSPOSITION AREA      5.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                            (CFS)
+     297.      5.50                106.         28.          9.           7.
                         (INCHES)    0.701       0.738       0.738        0.738
                          (AC-FT)     52.         55.         55.          55.

                          CUMULATIVE AREA =    1.40 SQ MI


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

                           HYDROGRAPH AT STATION      F1B
                         TRANSPOSITION AREA     10.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                            (CFS)
+     253.      5.50                 91.         24.          8.           6.
                         (INCHES)    0.601       0.633       0.633        0.633
                          (AC-FT)     45.         47.         47.          47.

                          CUMULATIVE AREA =    1.40 SQ MI

    -----DSS---ZOPEN:  New File Opened,  File: J:\2006\10-0607\DESIGN~2\DRAINA~1\HEC-RAS\Model\A1.DSS
                       Unit:  71;  DSS Version: 6-LD
 -----DSS---ZWRITE Unit  71; Vers.    1:  /FRW/F1B/FLOW/01JAN1994/15MIN/100Y6H-EX/
       ***             ***             ***             ***             ***


                          INTERPOLATED HYDROGRAPH AT      F1B

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                            (CFS)
+     393.      5.50                142.         37.         12.           9.
                         (INCHES)    0.937       0.991       0.991        0.991
                          (AC-FT)     70.         74.         74.          74.

                          CUMULATIVE AREA =    1.40 SQ MI


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


            **************
            *            *
   90 KK    *        G3  *      COMBINE
            *            *
            **************

   92 KO          OUTPUT CONTROL VARIABLES
                        IPRNT           3  PRINT CONTROL
                        IPLOT           0  PLOT CONTROL
                        QSCAL          0.  HYDROGRAPH PLOT SCALE

   94 HC          HYDROGRAPH COMBINATION
                        ICOMP           2  NUMBER OF HYDROGRAPHS TO COMBINE

                                                                  ***

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

                           HYDROGRAPH AT STATION       G3
                         TRANSPOSITION AREA      0.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                            (CFS)
+    2624.      4.75                661.        170.         57.          41.
```

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                    (INCHES)     1.614       1.662       1.662       1.662
                     (AC-FT)      328.        338.        338.        338.

                    CUMULATIVE AREA =    3.81 SQ MI


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

                     HYDROGRAPH AT STATION       G3
                   TRANSPOSITION AREA      0.5 SQ MI

  PEAK FLOW     TIME                        MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                       (CFS)
+    2592.      4.75                655.        169.         56.         41.
                    (INCHES)     1.597       1.645       1.645       1.645
                     (AC-FT)      325.        334.        334.        334.

                    CUMULATIVE AREA =    3.81 SQ MI


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

                     HYDROGRAPH AT STATION       G3
                   TRANSPOSITION AREA      1.0 SQ MI

  PEAK FLOW     TIME                        MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                       (CFS)
+    2323.      5.00                606.        156.         52.         38.
                    (INCHES)     1.478       1.525       1.525       1.525
                     (AC-FT)      300.        310.        310.        310.

                    CUMULATIVE AREA =    3.81 SQ MI


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

                     HYDROGRAPH AT STATION       G3
                   TRANSPOSITION AREA      5.0 SQ MI

  PEAK FLOW     TIME                        MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                       (CFS)
+    1780.      5.00                493.        128.         43.         31.
                    (INCHES)     1.204       1.253       1.253       1.253
                     (AC-FT)      245.        255.        255.        255.

                    CUMULATIVE AREA =    3.81 SQ MI


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

                     HYDROGRAPH AT STATION       G3
                   TRANSPOSITION AREA     10.0 SQ MI

  PEAK FLOW     TIME                        MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                       (CFS)
+    1571.      5.00                448.        117.         39.         28.
                    (INCHES)     1.094       1.145       1.145       1.145
                     (AC-FT)      222.        233.        233.        233.

                    CUMULATIVE AREA =    3.81 SQ MI

-----DSS---ZWRITE Unit  71; Vers.    1:  /FRW/G3/FLOW/01JAN1994/15MIN/100Y6H-EX/
     ***            ***            ***            ***            ***


                    INTERPOLATED HYDROGRAPH AT       G3

  PEAK FLOW     TIME                        MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                       (CFS)
+    1872.      5.00                512.        133.         44.         32.
                    (INCHES)     1.250       1.299       1.299       1.299
                     (AC-FT)      254.        264.        264.        264.

                    CUMULATIVE AREA =    3.81 SQ MI
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*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


            **************
            *            *
  146 KK    *        H3  *      COMBINE
            *            *
            **************

  148 KO          OUTPUT CONTROL VARIABLES
                        IPRNT           3  PRINT CONTROL
                        IPLOT           0  PLOT CONTROL
                        QSCAL          0.  HYDROGRAPH PLOT SCALE

  150 HC          HYDROGRAPH COMBINATION
                        ICOMP           2  NUMBER OF HYDROGRAPHS TO COMBINE

                                                                  ***

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

                          HYDROGRAPH AT STATION       H3
                        TRANSPOSITION AREA      0.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                            (CFS)
+    1810.      5.00                307.         77.         26.          19.
                        (INCHES)    1.018       1.022       1.022        1.022
                         (AC-FT)     152.        153.        153.         153.

                         CUMULATIVE AREA =    2.80 SQ MI


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

                          HYDROGRAPH AT STATION       H3
                        TRANSPOSITION AREA      0.5 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                            (CFS)
+    1770.      5.00                303.         76.         25.          18.
                        (INCHES)    1.003       1.007       1.007        1.007
                         (AC-FT)     150.        151.        151.         151.

                         CUMULATIVE AREA =    2.80 SQ MI


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

                          HYDROGRAPH AT STATION       H3
                        TRANSPOSITION AREA      1.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                            (CFS)
+    1420.      5.00                266.         67.         22.          16.
                        (INCHES)    0.883       0.886       0.886        0.886
                         (AC-FT)     132.        133.        133.         133.

                         CUMULATIVE AREA =    2.80 SQ MI


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

                          HYDROGRAPH AT STATION       H3
                        TRANSPOSITION AREA      5.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                            (CFS)
+     939.      5.00                183.         46.         15.          11.
                        (INCHES)    0.606       0.609       0.609        0.609
                         (AC-FT)      91.         91.         91.          91.

                         CUMULATIVE AREA =    2.80 SQ MI


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

                          HYDROGRAPH AT STATION       H3
                        TRANSPOSITION AREA     10.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
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                                        6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                              (CFS)
+    780.      5.00                    155.         39.         13.           9.
                            (INCHES)  0.514       0.517       0.517        0.517
                             (AC-FT)   77.         77.         77.          77.

                             CUMULATIVE AREA =    2.80 SQ MI

-----DSS---ZWRITE Unit  71; Vers.    1:  /FRW/H3/FLOW/01JAN1994/15MIN/100Y6H-EX/
      ***             ***             ***             ***             ***


                             INTERPOLATED HYDROGRAPH AT       H3

  PEAK FLOW     TIME                            MAXIMUM AVERAGE FLOW
                                        6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                              (CFS)
+   1139.      5.00                    217.         55.         18.          13.
                            (INCHES)  0.721       0.724       0.724        0.724
                             (AC-FT)  108.        108.        108.         108.

                             CUMULATIVE AREA =    2.80 SQ MI


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


            **************
            *            *
  182 KK    *       I2A  *      COMBINE
            *            *
            **************

  184 KO          OUTPUT CONTROL VARIABLES
                        IPRNT           3  PRINT CONTROL
                        IPLOT           0  PLOT CONTROL
                        QSCAL          0.  HYDROGRAPH PLOT SCALE

  186 HC          HYDROGRAPH COMBINATION
                        ICOMP           2  NUMBER OF HYDROGRAPHS TO COMBINE
                                                                  ***
      ***             ***             ***             ***             ***

                          HYDROGRAPH AT STATION      I2A
                        TRANSPOSITION AREA      0.0 SQ MI

  PEAK FLOW     TIME                            MAXIMUM AVERAGE FLOW
                                        6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                              (CFS)
+   1236.      5.00                    175.         44.         15.          11.
                            (INCHES)  0.829       0.830       0.830        0.830
                             (AC-FT)   87.         87.         87.          87.

                             CUMULATIVE AREA =    1.97 SQ MI

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

                          HYDROGRAPH AT STATION      I2A
                        TRANSPOSITION AREA      0.5 SQ MI

  PEAK FLOW     TIME                            MAXIMUM AVERAGE FLOW
                                        6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                              (CFS)
+   1218.      5.00                    172.         43.         14.          10.
                            (INCHES)  0.812       0.814       0.814        0.814
                             (AC-FT)   85.         85.         85.          85.

                             CUMULATIVE AREA =    1.97 SQ MI

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

                          HYDROGRAPH AT STATION      I2A
                        TRANSPOSITION AREA      1.0 SQ MI

  PEAK FLOW     TIME                            MAXIMUM AVERAGE FLOW
                                        6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                              (CFS)
```

```
+     855.      5.00                148.         37.         12.          9.
                         (INCHES)    0.700       0.702       0.702       0.702
                          (AC-FT)     74.         74.         74.         74.

                          CUMULATIVE AREA =    1.97 SQ MI


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

                           HYDROGRAPH AT STATION      I2A
                         TRANSPOSITION AREA      5.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                            (CFS)
+     444.      5.25                92.         23.          8.          6.
                         (INCHES)    0.435       0.436       0.436       0.436
                          (AC-FT)     46.         46.         46.         46.

                          CUMULATIVE AREA =    1.97 SQ MI


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

                           HYDROGRAPH AT STATION      I2A
                         TRANSPOSITION AREA     10.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                            (CFS)
+     339.      5.25                75.         19.          6.          5.
                         (INCHES)    0.354       0.356       0.356       0.356
                          (AC-FT)     37.         37.         37.         37.

                          CUMULATIVE AREA =    1.97 SQ MI

 -----DSS---ZWRITE Unit  71; Vers.    1:  /FRW/I2A/FLOW/01JAN1994/15MIN/100Y6H-EX/
       ***             ***             ***             ***             ***


                          INTERPOLATED HYDROGRAPH AT      I2A

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                            (CFS)
+     651.      5.25               125.         31.         10.          8.
                         (INCHES)    0.588       0.590       0.590       0.590
                          (AC-FT)     62.         62.         62.         62.

                          CUMULATIVE AREA =    1.97 SQ MI


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


            **************
            *            *
  207 KK    *       I2B  *      COMBINE
            *            *
            **************

  209 KO          OUTPUT CONTROL VARIABLES
                        IPRNT           3  PRINT CONTROL
                        IPLOT           0  PLOT CONTROL
                        QSCAL          0.  HYDROGRAPH PLOT SCALE

  211 HC          HYDROGRAPH COMBINATION
                        ICOMP           2  NUMBER OF HYDROGRAPHS TO COMBINE

                                                                  ***

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

                           HYDROGRAPH AT STATION      I2B
                         TRANSPOSITION AREA      0.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                            (CFS)
+     315.      5.00               152.         41.         14.         10.
                         (INCHES)    1.269       1.357       1.357       1.357
                          (AC-FT)     75.         80.         80.         80.
```

```
                    CUMULATIVE AREA =    1.11 SQ MI

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

                     HYDROGRAPH AT STATION      I2B
                   TRANSPOSITION AREA      0.5 SQ MI

  PEAK FLOW     TIME                        MAXIMUM AVERAGE FLOW
                                    6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     312.      5.00                150.         40.         13.          10.
                         (INCHES)   1.254       1.342       1.342        1.342
                          (AC-FT)    74.         80.         80.          80.

                    CUMULATIVE AREA =    1.11 SQ MI

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

                     HYDROGRAPH AT STATION      I2B
                   TRANSPOSITION AREA      1.0 SQ MI

  PEAK FLOW     TIME                        MAXIMUM AVERAGE FLOW
                                    6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     274.      5.00                132.         36.         12.           9.
                         (INCHES)   1.107       1.189       1.189        1.189
                          (AC-FT)    66.         70.         71.          71.

                    CUMULATIVE AREA =    1.11 SQ MI

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

                     HYDROGRAPH AT STATION      I2B
                   TRANSPOSITION AREA      5.0 SQ MI

  PEAK FLOW     TIME                        MAXIMUM AVERAGE FLOW
                                    6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     203.      5.00                 98.         27.          9.           6.
                         (INCHES)   0.823       0.892       0.893        0.893
                          (AC-FT)    49.         53.         53.          53.

                    CUMULATIVE AREA =    1.11 SQ MI

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

                     HYDROGRAPH AT STATION      I2B
                   TRANSPOSITION AREA     10.0 SQ MI

  PEAK FLOW     TIME                        MAXIMUM AVERAGE FLOW
                                    6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     177.      5.00                 86.         23.          8.           6.
                         (INCHES)   0.721       0.784       0.785        0.785
                          (AC-FT)    43.         47.         47.          47.

                    CUMULATIVE AREA =    1.11 SQ MI

-----DSS---ZWRITE Unit  71; Vers.    1:  /FRW/I2B/FLOW/01JAN1994/15MIN/100Y6H-EX/
      ***            ***            ***            ***            ***


                    INTERPOLATED HYDROGRAPH AT      I2B

  PEAK FLOW     TIME                        MAXIMUM AVERAGE FLOW
                                    6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     270.      5.00                130.         35.         12.           8.
                         (INCHES)   1.088       1.169       1.169        1.169
                          (AC-FT)    65.         69.         69.          69.

                    CUMULATIVE AREA =    1.11 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 | 15A | 943. | 4.25 | 91. | 23. | 8. | 0.59 | | |
| + | ROUTED TO | F1A-1B | 394. | 5.25 | 91. | 23. | 8. | 0.59 | | |
| + | HYDROGRAPH AT | 15B | 114. | 6.75 | 71. | 20. | 7. | 0.82 | | |
| + | 2 COMBINED AT | F1B | 393. | 5.50 | 142. | 37. | 12. | 1.40 | | |
| + | HYDROGRAPH AT | 2 | 1381. | 4.25 | 183. | 46. | 15. | 1.23 | | |
| + | HYDROGRAPH AT | 1 | 576. | 5.25 | 192. | 48. | 16. | 1.63 | | |
| + | 2 COMBINED AT | G2 | 1381. | 4.25 | 356. | 90. | 30. | 2.86 | | |
| + | ROUTED TO | G2-G3 | 1218. | 5.00 | 333. | 84. | 28. | 2.86 | | |
| + | HYDROGRAPH AT | 16 | 1075. | 4.75 | 227. | 57. | 19. | 0.95 | | |
| + | 2 COMBINED AT | G3 | 1872. | 5.00 | 512. | 133. | 44. | 3.81 | | |
| + | HYDROGRAPH AT | 4 | 956. | 4.25 | 100. | 25. | 8. | 0.55 | | |
| + | DIVERSION TO | 4RET | 460. | 4.00 | 28. | 7. | 2. | 0.55 | | |
| + | HYDROGRAPH AT | 4-O | 956. | 4.25 | 73. | 18. | 6. | 0.55 | | |
| + | ROUTED TO | H1-H2 | 439. | 4.75 | 73. | 18. | 6. | 0.55 | | |
| + | HYDROGRAPH AT | 3 | 1474. | 4.50 | 242. | 61. | 20. | 1.65 | | |
| + | DIVERSION TO | 3RET | 721. | 4.25 | 75. | 19. | 6. | 1.65 | | |
| + | HYDROGRAPH AT | 3-O | 1474. | 4.50 | 168. | 42. | 14. | 1.65 | | |
| + | 2 COMBINED AT | H2 | 1595. | 4.50 | 218. | 54. | 18. | 2.20 | | |
| + | ROUTED TO | H2-H3 | 1139. | 5.00 | 217. | 54. | 18. | 2.20 | | |
| + | HYDROGRAPH AT | 17 | 781. | 4.50 | 125. | 31. | 10. | 0.61 | | |
| + | DIVERSION TO | 17RET | 781. | 4.50 | 104. | 26. | 9. | 0.61 | | |
| + | HYDROGRAPH AT | 17-O | 225. | 5.00 | 22. | 5. | 2. | 0.61 | | |
| + | 2 COMBINED AT | H3 | 1139. | 5.00 | 217. | 55. | 18. | 2.80 | | |
| + | HYDROGRAPH AT | 5A | 1230. | 4.25 | 202. | 51. | 17. | 1.17 | | |
| + | DIVERSION TO | 5ARET | 971. | 4.25 | 82. | 21. | 7. | 1.17 | | |
| + | HYDROGRAPH AT | 5A-O | 1187. | 4.50 | 120. | 30. | 10. | 1.17 | | |
| + | ROUTED TO | I1AI2A | 639. | 5.00 | 120. | 30. | 10. | 1.17 | | |
| + | HYDROGRAPH AT | 18 | 987. | 4.50 | 162. | 41. | 14. | 0.80 | | |
| | DIVERSION TO | | | | | | | | | |

```
+                        18RET      987.    4.50        135.        34.        11.      0.80

         HYDROGRAPH AT
+                         18-O      261.    5.00         28.         7.         2.      0.80

         2 COMBINED AT
+                          I2A      651.    5.25        125.        31.        10.      1.97

         HYDROGRAPH AT
+                           5B      913.    4.25         93.        23.         8.      0.58

         ROUTED TO
+                       I1BI2B      256.    4.75         86.        23.         8.      0.58

         HYDROGRAPH AT
+                           19      118.    6.00         62.        16.         5.      0.54

         2 COMBINED AT
+                          I2B      270.    5.00        130.        35.        12.      1.11


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


   -----DSS---ZCLOSE Unit:  71,   File: J:\2006\10-0607\DESIGN~2\DRAINA~1\HEC-RAS\Model\A1.DSS
            Pointer Utilization:  0.25
            Number of Records:      5
            File Size:     72.1  Kbytes
            Percent Inactive:   0.0
```

# HEC-1 Existing Conditions

- RBE, 100-Yr, 6-Hr

```
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   28FEB08  TIME  16:35:59  *                                    *          (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        FCDMC
        2           ID        0607BASE_EXST_6HR - Buckeye ADMP Existing Conditions Hydrology Update
        3           ID        Major Basin: 05
        4           ID        100 Year - Return Period
        5           ID        6 Hour Storm
        6           ID        Multiple Storms
        7           ID        Unit Hydrograph: S-Graph
        8           ID        01/09/2008
                    * ******************************************************************************
                    *  Original Model prepared as: Buckeye/Sun Valley ADMS - November 2004
                    *                              by PBS&J - Modelers: Jacob Lesue & Wen Chen
                    * ************* THIS MODEL: Major Basin 05, Model Area RBE *********************
                    *  100-year 6-hour
                    *  NEW FILE NAME:  "RBE1006EX.DAT"
                    *  Existing Conditions
                    *  Area 1 - RID to BIC (East)
                    *  Major Basin Key:  01=BGE, 02=BGW, 03=FRE, 04=FRW, 05=RBE, 06=RBW, 07=AREA2
                    *  Rainfall Loss Method - Green & Ampt
                    *  Unit Hydrograph Method - FCDMC S-Graph
                    *  Channel Routing Method - Normal Depth
                    *  Soil Data - USDA SCS Soil Survey (1972 & 1981)
                    *  Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
                    *  Retention volume for newly developed areas accounted for with FCDMC
                    *  storage methodology equation - V=C(P/12)A, where C=0.71 & P=2.8
                    * ******************************************************************************
                    *  UPDATED BY DIBBLE ENGINEERING, SEPTEMBER 2007
                    *  Land Use Updated using - FCDMC GIS Data: mag_landuse (2005)
                    * ******************************************************************************
                    *
                    *DIAGRAM
                    *
        9           IT      15 02JAN94       0     400
       10           IO       5
       11           IN      15 02JAN94       0
                    *
                    *
       12           JD   3.300  0.0100
                    * 6-hour distribution, pattern 1.0
       13           PC   0.000   0.008   0.016   0.025   0.033   0.041   0.050   0.058   0.066   0.074
       14           PC   0.087   0.099   0.118   0.138   0.216   0.377   0.834   0.911   0.931   0.950
       15           PC   0.962   0.972   0.983   0.991   1.000
       16           JD   3.280  0.5000
                    * 6-hour distribution, pattern 1.0
       17           PC   0.000   0.008   0.016   0.025   0.033   0.041   0.050   0.058   0.066   0.074
       18           PC   0.087   0.099   0.118   0.138   0.216   0.377   0.834   0.911   0.931   0.950
       19           PC   0.962   0.972   0.983   0.991   1.000
       20           JD   3.257     1.0
                    * 6-hour distribution, pattern 1.4
       21           PC   0.000   0.008   0.016   0.025   0.033   0.041   0.050   0.058   0.066   0.075
       22           PC   0.087   0.099   0.119   0.148   0.230   0.407   0.778   0.881   0.919   0.945
       23           PC   0.957   0.968   0.980   0.990   1.000
```

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 24          JD   3.168     5.0
             * 6-hour distribution, pattern 2.3
 25          PC   0.000   0.011   0.017   0.027   0.039   0.049   0.060   0.070   0.080   0.091
 26          PC   0.103   0.118   0.139   0.183   0.270   0.458   0.686   0.823   0.889   0.929
1                                          HEC-1 INPUT                                          PAGE  2

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

 27          PC   0.949   0.962   0.974   0.988   1.000
 28          JD   3.102    10.0
             * 6-hour distribution, pattern 2.7
 29          PC   0.000   0.013   0.019   0.029   0.044   0.057   0.069   0.081   0.094   0.107
 30          PC   0.122   0.137   0.160   0.205   0.289   0.466   0.677   0.807   0.877   0.919
 31          PC   0.947   0.961   0.974   0.987   1.000
             *
             *

 32          KK   RIDKB
 33          KM   ******************************************************************************
 34          KM   **   SUB-WATERSHED K   ******************************************************
 35          KM   ******************************************************************************
 36          KM   FALSE BASIN TO SIMULATE INFLOW FROM RID
 37          BA  0.0001
 38          ZR  =QI A=RID RID B=38999 LAT STRUCT C=FLOW-WEIR D=01JAN1994 E=15MIN F=RID-100-06E
             *

 39          KK  K3SBK4   ROUTE    K3SB
 40          KM   ROUTE INFLOW FROM RID CONCENTRATED AT K3SB TO K4 (CHANNEL A)
 41          RS       1    FLOW     0.0     0.0
 42          RC   0.100   0.100   0.100    3026  0.0090    0.00
 43          RX    0.00  250.00  500.00  750.00 1000.00 1333.30 1666.60 2000.00
 44          RY   10.00    7.50    5.00    2.50    0.00    3.30    6.60   10.00
             *

 45          KK   RIDKA
 46          KM   FALSE BASIN TO SIMULATE INFLOW FROM RID
 47          BA  0.0001
 48          ZR  =QI A=RID RID B=35599 LAT STRUCT C=FLOW-WEIR D=01JAN1994 E=15MIN F=RID-100-06E
             *

 49          KK  K3SAK4   ROUTE    K3SA
 50          KM   ROUTE INFLOW FROM RID CONCENTRATED AT K3SA TO K4 (CHANNEL A)
 51          RS       1    FLOW     0.0     0.0
 52          RC   0.100   0.100   0.100    4868  0.0050    0.00
 53          RX    0.00  250.00  500.00  750.00 1000.00 1333.30 1666.60 2000.00
 54          RY   10.00    7.50    5.00    2.50    0.00    3.30    6.60   10.00
             *

 55          KK      34   BASIN
 56          KM   S-GRAPH TYPE=AGRICULTURE
 57          BA   0.637
 58          LG    0.94    0.25    4.00    0.57       2
 59          UI      17      18      40      76      98     124     133     143     142     125
 60          UI     124     105      96      71      59      49      44      30      25      21
 61          UI      17      16      12       9      10       7       3       2       2       2
 62          UI       2       2       2       2       3       2       2       2       2       2
 63          UI       2       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

 64          KK      K4 COMBINE   K4-K5
 65          KM   COMBINE ROUTED HYDROGRAPH FROM K3SA AND K3SB WITH RUNOFF FROM 34 @ K4
 66          HC       3
             *

 67          KK   K4-K5   ROUTE      K4
 68          KM   ROUTE HYDROGRAPH FROM K4 TO K5 (CHANNEL B)
 69          RS       5    FLOW     0.0     0.0
 70          RC   0.100   0.020   0.100    5284  0.0080    0.00
 71          RX    0.00 1000.00 1006.00 1010.00 1050.00 1054.00 1060.00 2060.00
 72          RY   10.00    0.00    0.00    1.00    1.00    0.00    0.00   10.00
             *

 73          KK      35   BASIN
 74          KM   S-GRAPH TYPE=AGRICULTURE
 75          BA   1.504
 76          LG    0.96    0.25    3.95    0.49       2
 77          UI      31      31      46      75     138     180     174     232     248     257
 78          UI     258     258     216     221     225     162     177     132     117      93
 79          UI      88      82      58      50      43      38      33      28      28      20
 80          UI      18      17      18      14       4       4       3       4       4       4
 81          UI       4       3       4       4       4       4       3       4       4       4
 82          UI       4       0       0       0       0       0       0       0       0       0
             *

 83          KK      K5 COMBINE   K5-K6
```

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 84          KM   COMBINE ROUTED HYDROGRAPH FROM K4 WITH RUNOFF FROM 35 @ K5
 85          HC       2
             *

 86          KK   K5-K6   ROUTE      K5
 87          KM   ROUTE HYDROGRAPH FROM K5 TO K6 (CHANNEL B)
 88          RS       5    FLOW     0.0     0.0
 89          RC   0.100   0.020   0.100    6533  0.0060    0.00
 90          RX    0.00 1000.00 1006.00 1010.00 1050.00 1054.00 1060.00 2060.00
 91          RY   10.00    0.00    0.00    1.00    1.00    0.00    0.00   10.00
             *

 92          KK      46   BASIN
 93          KM   S-GRAPH TYPE=PHOENIX VALLEY
 94          KM   S-GRAPH TYPE MODIFIED BY DIBBLE ENGINEERING FOR ADMP HYDROLOGY UPDATE - JTB
 95          BA   1.381
 96          LG    0.56    0.25    4.15    0.57      17
 97          UI      45      91     193     252     314     416     561     438     351     278
 98          UI     216     137      78      66      46      22      14      14      14      14
             *

 99          KK    46-O  DIVERT
100          KM   RETENTION CALCULATION BASED ON FCDMC METHODOLOGY - CALCULATED VALUE IS 74.1
101          KM   80% OF CALCULATED VALUE (59.3) IS APPLIED HERE - JTB
102          DT   46RET    59.3     0.0
103          DI     0.0 10000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
104          DQ     0.0 10000.0     0.0     0.0     0.0     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


105          KK      K6 COMBINE   K6-K7
106          KM   COMBINE ROUTED HYDROGRAPH FROM K5 WITH RUNOFF FROM 46 @ K6
107          KO       3
108          HC       2
             *

109          KK   K6-K7              K6
110          KM   STORAGE ROUTE FROM K6 TO K7 THROUGH SPRR TRESTLE
111          RS       1    ELEV   890.0     0.0
112          SV     0.0    0.43   43.48  173.62  410.02  410.02  410.02  410.02  410.02  410.02
113          SV  410.02  410.02  410.02  410.02  410.02  410.02  410.02  410.02  410.02  410.02
114          SE   890.0   892.0   894.0   896.0   898.0   898.0   898.0   898.0   898.0   898.0
115          SE   898.0   898.0   898.0   898.0   898.0   898.0   898.0   898.0   898.0   898.0
116          SQ     0.0   200.0   975.0  1120.0  1555.0  1565.0  1610.0  2150.0  2150.0  2150.0
117          SQ  2150.0  2150.0  2150.0  2150.0  2150.0  2150.0  2150.0  2150.0  2150.0  2150.0
118          SE   890.0  891.09  893.09  893.69  894.89  894.99  895.09  895.29  895.29  895.29
119          SE  895.29  895.29  895.29  895.29  895.29  895.29  895.29  895.29  895.29  895.29
             *

120          KK      65   BASIN
121          KM   S-GRAPH TYPE=AGRICULTURE
122          BA   0.376
123          LG    0.99    0.25    4.60    0.41       1
124          UI      11      16      34      66      75      91      98      97      81      84
125          UI      62      55      40      34      27      19      15      12      11       8
126          UI       7       6       3       2       1       2       1       2       1       1
127          UI       2       1       2       1       2       0       0       0       0       0
             *

128          KK      K7 COMBINE
129          KM   COMBINE STORAGE HYDROGRAPH FROM K6 WITH RUNOFF FROM 65 @ K7
130          KO       3
131          ZW   A=RBE B=K7 C=FLOW E=15MIN F=100y6h-ex
132          HC       2
             *

133          KK    RIDL
134          KM   ******************************************************************************
135          KM   **   SUB-WATERSHED L   ********************************************************
136          KM   ******************************************************************************
137          KM   FALSE BASIN TO SIMULATE INFLOW FROM RID
138          BA  0.0001
139          ZR  =QI A=RID RID B=41599 LAT STRUCT C=FLOW-WEIR D=01JAN1994 E=15MIN F=RID-100-06E
             *

140          KK  L2S-L3   ROUTE     L2S
141          KM   ROUTE INFLOW FROM RID CONCENTRATED AT L2S TO L3 (CHANNEL B)
142          RS       1    FLOW     0.0     0.0
143          RC   0.100   0.020   0.100    7457  0.0090    0.00
144          RX    0.00 1000.00 1006.00 1010.00 1050.00 1054.00 1060.00 2060.00
145          RY   10.00    0.00    0.00    1.00    1.00    0.00    0.00   10.00
             *
1                                          HEC-1 INPUT                                          PAGE  5

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

```
146          KK      36   BASIN
147          KM   S-GRAPH TYPE=AGRICULTURE
148          BA   0.684
149          LG    0.73    0.25    3.95    0.40       6
150          UI      20      24      52     104     115     151     166     165     153     144
151          UI     126     111      82      67      58      44      33      27      23      18
152          UI      15      12      11       9       3       2       3       2       3       3
153          UI       2       3       2       3       2       3       2       3       0       0
             *

154          KK      L3 COMBINE   L3-L4
155          KM   COMBINE ROUTED HYDROGRAPH FROM L2S WITH RUNOFF FROM 36 @ L3
156          HC       2
             *

157          KK   L3-L4   ROUTE      L3
158          KM   ROUTE HYDROGRAPH FROM L3 TO L4 (CHANNEL B)
159          RS       7    FLOW     0.0     0.0
160          RC   0.100   0.020   0.100    7727  0.0050    0.00
161          RX    0.00 1000.00 1006.00 1010.00 1050.00 1054.00 1060.00 2060.00
162          RY   10.00    0.00    0.00    1.00    1.00    0.00    0.00   10.00
             *

163          KK      47   BASIN
164          KM   S-GRAPH TYPE=PHOENIX VALLEY
165          KM   S-GRAPH TYPE MODIFIED BY DIBBLE ENGINEERING FOR ADMP HYDROLOGY UPDATE - JTB
166          BA   0.617
167          LG    0.43    0.25    4.45    0.47      24
168          UI      31     117     178     261     355     248     176     105      52      33
169          UI      13       9      10       0       0       0       0       0       0       0
             *

170          KK    47-O  DIVERT
171          KM   RETENTION CALCULATION BASED ON FCDMC METHODOLOGY - CALCULATED VALUE IS 40.4
172          KM   80% OF CALCULATED VALUE (32.4) IS APPLIED HERE - JTB
173          DT   47RET    32.4     0.0
174          DI     0.0 10000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
175          DQ     0.0 10000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

176          KK      L4 COMBINE   L4-L5
177          KM   COMBINE ROUTED HYDROGRAPH FROM L3 WITH RUNOFF FROM 47 @ L4
178          KO       3
179          HC       2
             *

180          KK   L4-L5              L4
181          KM   STORAGE ROUTE FROM L4 TO L5 THROUGH SPRR TRESTLE
182          RS       1    ELEV   886.3     0.0
183          SV     0.0     0.9     4.0    25.7   107.8  265.67  265.67  265.67  265.67  265.67
184          SV  265.67  265.67  265.67  265.67  265.67  265.67  265.67  265.67  265.67  265.67
185          SE   886.0   888.0   890.0   892.0   894.0   896.0   896.0   896.0   896.0   896.0
186          SE   896.0   896.0   896.0   896.0   896.0   896.0   896.0   896.0   896.0   896.0
187          SQ     0.0    59.0   172.0   230.0   323.0   480.0   769.0  1218.0  1828.0  1828.0
```



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

188          SQ  1828.0  1828.0  1828.0  1828.0  1828.0  1828.0  1828.0  1828.0  1828.0  1828.0
189          SE  886.29  888.09  890.09  890.99  891.79  891.99  892.19  892.39  892.59  892.59
190          SE  892.59  892.59  892.59  892.59  892.59  892.59  892.59  892.59  892.59  892.59
             *

191          KK      66   BASIN
192          KM   S-GRAPH TYPE=AGRICULTURE
193          BA   0.294
194          LG    0.81    0.26    4.35    0.39      10
195          UI      14      37      79     109     116     102      87      66      44      31
196          UI      20      15      12       7       6       1       2       2       2       1
197          UI       2       2       1       0       0       0       0       0       0       0
             *

198          KK      L5 COMBINE
199          KM   COMBINE STORAGE HYDROGRAPH FROM L4 WITH RUNOFF FROM 66 @ L5
200          KO       3
201          ZW   A=RBE B=L5 C=FLOW E=15MIN F=100y6h-ex
202          HC       2
             *

203          KK    RIDM
204          KM   ******************************************************************************
205          KM   **   SUB-WATERSHED M   ***********************************************************
206          KM   ******************************************************************************
207          KM   FALSE BASIN TO SIMULATE INFLOW FROM RID
208          BA  0.0001
209          ZR  =QI A=RID RID B=47199 LAT STRUCT C=FLOW-WEIR D=01JAN1994 E=15MIN F=RID-100-06E
             *
```

```
 210          KK  L2S2M1   ROUTE    L2S2
 211          KM   ROUTE INFLOW FROM RID CONCENTRATED AT L2S2 TO M1 (CHANNEL A)
 212          RS       1    FLOW     0.0     0.0
 213          RC   0.100   0.100   0.100    9579  0.0030    0.00
 214          RX    0.00  250.00  500.00  750.00 1000.00 1333.30 1666.60 2000.00
 215          RY   10.00    7.50    5.00    2.50    0.00    3.30    6.60   10.00
              *

 216          KK      37   BASIN
 217          KM   S-GRAPH TYPE=AGRICULTURE
 218          BA   1.421
 219          LG    0.67    0.25    4.10    0.61      13
 220          UI      35      35      73     142     204     216     277     297     297     291
 221          UI     247     267     201     203     143     123     102      98      65      57
 222          UI      44      40      33      31      21      20      20      15       4       4
 223          UI       5       4       5       4       4       5       4       5       4       4
 224          UI       5       4       5       4       0       0       0       0       0       0
              *

 225          KK    37-O  DIVERT
 226          KM   RETENTION CALCULATION BASED ON FCDMC METHODOLOGY - CALCULATED VALUE IS 65.1
 227          KM   80% OF CALCULATED VALUE (52.0) IS APPLIED HERE - JTB
 228          DT   37RET    52.0     0.0
 229          DI     0.0 10000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
 230          DQ     0.0 10000.0     0.0     0.0     0.0     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

 231          KK      M1 COMBINE   M1-M2
 232          KM   COMBINE ROUTED HYDROGRAPH FROM L2S2 WITH RUNOFF FROM 37 @ M1
 233          HC       2
              *

 234          KK   M1-M2   ROUTE      M1
 235          KM   ROUTE HYDROGRAPH FROM M1 TO M2 (CHANNEL A)
 236          RS       7    FLOW     0.0     0.0
 237          RC   0.100   0.100   0.100    5784  0.0032    0.00
 238          RX    0.00  250.00  500.00  750.00 1000.00 1333.30 1666.60 2000.00
 239          RY   10.00    7.50    5.00    2.50    0.00    3.30    6.60   10.00
              *

 240          KK      48   BASIN
 241          KM   S-GRAPH TYPE=AGRICULTURE
 242          BA   0.500
 243          LG    0.98    0.25    4.35    0.45       1
 244          UI      14      14      32      61      78      98     108     113     113      97
 245          UI      98      80      77      54      45      39      32      23      19      17
 246          UI      12      13       8       8       8       5       1       2       2       2
 247          UI       1       2       2       1       2       2       1       2       2       1
 248          UI       0       0       0       0       0       0       0       0       0       0
              *

 249          KK      M2 COMBINE   M2-M3
 250          KM   COMBINE ROUTED HYDROGRAPH FROM M1 WITH RUNOFF FROM 48 @ M2
 251          HC       2
              *

 252          KK   M2-M3   ROUTE      M2
 253          KM   ROUTE HYDROGRAPH FROM M2 TO M3 (CHANNEL A)
 254          RS       2    FLOW     0.0     0.0
 255          RC   0.025   0.025   0.025    4310  0.0050    0.00
 256          RX    0.00  250.00  500.00  750.00 1000.00 1333.30 1666.60 2000.00
 257          RY   10.00    7.50    5.00    2.50    0.00    3.30    6.60   10.00
              *

 258          KK      67   BASIN
 259          KM   S-GRAPH TYPE=PHOENIX VALLEY
 260          BA   0.472
 261          LG    0.25    0.25    4.30    0.39      30
 262          UI     223     630     292      57       0       0       0       0       0       0
              *

 263          KK      M3 COMBINE   M3-M4
 264          KM   COMBINE ROUTED HYDROGRAPH FROM M2 WITH RUNOFF FROM 67 @ M3
 265          KO       3
 266          HC       2
              *
1                                          HEC-1 INPUT                                          PAGE  8

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

 267          KK   M3-M4              M3
 268          KM   STORAGE ROUTE FROM M3 TO M4 THROUGH SPRR TRESTLE
 269          RS       1    ELEV   884.0     0.0
 270          SV     0.0    0.28    12.7    94.1  202.02  383.38  383.38  383.38  383.38  383.38
```

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271          SV  383.38  383.38  383.38  383.38  383.38  383.38  383.38  383.38  383.38  383.38
272          SE   884.0   886.0   888.0   890.0   892.0   894.0   894.0   894.0   894.0   894.0
273          SE   894.0   894.0   894.0   894.0   894.0   894.0   894.0   894.0   894.0   894.0
274          SQ     0.0    42.0   135.0   200.0   226.0   465.0  1010.0  1703.0  1703.0  1703.0
275          SQ  1703.0  1703.0  1703.0  1703.0  1703.0  1703.0  1703.0  1703.0  1703.0  1703.0
276          SE   884.0  885.09  887.09  889.19  889.29  889.49  889.69  889.89  889.89  889.89
277          SE  889.89  889.89  889.89  889.89  889.89  889.89  889.89  889.89  889.89  889.89
             *

278          KK      69   BASIN
279          KM   S-GRAPH TYPE=PHOENIX VALLEY
280          BA   0.137
281          LG    0.18    0.27    4.50    0.40      53
282          UI      61     176      92      20       0       0       0       0       0       0
             *

283          KK      M4 COMBINE
284          KM   COMBINE STORAGE HYDROGRAPH FROM M3 WITH RUNOFF FROM 69 @ M4
285          KO       3
286          ZW   A=RBE B=M4 C=FLOW E=15MIN F=100y6h-ex
287          HC       2
             *

288          KK    RIDN
289          KM   ******************************************************************************
290          KM   **   SUB-WATERSHED N   ***********************************************************
291          KM   ******************************************************************************
292          KM   FALSE BASIN TO SIMULATE INFLOW FROM RID
293          BA  0.0001
294          ZR  =QI A=RID RID B=51199 LAT STRUCT C=FLOW-WEIR D=01JAN1994 E=15MIN F=RID-100-06E
             *

295          KK  N2S-N3   ROUTE     N2S
296          KM   ROUTE INFLOW FROM RID CONCENTRATED AT N2S TO N3 (CHANNEL A)
297          RS       1    FLOW     0.0     0.0
298          RC   0.100   0.100   0.100    5806  0.0050    0.00
299          RX    0.00  250.00  500.00  750.00 1000.00 1333.30 1666.60 2000.00
300          RY   10.00    7.50    5.00    2.50    0.00    3.30    6.60   10.00
             *

301          KK      38   BASIN
302          KM   S-GRAPH TYPE=AGRICULTURE
303          BA   0.542
304          LG    0.94    0.25    3.95    0.47       1
305          UI      13      14      26      51      77      79     102     112     112     112
306          UI      92      98      82      74      61      49      38      41      25      22
307          UI      18      16      13      12       9       7       8       8       2       1
308          UI       2       2       1       2       2       1       2       2       1       2
309          UI       2       1       2       2       0       0       0       0       0       0
             *
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

310          KK      N3 COMBINE   N3-N4
311          KM   COMBINE ROUTED HYDROGRAPH FROM N2S WITH RUNOFF FROM 38 @ N3
312          HC       2
             *

313          KK   N3-N4   ROUTE      N3
314          KM   ROUTE HYDROGRAPH FROM N3 TO N4 (CHANNEL B)
315          RS       5    FLOW     0.0     0.0
316          RC   0.100   0.020   0.100    5296  0.0087    0.00
317          RX    0.00 1000.00 1006.00 1010.00 1050.00 1054.00 1060.00 2060.00
318          RY   10.00    0.00    0.00    1.00    1.00    0.00    0.00   10.00
             *

319          KK      49   BASIN
320          KM   S-GRAPH TYPE=PHOENIX VALLEY
321          KM   S-GRAPH TYPE MODIFIED BY DIBBLE ENGINEERING FOR ADMP HYDROLOGY UPDATE - JTB
322          BA   1.009
323          LG    0.46    0.26    3.95    0.40      18
324          UI      39     103     192     246     332     475     365     281     211     143
325          UI      72      55      38      12      13      12      12       0       0       0
             *

326          KK    49-O  DIVERT
327          KM   DIVERT RETENTION OUT OF MODEL DUE TO DEVELOPMENT
328          KM   TOTAL RETENTION VOLUME FROM SONORAN VISTA DRAINAGE REPORT OF 72 AC-FT.
329          KM   80% OF TOTAL VOLUME (57.6 AC-FT) DIVERTED OUT OF MODEL - JTB
330          DT   49RET    57.6     0.0
331          DI     0.0 10000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
332          DQ     0.0 10000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

333          KK      N4 COMBINE  N4-N5B
334          KM   COMBINE ROUTED HYDROGRAPH FROM N3 WITH RUNOFF FROM 49 @ N4
335          HC       2
```

```
                 *
 336             KK  N4-N5B   ROUTE      N4
 337             KM   ROUTE HYDROGRAPH FROM N4 TO N5 (CHANNEL B)
 338             RS       3    FLOW     0.0     0.0
 339             RC   0.100   0.020   0.100    3866  0.0080    0.00
 340             RX    0.00 1000.00 1006.00 1010.00 1050.00 1054.00 1060.00 2060.00
 341             RY   10.00    0.00    0.00    1.00    1.00    0.00    0.00   10.00
                 *
 342             KK     56B   BASIN
 343             KM   S-GRAPH TYPE=PHOENIX VALLEY
 344             KM   S-GRAPH CHANGED FOR ADMP - JTB
 345             BA   0.334
 346             LG    0.15    0.25    4.00    0.62      54
 347             UI     779       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

 348             KK   56B-O  DIVERT
 349             KM   RETENTION CALCULATION BASED ON FCDMC METHODOLOGY - CALCULATED VALUE IS 33.9
 350             KM   80% OF CALCULATED VALUE (27.1) IS APPLIED HERE - JTB
 351             DT  56BRET    27.1     0.0
 352             DI     0.0 10000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
 353             DQ     0.0 10000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
                 *
 354             KK     N5B COMBINE  N5B-N6
 355             KM   COMBINE ROUTED HYDROGRAPH FROM N4 WITH RUNOFF FROM 56B @ N5B
 356             HC       2
                 *
 357             KK  N5B-N6             N5B
 358             KM   STORAGE ROUTE FROM N5B TO N6 THROUGH SPRR TRESTLE
 359             KO       3
 360             RS       1    ELEV  887.23     0.0
 361             SV     0.0    0.96   12.89   39.94   86.12  150.27  150.27  150.27  150.27  150.27
 362             SV  150.27  150.27  150.27  150.27  150.27  150.27  150.27  150.27  150.27  150.27
 363             SE   886.0   888.0   890.0   892.0   894.0   896.0   896.0   896.0   896.0   896.0
 364             SE   896.0   896.0   896.0   896.0   896.0   896.0   896.0   896.0   896.0   896.0
 365             SQ     0.0    71.6    98.1   118.7   136.2   151.6   165.7   178.6   190.7   202.0
 366             SQ   212.8   223.0   232.8   242.1   251.2   259.9   268.3   276.5   276.5   276.5
 367             SE  887.23  889.23  889.73  890.23  890.73  891.23  891.73  892.23  892.73  893.23
 368             SE  893.73  894.23  894.73  895.23  895.73  896.23  896.73  897.23  897.23  897.23
                 *
 369             KK     56A   BASIN
 370             KM   S-GRAPH TYPE=AGRICULTURE
 371             BA   0.411
 372             LG    0.69    0.26    3.95    0.46      15
 373             UI      18      40      96     127     150     142     131      98      71      53
 374             UI      36      25      19      15      10       9       3       2       2       2
 375             UI       2       3       2       2       2       0       0       0       0       0
                 *
 376             KK  N5A-N6             N5A
 377             KM   STORAGE ROUTE FROM N5A TO N6 THROUGH SPRR TRESTLE
 378             KO       3
 379             RS       1    ELEV   886.0     0.0
 380             SV     0.0    0.02    8.08   35.13  100.26  100.26  100.26  100.26  100.26  100.26
 381             SV  100.26  100.26  100.26  100.26  100.26  100.26  100.26  100.26  100.26  100.26
 382             SE   886.0   888.0   890.0   892.0   894.0   894.0   894.0   894.0   894.0   894.0
 383             SE   894.0   894.0   894.0   894.0   894.0   894.0   894.0   894.0   894.0   894.0
 384             SQ     0.0   102.4   189.7   248.0   294.9   335.4   371.5   404.3   434.7   463.1
 385             SQ   489.9   515.2   539.4   562.6   584.8   606.2   626.9   646.9   646.9   646.9
 386             SE   886.0  887.52  888.02  888.52  889.02  889.52  890.02  890.52  891.02  891.52
 387             SE  892.02  892.52  893.02  893.52  894.02  894.52  895.02  895.52  895.52  895.52
                 *
1                                          HEC-1 INPUT                                          PAGE 11

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

 388             KK      70   BASIN
 389             KM   S-GRAPH TYPE=AGRICULTURE
 390             BA   0.141
 391             LG    0.46    0.25    4.45    0.51      24
 392             UI       8      26      49      62      59      51      36      24      16      10
 393             UI       7       5       4       1       1       1       1       1       1       1
                 *
 394             KK      N6 COMBINE
 395             KM   COMBINE STORAGE HYDROGRAPH FROM N5A AND N5B WITH RUNOFF FROM 70 @ N6
 396             KO       3
 397             ZW   A=RBE B=N6 C=FLOW E=15MIN F=100y6h-ex
 398             HC       3
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                *

399             KK    RIDO
400             KM   ******************************************************************************
401             KM   **    SUB-WATERSHED O    ******************************************************
402             KM   ******************************************************************************
403             KM   FALSE BASIN TO SIMULATE INFLOW FROM RID
404             BA  0.0001
405             ZR  =QI A=RID RID B=57199 LAT STRUCT C=FLOW-WEIR D=01JAN1994 E=15MIN F=RID-100-06E
                *

406             KK  O4S-O5   ROUTE     O4S
407             KM   ROUTE INFLOW FROM RID CONCENTRATED AT O4S TO O5 (CHANNEL A)
408             RS       1    FLOW     0.0     0.0
409             RC   0.100   0.100   0.100    6325  0.0060    0.00
410             RX    0.00  250.00  500.00  750.00 1000.00 1333.30 1666.60 2000.00
411             RY   10.00    7.50    5.00    2.50    0.00    3.30    6.60   10.00
                *

412             KK      39   BASIN
413             KM   S-GRAPH TYPE=AGRICULTURE
414             BA   0.725
415             LG    0.90    0.26    4.30    0.47       2
416             UI      17      17      35      63     102     100     130     147     146     146
417             UI     128     128     116      93      90      67      54      51      40      31
418             UI      26      22      18      16      16       9      10      10       7       2
419             UI       2       2       2       3       2       2       2       2       2       3
420             UI       2       2       2       2       2       0       0       0       0       0
                *

421             KK      O5 COMBINE   O5-O6
422             KM   COMBINE ROUTED HYDROGRAPH FROM O4S WITH RUNOFF FROM 39 @ O5
423             HC       2
                *

424             KK   O5-O6   ROUTE      O5
425             KM   ROUTE HYDROGRAPH FROM O5 TO O6 (CHANNEL B)
426             RS       4    FLOW     0.0     0.0
427             RC   0.100   0.020   0.100    5268  0.0100    0.00
428             RX    0.00 1000.00 1006.00 1010.00 1050.00 1054.00 1060.00 2060.00
429             RY   10.00    0.00    0.00    1.00    1.00    0.00    0.00   10.00
                *
1                                          HEC-1 INPUT                                          PAGE 12

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

430             KK      50   BASIN
431             KM   S-GRAPH TYPE=AGRICULTURE
432             BA   1.002
433             LG    0.91    0.25    4.20    0.49       3
434             UI      21      20      32      51      94     121     119     155     169     173
435             UI     173     172     144     152     143     108     121      83      77      61
436             UI      60      51      38      33      27      26      20      19      19      12
437             UI      12      12      11       7       3       2       3       3       2       3
438             UI       2       3       2       3       2       3       2       3       2       3
439             UI       3       0       0       0       0       0       0       0       0       0
                *

440             KK      O6 COMBINE   O6-O7
441             KM   COMBINE ROUTED HYDROGRAPH FROM O5 WITH RUNOFF FROM 50 @ O6
442             HC       2
                *

443             KK   O6-O7   ROUTE      O6
444             KM   ROUTE HYDROGRAPH FROM O6 TO O7 (CHANNEL B)
445             RS       4    FLOW     0.0     0.0
446             RC   0.100   0.020   0.100    3579  0.0040    0.00
447             RX    0.00 1000.00 1006.00 1010.00 1050.00 1054.00 1060.00 2060.00
448             RY   10.00    0.00    0.00    1.00    1.00    0.00    0.00   10.00
                *

449             KK      57   BASIN
450             KM   S-GRAPH TYPE=AGRICULTURE
451             BA   0.489
452             LG    1.00    0.25    4.25    0.53       0
453             UI      19      35      95     124     152     160     142     133     105      74
454             UI      57      42      29      23      17      13      11       7       2       3
455             UI       2       2       3       2       3       2       2       3       0       0
                *

456             KK      O7 COMBINE   O7-O8
457             KM   COMBINE ROUTED HYDROGRAPH FROM O6 WITH RUNOFF FROM 57 @ O7
458             KO       3
459             HC       2
                *

460             KK   O7-O8              O7
461             KM   STORAGE ROUTE FROM O7 TO O8 THROUGH SPRR TRESTLE
```

```
 462          RS       1    ELEV   891.1     0.0
 463          SV     0.0     0.2    8.52   76.65  224.48  224.48  224.48  224.48  224.48  224.48
 464          SV  224.48  224.48  224.48  224.48  224.48  224.48  224.48  224.48  224.48  224.48
 465          SE   890.0   892.0   894.0   896.0   898.0   898.0   898.0   898.0   898.0   898.0
 466          SE   898.0   898.0   898.0   898.0   898.0   898.0   898.0   898.0   898.0   898.0
 467          SQ     0.0    78.0    85.0   151.0   248.0   540.0   954.0  1560.0  2334.0  2334.0
 468          SQ  2334.0  2334.0  2334.0  2334.0  2334.0  2334.0  2334.0  2334.0  2334.0  2334.0
 469          SE   891.1   893.1   893.4   894.5   894.7   895.0   895.2   895.4   895.6   895.6
 470          SE   895.6   895.6   895.6   895.6   895.6   895.6   895.6   895.6   895.6   895.6
              *
1                                          HEC-1 INPUT                                          PAGE 13

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

 471          KK      71   BASIN
 472          KM   S-GRAPH TYPE=AGRICULTURE
 473          BA   0.155
 474          LG    0.93    0.25    4.80    0.41       3
 475          UI      13      50      84      83      67      41      25      14       9       6
 476          UI       1       2       1       1       2       1       0       0       0       0
              *

 477          KK      O8 COMBINE
 478          KM   COMBINE STORAGE HYDROGRAPH FROM 07 WITH RUNOFF FROM 71 @ O8
 479          KO       3
 480          ZW   A=RBE B=08 C=FLOW E=15MIN F=100y6h-ex
 481          HC       2
              *

 482          KK    RIDP
 483          KM   ******************************************************************************
 484          KM   **   SUB-WATERSHED P   ******************************************************
 485          KM   ******************************************************************************
 486          KM   FALSE BASIN TO SIMULATE INFLOW FROM RID
 487          BA  0.0001
 488          ZR  =QI A=RID RID B=61999 LAT STRUCT C=FLOW-WEIR D=01JAN1994 E=15MIN F=RID-100-06E
              *

 489          KK  P2S-P3   ROUTE     P2S
 490          KM   ROUTE INFLOW FROM RID CONCENTRATED AT P2S TO P3 (CHANNEL A)
 491          RS       1    FLOW     0.0     0.0
 492          RC   0.100   0.100   0.100    8445  0.0070    0.00
 493          RX    0.00  250.00  500.00  750.00 1000.00 1333.30 1666.60 2000.00
 494          RY   10.00    7.50    5.00    2.50    0.00    3.30    6.60   10.00
              *

 495          KK      40   BASIN
 496          KM   S-GRAPH TYPE=AGRICULTURE
 497          BA   0.976
 498          LG    0.96    0.25    4.20    0.53       1
 499          UI      21      20      34      56      99     121     128     159     174     175
 500          UI     174     162     145     155     124     113     105      79      67      59
 501          UI      59      39      34      29      26      22      19      19      12      12
 502          UI      12      11       7       2       3       2       3       2       3       3
 503          UI       2       3       2       3       2       3       3       2       3       2
 504          UI       3       0       0       0       0       0       0       0       0       0
              *

 505          KK      P3 COMBINE   P3-P4
 506          KM   COMBINE ROUTED HYDROGRAPH FROM P2S WITH RUNOFF FROM 40 @ P3
 507          HC       2
              *
1                                          HEC-1 INPUT                                          PAGE 14

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

 508          KK   P3-P4   ROUTE      P3
 509          KM   ROUTE HYDROGRAPH FROM P3 TO P4 (CHANNEL B)
 510          RS       3    FLOW     0.0     0.0
 511          RC   0.100   0.020   0.100    5302  0.0080    0.00
 512          RX    0.00 1000.00 1006.00 1010.00 1050.00 1054.00 1060.00 2060.00
 513          RY   10.00    0.00    0.00    1.00    1.00    0.00    0.00   10.00
              *

 514          KK      51   BASIN
 515          KM   S-GRAPH TYPE=AGRICULTURE
 516          BA   1.004
 517          LG    0.88    0.25    4.40    0.56       3
 518          UI      21      21      34      54      98     124     125     159     177     177
 519          UI     176     170     146     156     135     113     113      83      72      61
 520          UI      66      39      36      33      26      25      19      19      16      12
 521          UI      12      12      10       3       3       2       3       3       2       3
 522          UI       2       3       3       2       3       3       2       3       3       2
 523          UI       3       0       0       0       0       0       0       0       0       0
              *

 524          KK      P4 COMBINE   P4-P5
```

```
525          KM   COMBINE ROUTED HYDROGRAPH FROM P3 WITH RUNOFF FROM 51 @ P4
526          KO       3
527          HC       2
             *

528          KK   P4-P5   ROUTE      P4
529          KM   ROUTE HYDROGRAPH FROM P4 TO P5 (CHANNEL A)
530          RS       5    FLOW     0.0     0.0
531          RC   0.100   0.100   0.100    2652  0.0030    0.00
532          RX    0.00  250.00  500.00  750.00 1000.00 1333.30 1666.60 2000.00
533          RY   10.00    7.50    5.00    2.50    0.00    3.30    6.60   10.00
             *

534          KK      58   BASIN
535          KM   S-GRAPH TYPE=PHOENIX VALLEY
536          KM   S-GRAPH TYPE MODIFIED BY DIBBLE ENGINEERING FOR ADMP HYDROLOGY UPDATE - JTB
537          BA   0.190
538          LG    0.29    0.31    4.30    0.55      21
539          UI     412       0       0       0       0       0       0       0       0       0
             *

540          KK      P5 COMBINE   P5-P6
541          KM   COMBINE ROUTED HYDROGRAPH FROM P4 WITH RUNOFF FROM 58 @ P5
542          KO       3
543          HC       2
             *

544          KK   P5-P6              P5
545          KM   STORAGE ROUTE FROM P5 TO P6 THROUGH SPRR TRESTLE
546          RS       1    ELEV   889.1     0.0
547          SV     0.0    1.33    6.78   36.99  130.95  286.86  286.86  286.86  286.86  286.86
548          SV  286.86  286.86  286.86  286.86  286.86  286.86  286.86  286.86  286.86  286.86
549          SE   888.0   890.0   892.0   894.0   896.0   898.0   898.0   898.0   898.0   898.0
```



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

550          SE   898.0   898.0   898.0   898.0   898.0   898.0   898.0   898.0   898.0   898.0
551          SQ     0.0    40.0   105.0   187.0   278.0   531.0   853.0  1198.0  1573.0  1722.0
552          SQ  1980.0  1980.0  1980.0  1980.0  1980.0  1980.0  1980.0  1980.0  1980.0  1980.0
553          SE  889.11  889.61  890.11  890.61  891.11  892.11  893.11  894.11  895.11  896.11
554          SE  897.11  897.11  897.11  897.11  897.11  897.11  897.11  897.11  897.11  897.11
             *

555          KK      72   BASIN
556          KM   S-GRAPH TYPE=AGRICULTURE
557          BA   0.086
558          LG    0.59    0.30    4.45    0.42       6
559          UI     114      90      15       2       0       0       0       0       0       0
             *

560          KK      P6 COMBINE
561          KM   COMBINE STORAGE HYDROGRAPH FROM P5 WITH RUNOFF FROM 72 @ P6
562          KO       3
563          ZW   A=RBE B=P6 C=FLOW E=15MIN F=100y6h-ex
564          HC       2
565          ZZ
```

1

SCHEMATIC DIAGRAM OF STREAM NETWORK

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

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

    32       RIDKB
                 V
                 V
    39      K3SBK4
                 .
                 .
    45           .       RIDKA
                 .           V
                 .           V
    49           .      K3SAK4
                 .           .
                 .           .
    55           .           .          34
                 .           .           .
                 .           .           .
    64          K4.......................
                 V
                 V
    67       K4-K5
                 .
                 .
    73           .          35
                 .           .
                 .           .
    83          K5............
```

```
              V
              V
 86        K5-K6
              .
              .
 92           .          46
              .           .
              .           .
102           .           .-------->   46RET
 99           .        46-O
              .           .
              .           .
105          K6............
              V
              V
109        K6-K7
              .
              .
120           .          65
              .           .
              .           .
128          K7............
              .
              .
133           .        RIDL
              .           V
              .           V
140           .      L2S-L3
              .           .
              .           .
146           .           .          36
              .           .           .
              .           .           .
154           .          L3............
              .           V
              .           V
157           .       L3-L4
              .           .
              .           .
163           .           .          47
              .           .           .
              .           .           .
173           .           .           .-------->   47RET
170           .           .        47-O
              .           .           .
              .           .           .
176           .          L4............
              .           V
              .           V
180           .       L4-L5
              .           .
              .           .
191           .           .          66
              .           .           .
              .           .           .
198           .          L5............
              .           .
              .           .
203           .           .        RIDM
              .           .           V
              .           .           V
210           .           .      L2S2M1
              .           .           .
              .           .           .
216           .           .           .          37
              .           .           .           .
              .           .           .           .
228           .           .           .           .-------->   37RET
225           .           .           .        37-O
              .           .           .           .
              .           .           .           .
231           .           .          M1............
              .           .           V
              .           .           V
234           .           .       M1-M2
              .           .           .
              .           .           .
240           .           .           .          48
              .           .           .           .
              .           .           .           .
249           .           .          M2............
              .           .           V
              .           .           V
252           .           .       M2-M3
              .           .           .
              .           .           .
258           .           .           .          67
              .           .           .           .
              .           .           .           .
```

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263          .          .          M3............
             .          .           V
             .          .           V
267          .          .       M3-M4
             .          .           .
             .          .           .
278          .          .           .          69
             .          .           .           .
             .          .           .           .
283          .          .          M4............
             .          .           .
             .          .           .
288          .          .           .        RIDN
             .          .           .           V
             .          .           .           V
295          .          .           .      N2S-N3
             .          .           .           .
             .          .           .           .
301          .          .           .           .          38
             .          .           .           .           .
             .          .           .           .           .
310          .          .           .          N3............
             .          .           .           V
             .          .           .           V
313          .          .           .       N3-N4
             .          .           .           .
             .          .           .           .
319          .          .           .           .          49
             .          .           .           .           .
             .          .           .           .           .
330          .          .           .           .           .-------->   49RET
326          .          .           .           .        49-O
             .          .           .           .           .
             .          .           .           .           .
333          .          .           .          N4............
             .          .           .           V
             .          .           .           V
336          .          .           .      N4-N5B
             .          .           .           .
             .          .           .           .
342          .          .           .           .         56B
             .          .           .           .           .
             .          .           .           .           .
351          .          .           .           .           .-------->  56BRET
348          .          .           .           .       56B-O
             .          .           .           .           .
             .          .           .           .           .
354          .          .           .         N5B............
             .          .           .           V
             .          .           .           V
357          .          .           .      N5B-N6
             .          .           .           .
             .          .           .           .
369          .          .           .           .         56A
             .          .           .           .           V
             .          .           .           .           V
376          .          .           .           .      N5A-N6
             .          .           .           .           .
             .          .           .           .           .
388          .          .           .           .           .          70
             .          .           .           .           .           .
             .          .           .           .           .           .
394          .          .           .          N6........................
             .          .           .           .
             .          .           .           .
399          .          .           .           .        RIDO
             .          .           .           .           V
             .          .           .           .           V
406          .          .           .           .      O4S-O5
             .          .           .           .           .
             .          .           .           .           .
412          .          .           .           .           .          39
             .          .           .           .           .           .
             .          .           .           .           .           .
421          .          .           .           .          O5............
             .          .           .           .           V
             .          .           .           .           V
424          .          .           .           .       O5-O6
             .          .           .           .           .
             .          .           .           .           .
430          .          .           .           .           .          50
             .          .           .           .           .           .
             .          .           .           .           .           .
440          .          .           .           .          O6............
             .          .           .           .           V
             .          .           .           .           V
443          .          .           .           .       O6-O7
             .          .           .           .           .
             .          .           .           .           .
```

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449          .          .          .          .          .          57
             .          .          .          .          .           .
             .          .          .          .          .           .
456          .          .          .          .         O7............
             .          .          .          .          V
             .          .          .          .          V
460          .          .          .          .       O7-O8
             .          .          .          .          .
             .          .          .          .          .
471          .          .          .          .          .          71
             .          .          .          .          .           .
             .          .          .          .          .           .
477          .          .          .          .         O8............
             .          .          .          .          .
             .          .          .          .          .
482          .          .          .          .          .        RIDP
             .          .          .          .          .           V
             .          .          .          .          .           V
489          .          .          .          .          .      P2S-P3
             .          .          .          .          .           .
             .          .          .          .          .           .
495          .          .          .          .          .           .          40
             .          .          .          .          .           .           .
             .          .          .          .          .           .           .
505          .          .          .          .          .          P3............
             .          .          .          .          .           V
             .          .          .          .          .           V
508          .          .          .          .          .       P3-P4
             .          .          .          .          .           .
             .          .          .          .          .           .
514          .          .          .          .          .           .          51
             .          .          .          .          .           .           .
             .          .          .          .          .           .           .
524          .          .          .          .          .          P4............
             .          .          .          .          .           V
             .          .          .          .          .           V
528          .          .          .          .          .       P4-P5
             .          .          .          .          .           .
             .          .          .          .          .           .
534          .          .          .          .          .           .          58
             .          .          .          .          .           .           .
             .          .          .          .          .           .           .
540          .          .          .          .          .          P5............
             .          .          .          .          .           V
             .          .          .          .          .           V
544          .          .          .          .          .       P5-P6
             .          .          .          .          .           .
             .          .          .          .          .           .
555          .          .          .          .          .           .          72
             .          .          .          .          .           .           .
             .          .          .          .          .           .           .
560          .          .          .          .          .          P6............
```

```
(***) RUNOFF ALSO COMPUTED AT THIS LOCATION
1****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*              JUN   1998              *
*            VERSION 4.1               *
*                                      *
*  RUN DATE   28FEB08  TIME  16:35:59  *
*                                      *
****************************************
```

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

```
                    FCDMC
                    0607BASE_EXST_6HR - Buckeye ADMP Existing Conditions Hydrology Update
                    Major Basin: 05
                    100 Year - Return Period
                    6 Hour Storm
                    Multiple Storms
                    Unit Hydrograph: S-Graph
                    01/09/2008

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

     IT        HYDROGRAPH TIME DATA
                      NMIN         15  MINUTES IN COMPUTATION INTERVAL
                     IDATE     2JAN94  STARTING DATE
                     ITIME       0000  STARTING TIME
                        NQ        400  NUMBER OF HYDROGRAPH ORDINATES
                    NDDATE     6JAN94  ENDING DATE
                    NDTIME       0345  ENDING TIME
```

```
                    ICENT          19  CENTURY MARK

                 COMPUTATION INTERVAL    0.25 HOURS
                      TOTAL TIME BASE   99.75 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

  12 JD          INDEX STORM NO. 1
                       STRM        3.30  PRECIPITATION DEPTH
                       TRDA        0.01  TRANSPOSITION DRAINAGE AREA

  13 PI            PRECIPITATION PATTERN
                     0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                     0.01      0.02      0.02      0.08      0.16      0.46      0.08      0.02      0.02      0.01
                     0.01      0.01      0.01      0.01

  16 JD          INDEX STORM NO. 2
                       STRM        3.28  PRECIPITATION DEPTH
                       TRDA        0.50  TRANSPOSITION DRAINAGE AREA

  17 PI            PRECIPITATION PATTERN
                     0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                     0.01      0.02      0.02      0.08      0.16      0.46      0.08      0.02      0.02      0.01
                     0.01      0.01      0.01      0.01

  20 JD          INDEX STORM NO. 3
                       STRM        3.26  PRECIPITATION DEPTH
                       TRDA        1.00  TRANSPOSITION DRAINAGE AREA

  21 PI            PRECIPITATION PATTERN
                     0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                     0.01      0.02      0.03      0.08      0.18      0.37      0.10      0.04      0.03      0.01
                     0.01      0.01      0.01      0.01

  24 JD          INDEX STORM NO. 4
                       STRM        3.17  PRECIPITATION DEPTH
                       TRDA        5.00  TRANSPOSITION DRAINAGE AREA

  25 PI            PRECIPITATION PATTERN
                     0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                     0.02      0.02      0.04      0.09      0.19      0.23      0.14      0.07      0.04      0.02
                     0.01      0.01      0.01      0.01

  28 JD          INDEX STORM NO. 5
                       STRM        3.10  PRECIPITATION DEPTH
                       TRDA       10.00  TRANSPOSITION DRAINAGE AREA

  29 PI            PRECIPITATION PATTERN
                     0.01      0.01      0.01      0.02      0.01      0.01      0.01      0.01      0.01      0.02
                     0.01      0.02      0.05      0.08      0.18      0.21      0.13      0.07      0.04      0.03
                     0.01      0.01      0.01      0.01
   -----DSS---ZOPEN:  Existing File Opened,  File: J:\2006\10-0607\DESIGN~2\DRAINA~1\HEC-RAS\Model\A1.DSS
                      Unit: 71;  DSS Versions - Software: 6-LD, File: 6-LD
       ----- Entering ZRRTSX for unit 71 -----
Pathname: /RID RID/38999 LAT STRUCT/FLOW-WEIR//15MIN/RID-100-06E/
       Time Window set.  Interval:    15  Number of data values:      1
       Starting date and time:  Jan 1, 1994  2400  (  34334 1440)
       Ending   date and time:  Jan 1, 1994  2400  (  34334 1440)
       Input time offset:      0
       After ZRDINF, Record found: T
       Pathname: /RID RID/38999 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/RID-100-06E/
       Number of actual data: 2976  Header length:   0
       Compression:   0  Quality:   0  Double: F
-----DSS--- ZREAD Unit  71; Vers.    1:  /RID RID/38999 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/RID-100-06E/
     ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
       NSTART:    1   NVALS:    1    JULS:   34334  ISTIME:  1440
       NLDATA: 2976   JULSD:   34334
       JULS: 01JAN94        JULSD: 01JAN94
       Quality Read: F,  Quality Requested: F
       ---ZRRTSB Calculations:  NPOS:   96  NDATA: 2976  NREAD:    1  ILIM:    1
     ----- Exiting ZRRTS, Number of data values:      1,  Status:  0
       Offset:       0,  Units: CFS     ,  Type:INST-VAL
       ----- Entering ZRRTSX for unit 71 -----
Pathname: /RID RID/38999 LAT STRUCT/FLOW-WEIR//15MIN/RID-100-06E/
       Time Window set.  Interval:    15  Number of data values:    401
       Starting date and time:  Jan 1, 1994  2400  (  34334 1440)
       Ending   date and time:  Jan 6, 1994  0400  (  34339  240)
       Input time offset:      0
       After ZRDINF, Record found: T
       Pathname: /RID RID/38999 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/RID-100-06E/
       Number of actual data: 2976  Header length:   0
       Compression:   0  Quality:   0  Double: F
```

```
-----DSS--- ZREAD Unit  71; Vers.    1:  /RID RID/38999 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/RID-100-06E/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:  401    JULS:   34334  ISTIME:  1440
        NLDATA: 2976   JULSD:   34334
        JULS: 01JAN94       JULSD: 01JAN94
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:   96  NDATA: 2976  NREAD:  401  ILIM:  401
      ----- Exiting ZRRTS, Number of data values:    401,  Status:  1
        Offset:       0,  Units: CFS     ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
Pathname: /RID RID/35599 LAT STRUCT/FLOW-WEIR//15MIN/RID-100-06E/
        Time Window set.  Interval:    15  Number of data values:      1
        Starting date and time:  Jan 1, 1994  2400  (  34334 1440)
        Ending   date and time:  Jan 1, 1994  2400  (  34334 1440)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /RID RID/35599 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/RID-100-06E/
        Number of actual data: 2976  Header length:   0
        Compression:   0  Quality:   0  Double: F
-----DSS--- ZREAD Unit  71; Vers.    1:  /RID RID/35599 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/RID-100-06E/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:    1    JULS:   34334  ISTIME:  1440
        NLDATA: 2976   JULSD:   34334
        JULS: 01JAN94       JULSD: 01JAN94
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:   96  NDATA: 2976  NREAD:    1  ILIM:    1
      ----- Exiting ZRRTS, Number of data values:      1,  Status:  0
        Offset:       0,  Units: CFS     ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
Pathname: /RID RID/35599 LAT STRUCT/FLOW-WEIR//15MIN/RID-100-06E/
        Time Window set.  Interval:    15  Number of data values:    401
        Starting date and time:  Jan 1, 1994  2400  (  34334 1440)
        Ending   date and time:  Jan 6, 1994  0400  (  34339  240)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /RID RID/35599 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/RID-100-06E/
        Number of actual data: 2976  Header length:   0
        Compression:   0  Quality:   0  Double: F
-----DSS--- ZREAD Unit  71; Vers.    1:  /RID RID/35599 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/RID-100-06E/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:  401    JULS:   34334  ISTIME:  1440
        NLDATA: 2976   JULSD:   34334
        JULS: 01JAN94       JULSD: 01JAN94
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:   96  NDATA: 2976  NREAD:  401  ILIM:  401
      ----- Exiting ZRRTS, Number of data values:    401,  Status:  1
        Offset:       0,  Units: CFS     ,  Type:INST-VAL


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


            **************
            *            *
 105 KK     *        K6  *      COMBINE   K6-K7
            *            *
            **************

 107 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           3  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE

 108 HC          HYDROGRAPH COMBINATION
                      ICOMP           2  NUMBER OF HYDROGRAPHS TO COMBINE

                                                                  ***

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

                        HYDROGRAPH AT STATION       K6
                      TRANSPOSITION AREA      0.0 SQ MI

 PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+    1041.      7.25                614.        183.         61.          44.
                      (INCHES)     1.620       1.934       1.936        1.936
                       (AC-FT)      304.        363.        364.         364.

                       CUMULATIVE AREA =    3.52 SQ MI

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

                        HYDROGRAPH AT STATION       K6
                      TRANSPOSITION AREA      0.5 SQ MI
```

```
  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                            (CFS)
+    1035.      7.25                609.        182.         61.          44.
                         (INCHES)  1.609       1.921       1.923        1.923
                          (AC-FT)   302.        361.        361.         361.

                          CUMULATIVE AREA =    3.52 SQ MI


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

                           HYDROGRAPH AT STATION       K6
                         TRANSPOSITION AREA      1.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                            (CFS)
+     948.      7.25                550.        166.         55.          40.
                         (INCHES)  1.451       1.748       1.750        1.750
                          (AC-FT)   273.        328.        329.         329.

                          CUMULATIVE AREA =    3.52 SQ MI


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

                           HYDROGRAPH AT STATION       K6
                         TRANSPOSITION AREA      5.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                            (CFS)
+     800.      7.25                450.        137.         46.          33.
                         (INCHES)  1.187       1.447       1.449        1.449
                          (AC-FT)   223.        272.        272.         272.

                          CUMULATIVE AREA =    3.52 SQ MI


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

                           HYDROGRAPH AT STATION       K6
                         TRANSPOSITION AREA     10.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                            (CFS)
+     754.      7.50                416.        127.         42.          31.
                         (INCHES)  1.099       1.342       1.344        1.344
                          (AC-FT)   206.        252.        252.         252.

                          CUMULATIVE AREA =    3.52 SQ MI

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


                          INTERPOLATED HYDROGRAPH AT       K6

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                            (CFS)
+     832.      7.25                469.        143.         48.          35.
                         (INCHES)  1.237       1.513       1.515        1.515
                          (AC-FT)   232.        284.        285.         285.

                          CUMULATIVE AREA =    3.52 SQ MI


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


            **************
            *            *
  128 KK    *        K7  *      COMBINE
            *            *
            **************

  130 KO          OUTPUT CONTROL VARIABLES
                        IPRNT           3  PRINT CONTROL
```

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                    IPLOT          0  PLOT CONTROL
                    QSCAL         0.  HYDROGRAPH PLOT SCALE

 132 HC          HYDROGRAPH COMBINATION
                    ICOMP          2  NUMBER OF HYDROGRAPHS TO COMBINE

                                                                  ***

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

                      HYDROGRAPH AT STATION       K7
                    TRANSPOSITION AREA      0.0 SQ MI

 PEAK FLOW     TIME                        MAXIMUM AVERAGE FLOW
                                   6-HR       24-HR       72-HR     99.75-HR
+  (CFS)       (HR)
                        (CFS)
+    956.      7.75                644.        195.         65.          47.
                    (INCHES)     1.535       1.859       1.861        1.861
                     (AC-FT)      319.        387.        387.         387.

                     CUMULATIVE AREA =    3.90 SQ MI


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

                      HYDROGRAPH AT STATION       K7
                    TRANSPOSITION AREA      0.5 SQ MI

 PEAK FLOW     TIME                        MAXIMUM AVERAGE FLOW
                                   6-HR       24-HR       72-HR     99.75-HR
+  (CFS)       (HR)
                        (CFS)
+    950.      7.75                639.        193.         65.          47.
                    (INCHES)     1.524       1.846       1.848        1.848
                     (AC-FT)      317.        384.        384.         384.

                     CUMULATIVE AREA =    3.90 SQ MI


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

                      HYDROGRAPH AT STATION       K7
                    TRANSPOSITION AREA      1.0 SQ MI

 PEAK FLOW     TIME                        MAXIMUM AVERAGE FLOW
                                   6-HR       24-HR       72-HR     99.75-HR
+  (CFS)       (HR)
                        (CFS)
+    866.      7.75                575.        175.         59.          42.
                    (INCHES)     1.371       1.673       1.676        1.676
                     (AC-FT)      285.        348.        348.         348.

                     CUMULATIVE AREA =    3.90 SQ MI


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

                      HYDROGRAPH AT STATION       K7
                    TRANSPOSITION AREA      5.0 SQ MI

 PEAK FLOW     TIME                        MAXIMUM AVERAGE FLOW
                                   6-HR       24-HR       72-HR     99.75-HR
+  (CFS)       (HR)
                        (CFS)
+    734.      8.00                462.        144.         48.          35.
                    (INCHES)     1.103       1.371       1.373        1.373
                     (AC-FT)      229.        285.        285.         285.

                     CUMULATIVE AREA =    3.90 SQ MI


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

                      HYDROGRAPH AT STATION       K7
                    TRANSPOSITION AREA     10.0 SQ MI

 PEAK FLOW     TIME                        MAXIMUM AVERAGE FLOW
                                   6-HR       24-HR       72-HR     99.75-HR
+  (CFS)       (HR)
                        (CFS)
+    696.      8.00                425.        133.         44.          32.
                    (INCHES)     1.014       1.266       1.269        1.269
                     (AC-FT)      211.        263.        264.         264.

                     CUMULATIVE AREA =    3.90 SQ MI

-----DSS---ZWRITE Unit  71; Vers.    1:  /RBE/K7/FLOW/01JAN1994/15MIN/100Y6H-EX/
     ***            ***            ***            ***            ***
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                        INTERPOLATED HYDROGRAPH AT       K7

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                            (CFS)
+     754.      7.75                478.        149.         50.          36.
                         (INCHES)  1.140       1.418       1.420        1.420
                          (AC-FT)    237.        295.        295.         295.

                        CUMULATIVE AREA =    3.90 SQ MI

        ----- Entering ZRRTSX for unit 71 -----
 Pathname: /RID RID/41599 LAT STRUCT/FLOW-WEIR//15MIN/RID-100-06E/
        Time Window set.  Interval:    15  Number of data values:      1
        Starting date and time:  Jan 1, 1994  2400  (  34334 1440)
        Ending   date and time:  Jan 1, 1994  2400  (  34334 1440)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /RID RID/41599 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/RID-100-06E/
        Number of actual data: 2976  Header length:   0
        Compression:   0  Quality:   0  Double: F
 -----DSS--- ZREAD Unit  71; Vers.    1:  /RID RID/41599 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/RID-100-06E/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:    1    JULS:   34334  ISTIME:  1440
        NLDATA: 2976   JULSD:   34334
        JULS: 01JAN94       JULSD: 01JAN94
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:   96  NDATA: 2976  NREAD:    1  ILIM:    1
      ----- Exiting ZRRTS, Number of data values:      1,  Status:  0
        Offset:       0,  Units: CFS     ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
 Pathname: /RID RID/41599 LAT STRUCT/FLOW-WEIR//15MIN/RID-100-06E/
        Time Window set.  Interval:    15  Number of data values:    401
        Starting date and time:  Jan 1, 1994  2400  (  34334 1440)
        Ending   date and time:  Jan 6, 1994  0400  (  34339  240)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /RID RID/41599 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/RID-100-06E/
        Number of actual data: 2976  Header length:   0
        Compression:   0  Quality:   0  Double: F
 -----DSS--- ZREAD Unit  71; Vers.    1:  /RID RID/41599 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/RID-100-06E/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:  401    JULS:   34334  ISTIME:  1440
        NLDATA: 2976   JULSD:   34334
        JULS: 01JAN94       JULSD: 01JAN94
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:   96  NDATA: 2976  NREAD:  401  ILIM:  401
      ----- Exiting ZRRTS, Number of data values:    401,  Status:  1
        Offset:       0,  Units: CFS     ,  Type:INST-VAL


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

            **************
            *            *
 176 KK     *        L4  *      COMBINE   L4-L5
            *            *
            **************

 178 KO          OUTPUT CONTROL VARIABLES
                       IPRNT           3  PRINT CONTROL
                       IPLOT           0  PLOT CONTROL
                       QSCAL          0.  HYDROGRAPH PLOT SCALE

 179 HC          HYDROGRAPH COMBINATION
                       ICOMP           2  NUMBER OF HYDROGRAPHS TO COMBINE

                                                                  ***

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

                         HYDROGRAPH AT STATION       L4
                       TRANSPOSITION AREA      0.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                            (CFS)
+     406.      5.25                147.         41.         14.          10.
                         (INCHES)  1.052       1.172       1.172        1.172
                          (AC-FT)     73.         81.         81.          81.

                        CUMULATIVE AREA =    1.30 SQ MI
```

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

                        HYDROGRAPH AT STATION       L4
                      TRANSPOSITION AREA      0.5 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     402.      5.25                 145.         40.         13.         10.
                        (INCHES)    1.036       1.155       1.155       1.155
                         (AC-FT)     72.         80.         80.         80.

                        CUMULATIVE AREA =    1.30 SQ MI

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

                        HYDROGRAPH AT STATION       L4
                      TRANSPOSITION AREA      1.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     377.      5.25                 129.         36.         12.          9.
                        (INCHES)    0.922       1.035       1.035       1.035
                         (AC-FT)     64.         72.         72.         72.

                        CUMULATIVE AREA =    1.30 SQ MI

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

                        HYDROGRAPH AT STATION       L4
                      TRANSPOSITION AREA      5.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     228.      5.50                  95.         27.          9.          6.
                        (INCHES)    0.681       0.770       0.770       0.770
                         (AC-FT)     47.         53.         53.         53.

                        CUMULATIVE AREA =    1.30 SQ MI

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

                        HYDROGRAPH AT STATION       L4
                      TRANSPOSITION AREA     10.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     189.      5.50                  82.         23.          8.          6.
                        (INCHES)    0.588       0.664       0.664       0.664
                         (AC-FT)     41.         46.         46.         46.

                        CUMULATIVE AREA =    1.30 SQ MI

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


                        INTERPOLATED HYDROGRAPH AT       L4

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     334.      5.25                 123.         35.         12.          8.
                        (INCHES)    0.882       0.992       0.992       0.992
                         (AC-FT)     61.         69.         69.         69.

                        CUMULATIVE AREA =    1.30 SQ MI


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

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  198 KK      *        L5  *      COMBINE
              *            *
              **************

  200 KO          OUTPUT CONTROL VARIABLES
                        IPRNT           3  PRINT CONTROL
                        IPLOT           0  PLOT CONTROL
                        QSCAL          0.  HYDROGRAPH PLOT SCALE

  202 HC          HYDROGRAPH COMBINATION
                        ICOMP           2  NUMBER OF HYDROGRAPHS TO COMBINE

                                                                  ***

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

                          HYDROGRAPH AT STATION       L5
                        TRANSPOSITION AREA      0.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     318.      5.25                182.         52.         17.          13.
                        (INCHES)    1.063       1.224       1.224        1.224
                         (AC-FT)     90.        104.        104.         104.

                         CUMULATIVE AREA =    1.60 SQ MI


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

                          HYDROGRAPH AT STATION       L5
                        TRANSPOSITION AREA      0.5 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     314.      5.25                180.         52.         17.          12.
                        (INCHES)    1.048       1.207       1.207        1.207
                         (AC-FT)     89.        103.        103.         103.

                         CUMULATIVE AREA =    1.60 SQ MI


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

                          HYDROGRAPH AT STATION       L5
                        TRANSPOSITION AREA      1.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     291.      5.50                160.         47.         16.          11.
                        (INCHES)    0.934       1.085       1.085        1.085
                         (AC-FT)     79.         92.         92.          92.

                         CUMULATIVE AREA =    1.60 SQ MI


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

                          HYDROGRAPH AT STATION       L5
                        TRANSPOSITION AREA      5.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     225.      5.75                118.         35.         12.           8.
                        (INCHES)    0.688       0.821       0.821        0.821
                         (AC-FT)     58.         70.         70.          70.

                         CUMULATIVE AREA =    1.60 SQ MI


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

                          HYDROGRAPH AT STATION       L5
                        TRANSPOSITION AREA     10.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     184.      5.75                101.         31.         10.           7.
                        (INCHES)    0.591       0.716       0.716        0.716
```

```
                        (AC-FT)       50.         61.         61.         61.

                        CUMULATIVE AREA =    1.60 SQ MI

 -----DSS---ZWRITE Unit  71; Vers.    1:  /RBE/L5/FLOW/01JAN1994/15MIN/100Y6H-EX/
      ***             ***             ***             ***             ***



                        INTERPOLATED HYDROGRAPH AT       L5

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                        6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                            (CFS)
+     265.      5.50                    148.         43.         14.         10.
                        (INCHES)      0.862       1.008       1.008       1.008
                        (AC-FT)        73.         86.         86.         86.

                        CUMULATIVE AREA =    1.60 SQ MI

        ----- Entering ZRRTSX for unit 71 -----
 Pathname: /RID RID/47199 LAT STRUCT/FLOW-WEIR//15MIN/RID-100-06E/
        Time Window set.  Interval:    15  Number of data values:      1
        Starting date and time:  Jan 1, 1994  2400  (  34334 1440)
        Ending   date and time:  Jan 1, 1994  2400  (  34334 1440)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /RID RID/47199 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/RID-100-06E/
        Number of actual data: 2976  Header length:   0
        Compression:   0  Quality:   0  Double: F
 -----DSS--- ZREAD Unit  71; Vers.    1:  /RID RID/47199 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/RID-100-06E/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:    1    JULS:   34334  ISTIME:  1440
        NLDATA: 2976   JULSD:   34334
        JULS: 01JAN94       JULSD: 01JAN94
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:   96  NDATA: 2976  NREAD:    1  ILIM:    1
      ----- Exiting ZRRTS, Number of data values:      1,  Status:  0
        Offset:       0,  Units: CFS     ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
 Pathname: /RID RID/47199 LAT STRUCT/FLOW-WEIR//15MIN/RID-100-06E/
        Time Window set.  Interval:    15  Number of data values:    401
        Starting date and time:  Jan 1, 1994  2400  (  34334 1440)
        Ending   date and time:  Jan 6, 1994  0400  (  34339  240)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /RID RID/47199 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/RID-100-06E/
        Number of actual data: 2976  Header length:   0
        Compression:   0  Quality:   0  Double: F
 -----DSS--- ZREAD Unit  71; Vers.    1:  /RID RID/47199 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/RID-100-06E/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:  401    JULS:   34334  ISTIME:  1440
        NLDATA: 2976   JULSD:   34334
        JULS: 01JAN94       JULSD: 01JAN94
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:   96  NDATA: 2976  NREAD:  401  ILIM:  401
      ----- Exiting ZRRTS, Number of data values:    401,  Status:  1
        Offset:       0,  Units: CFS     ,  Type:INST-VAL


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


            **************
            *            *
 263 KK     *        M3  *      COMBINE   M3-M4
            *            *
            **************

 265 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           3  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE

 266 HC          HYDROGRAPH COMBINATION
                      ICOMP           2  NUMBER OF HYDROGRAPHS TO COMBINE

                                                                  ***

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

                        HYDROGRAPH AT STATION       M3
                      TRANSPOSITION AREA      0.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                        6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
```

```
                          (CFS)
+     987.      4.25                294.        117.         40.          29.
                        (INCHES)    1.141       1.819       1.871        1.871
                         (AC-FT)     146.        232.        239.         239.

                         CUMULATIVE AREA =    2.39 SQ MI


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

                          HYDROGRAPH AT STATION       M3
                        TRANSPOSITION AREA      0.5 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     979.      4.25                290.        116.         40.          29.
                        (INCHES)    1.128       1.805       1.857        1.857
                         (AC-FT)     144.        230.        237.         237.

                         CUMULATIVE AREA =    2.39 SQ MI


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

                          HYDROGRAPH AT STATION       M3
                        TRANSPOSITION AREA      1.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     832.      4.25                252.        106.         36.          26.
                        (INCHES)    0.981       1.642       1.693        1.694
                         (AC-FT)     125.        210.        216.         216.

                         CUMULATIVE AREA =    2.39 SQ MI


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

                          HYDROGRAPH AT STATION       M3
                        TRANSPOSITION AREA      5.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     562.      4.25                187.         87.         30.          22.
                        (INCHES)    0.727       1.359       1.411        1.411
                         (AC-FT)      93.        173.        180.         180.

                         CUMULATIVE AREA =    2.39 SQ MI


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

                          HYDROGRAPH AT STATION       M3
                        TRANSPOSITION AREA     10.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     502.      4.25                165.         81.         28.          20.
                        (INCHES)    0.642       1.252       1.304        1.304
                         (AC-FT)      82.        160.        166.         166.

                         CUMULATIVE AREA =    2.39 SQ MI

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


                         INTERPOLATED HYDROGRAPH AT       M3

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     686.      4.25                217.         96.         33.          24.
                        (INCHES)    0.843       1.489       1.540        1.540
                         (AC-FT)     108.        190.        197.         197.

                         CUMULATIVE AREA =    2.39 SQ MI
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*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

            **************
            *            *
  283 KK    *        M4  *      COMBINE
            *            *
            **************

  285 KO          OUTPUT CONTROL VARIABLES
                        IPRNT           3  PRINT CONTROL
                        IPLOT           0  PLOT CONTROL
                        QSCAL          0.  HYDROGRAPH PLOT SCALE

  287 HC          HYDROGRAPH COMBINATION
                        ICOMP           2  NUMBER OF HYDROGRAPHS TO COMBINE

                                                                  ***

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

                          HYDROGRAPH AT STATION       M4
                        TRANSPOSITION AREA      0.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                            (CFS)
+     463.      4.25                205.        126.         43.          31.
                        (INCHES)   0.752       1.853       1.902        1.903
                         (AC-FT)    102.        250.        257.         257.

                         CUMULATIVE AREA =    2.53 SQ MI


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

                          HYDROGRAPH AT STATION       M4
                        TRANSPOSITION AREA      0.5 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                            (CFS)
+     460.      4.25                204.        125.         43.          31.
                        (INCHES)   0.749       1.839       1.888        1.888
                         (AC-FT)    101.        248.        255.         255.

                         CUMULATIVE AREA =    2.53 SQ MI


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

                          HYDROGRAPH AT STATION       M4
                        TRANSPOSITION AREA      1.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                            (CFS)
+     418.      4.25                197.        114.         39.          28.
                        (INCHES)   0.725       1.680       1.730        1.730
                         (AC-FT)     98.        227.        233.         233.

                         CUMULATIVE AREA =    2.53 SQ MI


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

                          HYDROGRAPH AT STATION       M4
                        TRANSPOSITION AREA      5.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                            (CFS)
+     337.      4.25                175.         95.         33.          24.
                        (INCHES)   0.643       1.402       1.452        1.452
                         (AC-FT)     87.        189.        196.         196.

                         CUMULATIVE AREA =    2.53 SQ MI


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

                          HYDROGRAPH AT STATION       M4
                        TRANSPOSITION AREA     10.0 SQ MI
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  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                              (CFS)
+     312.      4.25                163.         88.         31.          22.
                          (INCHES)  0.600       1.296       1.346        1.346
                           (AC-FT)    81.        175.        182.         182.

                          CUMULATIVE AREA =    2.53 SQ MI

 -----DSS---ZWRITE Unit  71; Vers.    1:  /RBE/M4/FLOW/01JAN1994/15MIN/100Y6H-EX/
      ***             ***             ***             ***             ***


                          INTERPOLATED HYDROGRAPH AT       M4

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                              (CFS)
+     372.      4.25                184.        103.         36.          26.
                          (INCHES)  0.678       1.520       1.569        1.570
                           (AC-FT)    91.        205.        212.         212.

                          CUMULATIVE AREA =    2.53 SQ MI

        ----- Entering ZRRTSX for unit 71 -----
 Pathname: /RID RID/51199 LAT STRUCT/FLOW-WEIR//15MIN/RID-100-06E/
        Time Window set.  Interval:    15  Number of data values:      1
        Starting date and time:  Jan 1, 1994  2400  (  34334 1440)
        Ending   date and time:  Jan 1, 1994  2400  (  34334 1440)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /RID RID/51199 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/RID-100-06E/
        Number of actual data: 2976  Header length:   0
        Compression:   0  Quality:   0  Double: F
 -----DSS--- ZREAD Unit  71; Vers.    1:  /RID RID/51199 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/RID-100-06E/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:    1    JULS:   34334  ISTIME:  1440
        NLDATA: 2976   JULSD:   34334
        JULS: 01JAN94       JULSD: 01JAN94
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:   96  NDATA: 2976  NREAD:    1  ILIM:    1
      ----- Exiting ZRRTS, Number of data values:      1,  Status:  0
        Offset:       0,  Units: CFS     ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
 Pathname: /RID RID/51199 LAT STRUCT/FLOW-WEIR//15MIN/RID-100-06E/
        Time Window set.  Interval:    15  Number of data values:    401
        Starting date and time:  Jan 1, 1994  2400  (  34334 1440)
        Ending   date and time:  Jan 6, 1994  0400  (  34339  240)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /RID RID/51199 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/RID-100-06E/
        Number of actual data: 2976  Header length:   0
        Compression:   0  Quality:   0  Double: F
 -----DSS--- ZREAD Unit  71; Vers.    1:  /RID RID/51199 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/RID-100-06E/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:  401    JULS:   34334  ISTIME:  1440
        NLDATA: 2976   JULSD:   34334
        JULS: 01JAN94       JULSD: 01JAN94
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:   96  NDATA: 2976  NREAD:  401  ILIM:  401
      ----- Exiting ZRRTS, Number of data values:    401,  Status:  1
        Offset:       0,  Units: CFS     ,  Type:INST-VAL


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


            **************
            *            *
 357 KK     *    N5B-N6  *                  N5B
            *            *
            **************

 359 KO          OUTPUT CONTROL VARIABLES
                       IPRNT           3  PRINT CONTROL
                       IPLOT           0  PLOT CONTROL
                       QSCAL          0.  HYDROGRAPH PLOT SCALE

                HYDROGRAPH ROUTING DATA

 360 RS          STORAGE ROUTING
                       NSTPS           1  NUMBER OF SUBREACHES
                        ITYP        ELEV  TYPE OF INITIAL CONDITION
                      RSVRIC      887.23  INITIAL CONDITION
                           X        0.00 WORKING R AND D COEFFICIENT
```

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361 SV          STORAGE        0.0      1.0      12.9      39.9      86.1     150.3     150.3     150.3     150.3     150.3
                             150.3    150.3     150.3     150.3     150.3     150.3     150.3     150.3     150.3     150.3

363 SE        ELEVATION      886.00   888.00    890.00    892.00    894.00    896.00    896.00    896.00    896.00    896.00
                             896.00   896.00    896.00    896.00    896.00    896.00    896.00    896.00    896.00    896.00

365 SQ        DISCHARGE         0.       72.       98.      119.      136.      152.      166.      179.      191.      202.
                               213.     223.      233.      242.      251.      260.      268.      277.      277.      277.

367 SE        ELEVATION      887.23   889.23    889.73    890.23    890.73    891.23    891.73    892.23    892.73    893.23
                             893.73   894.23    894.73    895.23    895.73    896.23    896.73    897.23    897.23    897.23

                                                                  ***

                                        COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

          STORAGE      0.00      0.59      0.96      8.30     11.28     12.89     16.00     22.76     29.53     36.29
          OUTFLOW      0.00      0.00     27.57     71.60     98.10    109.22    118.70    136.20    151.60    165.70
        ELEVATION    886.00    887.23    888.00    889.23    889.73    890.00    890.23    890.73    891.23    891.73

          STORAGE     39.94     45.25     56.80     68.34     79.89     86.12     93.50    109.53    125.57    141.61
          OUTFLOW    172.67    178.60    190.70    202.00    212.80    218.31    223.00    232.80    242.10    251.20
        ELEVATION    892.00    892.23    892.73    893.23    893.73    894.00    894.23    894.73    895.23    895.73

          STORAGE    150.27 NaN       NaN       NaN
          OUTFLOW    255.90    259.90    268.30    276.50
        ELEVATION    896.00    896.23    896.73    897.23

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

                     HYDROGRAPH AT STATION   N5B-N6
                   TRANSPOSITION AREA      0.0 SQ MI

  PEAK FLOW     TIME                        MAXIMUM AVERAGE FLOW
                                    6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     157.      8.50                143.         54.         18.          13.
                        (INCHES)   0.705      1.072       1.073        1.073
                         (AC-FT)     71.        108.        108.         108.

 PEAK STORAGE   TIME                       MAXIMUM AVERAGE STORAGE
                                    6-HR       24-HR       72-HR     99.75-HR
+  (AC-FT)      (HR)
      32.       8.50                 26.          9.          3.           2.

  PEAK STAGE    TIME                        MAXIMUM AVERAGE STAGE
                                    6-HR       24-HR       72-HR     99.75-HR
+   (FEET)      (HR)
    891.40      8.50              890.96     888.67      887.71       887.58

                     CUMULATIVE AREA =    1.89 SQ MI

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

                     HYDROGRAPH AT STATION   N5B-N6
                   TRANSPOSITION AREA      0.5 SQ MI

  PEAK FLOW     TIME                        MAXIMUM AVERAGE FLOW
                                    6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     155.      8.50                141.         54.         18.          13.
                        (INCHES)   0.697      1.056       1.057        1.057
                         (AC-FT)     70.        106.        106.         106.

 PEAK STORAGE   TIME                       MAXIMUM AVERAGE STORAGE
                                    6-HR       24-HR       72-HR     99.75-HR
+  (AC-FT)      (HR)
      31.       8.50                 25.          8.          3.           2.

  PEAK STAGE    TIME                        MAXIMUM AVERAGE STAGE
                                    6-HR       24-HR       72-HR     99.75-HR
+   (FEET)      (HR)
    891.34      8.50              890.91     888.65      887.71       887.57

                     CUMULATIVE AREA =    1.89 SQ MI

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

                     HYDROGRAPH AT STATION   N5B-N6
                   TRANSPOSITION AREA      1.0 SQ MI

  PEAK FLOW     TIME                        MAXIMUM AVERAGE FLOW
                                    6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
```

```
                                (CFS)
+     140.       8.75                127.         47.         16.          11.
                            (INCHES)     0.629       0.930       0.931        0.931
                             (AC-FT)      63.         94.         94.          94.

 PEAK STORAGE   TIME                          MAXIMUM AVERAGE STORAGE
                                        6-HR       24-HR       72-HR     99.75-HR
+  (AC-FT)      (HR)
       24.      8.75                   20.          7.          3.           2.

  PEAK STAGE    TIME                          MAXIMUM AVERAGE STAGE
                                        6-HR       24-HR       72-HR     99.75-HR
+   (FEET)      (HR)
    890.85      8.75                890.50      888.47      887.65       887.53

                            CUMULATIVE AREA =    1.89 SQ MI


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

                             HYDROGRAPH AT STATION   N5B-N6
                           TRANSPOSITION AREA      5.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                        6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                                (CFS)
+     112.       9.25                 93.         34.         11.           8.
                            (INCHES)     0.457       0.673       0.674        0.674
                             (AC-FT)      46.         68.         68.          68.

 PEAK STORAGE   TIME                          MAXIMUM AVERAGE STORAGE
                                        6-HR       24-HR       72-HR     99.75-HR
+  (AC-FT)      (HR)
       14.      9.25                   11.          4.          2.           1.

  PEAK STAGE    TIME                          MAXIMUM AVERAGE STAGE
                                        6-HR       24-HR       72-HR     99.75-HR
+   (FEET)      (HR)
    890.06      9.25                889.64      888.14      887.54       887.45

                            CUMULATIVE AREA =    1.89 SQ MI


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

                             HYDROGRAPH AT STATION   N5B-N6
                           TRANSPOSITION AREA     10.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                        6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                                (CFS)
+      99.       9.50                 78.         29.         10.           7.
                            (INCHES)     0.384       0.571       0.572        0.572
                             (AC-FT)      39.         57.         58.          58.

 PEAK STORAGE   TIME                          MAXIMUM AVERAGE STORAGE
                                        6-HR       24-HR       72-HR     99.75-HR
+  (AC-FT)      (HR)
       11.      9.50                    9.          3.          1.           1.

  PEAK STAGE    TIME                          MAXIMUM AVERAGE STAGE
                                        6-HR       24-HR       72-HR     99.75-HR
+   (FEET)      (HR)
    889.75      9.50                889.31      888.01      887.49       887.42

                            CUMULATIVE AREA =    1.89 SQ MI

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


                            INTERPOLATED HYDROGRAPH AT   N5B-N6

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                        6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                                (CFS)
+     129.       8.75                113.         42.         14.          10.
                            (INCHES)     0.559       0.829       0.830        0.830
                             (AC-FT)      56.         83.         83.          83.

                            CUMULATIVE AREA =    1.89 SQ MI

*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
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                **************
                *            *
  376 KK        *   N5A-N6   *                N5A
                *            *
                **************

  378 KO            OUTPUT CONTROL VARIABLES
                          IPRNT          3  PRINT CONTROL
                          IPLOT          0  PLOT CONTROL
                          QSCAL         0.  HYDROGRAPH PLOT SCALE

                 HYDROGRAPH ROUTING DATA

  379 RS            STORAGE ROUTING
                          NSTPS          1  NUMBER OF SUBREACHES
                           ITYP       ELEV  TYPE OF INITIAL CONDITION
                          RSVRIC     886.00  INITIAL CONDITION
                               X       0.00 WORKING R AND D COEFFICIENT

  380 SV              STORAGE        0.0      0.0      8.1     35.1    100.3    100.3    100.3    100.3    100.3    100.3
                                   100.3    100.3    100.3    100.3    100.3    100.3    100.3    100.3    100.3    100.3

  382 SE            ELEVATION      886.00   888.00   890.00   892.00   894.00   894.00   894.00   894.00   894.00   894.00
                                   894.00   894.00   894.00   894.00   894.00   894.00   894.00   894.00   894.00   894.00

  384 SQ            DISCHARGE        0.      102.     190.     248.     295.     335.     372.     404.     435.     463.
                                   490.     515.     539.     563.     585.     606.     627.     647.     647.     647.

  386 SE            ELEVATION      886.00   887.52   888.02   888.52   889.02   889.52   890.02   890.52   891.02   891.52
                                   892.02   892.52   893.02   893.52   894.02   894.52   895.02   895.52   895.52   895.52

                                                                  ***

                                          COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

              STORAGE      0.00     0.02     0.02     0.10     2.12     4.13     6.15     8.08     8.35    15.11
              OUTFLOW      0.00   102.40   186.20   189.70   248.00   294.90   335.40   370.05   371.50   404.30
            ELEVATION    886.00   887.52   888.00   888.02   888.52   889.02   889.52   890.00   890.02   890.52

              STORAGE     21.88    28.64    35.13    35.78    52.06    68.35    84.63   100.26 NaN       NaN
              OUTFLOW    434.70   463.10   488.83   489.90   515.20   539.40   562.60   583.91   584.80   606.20
            ELEVATION    891.02   891.52   892.00   892.02   892.52   893.02   893.52   894.00   894.02   894.52

              STORAGE  NaN       NaN
              OUTFLOW    626.90   646.90
            ELEVATION    895.02   895.52

 *** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN        0. TO      186.
                 THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
                 THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

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

                        HYDROGRAPH AT STATION   N5A-N6
                      TRANSPOSITION AREA      0.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     206.      5.25                 69.         18.          6.           4.
                        (INCHES)    1.554       1.594       1.594        1.594
                         (AC-FT)     34.         35.         35.          35.

 PEAK STORAGE   TIME                          MAXIMUM AVERAGE STORAGE
                                     6-HR       24-HR       72-HR     99.75-HR
+  (AC-FT)      (HR)
       1.       5.25                  0.          0.          0.           0.

  PEAK STAGE    TIME                          MAXIMUM AVERAGE STAGE
                                     6-HR       24-HR       72-HR     99.75-HR
+   (FEET)      (HR)
    888.16      5.25                886.82      886.21      886.07       886.05

                        CUMULATIVE AREA =    0.41 SQ MI

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

                        HYDROGRAPH AT STATION   N5A-N6
                      TRANSPOSITION AREA      0.5 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     204.      5.25                 68.         17.          6.           4.
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                        (INCHES)     1.536       1.575       1.575       1.575
                         (AC-FT)      34.         35.         35.         35.

 PEAK STORAGE   TIME                        MAXIMUM AVERAGE STORAGE
                                     6-HR       24-HR       72-HR     99.75-HR
+  (AC-FT)      (HR)
       1.      5.25                   0.          0.          0.          0.

  PEAK STAGE    TIME                        MAXIMUM AVERAGE STAGE
                                     6-HR       24-HR       72-HR     99.75-HR
+   (FEET)      (HR)
   888.14      5.25               886.82      886.21      886.07      886.05

                        CUMULATIVE AREA =    0.41 SQ MI


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

                         HYDROGRAPH AT STATION   N5A-N6
                       TRANSPOSITION AREA      1.0 SQ MI

  PEAK FLOW     TIME                        MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+    191.      5.25                  62.         16.          5.          4.
                        (INCHES)     1.402       1.440       1.440       1.440
                         (AC-FT)      31.         32.         32.         32.

 PEAK STORAGE   TIME                        MAXIMUM AVERAGE STORAGE
                                     6-HR       24-HR       72-HR     99.75-HR
+  (AC-FT)      (HR)
       0.      5.25                   0.          0.          0.          0.

  PEAK STAGE    TIME                        MAXIMUM AVERAGE STAGE
                                     6-HR       24-HR       72-HR     99.75-HR
+   (FEET)      (HR)
   888.03      5.25               886.78      886.20      886.07      886.05

                        CUMULATIVE AREA =    0.41 SQ MI


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

                         HYDROGRAPH AT STATION   N5A-N6
                       TRANSPOSITION AREA      5.0 SQ MI

  PEAK FLOW     TIME                        MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+    149.      5.00                  50.         13.          4.          3.
                        (INCHES)     1.131       1.165       1.165       1.165
                         (AC-FT)      25.         26.         26.         26.

 PEAK STORAGE   TIME                        MAXIMUM AVERAGE STORAGE
                                     6-HR       24-HR       72-HR     99.75-HR
+  (AC-FT)      (HR)
       0.      4.75                   0.          0.          0.          0.

  PEAK STAGE    TIME                        MAXIMUM AVERAGE STAGE
                                     6-HR       24-HR       72-HR     99.75-HR
+   (FEET)      (HR)
   887.79      5.00               886.68      886.18      886.06      886.04

                        CUMULATIVE AREA =    0.41 SQ MI


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

                         HYDROGRAPH AT STATION   N5A-N6
                       TRANSPOSITION AREA     10.0 SQ MI

  PEAK FLOW     TIME                        MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+    132.      5.00                  45.         12.          4.          3.
                        (INCHES)     1.025       1.060       1.060       1.060
                         (AC-FT)      22.         23.         23.         23.

 PEAK STORAGE   TIME                        MAXIMUM AVERAGE STORAGE
                                     6-HR       24-HR       72-HR     99.75-HR
+  (AC-FT)      (HR)
       0.      4.75                   0.          0.          0.          0.

  PEAK STAGE    TIME                        MAXIMUM AVERAGE STAGE
                                     6-HR       24-HR       72-HR     99.75-HR
+   (FEET)      (HR)
```

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   887.69      5.00                886.64      886.17      886.06       886.04

                        CUMULATIVE AREA =    0.41 SQ MI

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


                        INTERPOLATED HYDROGRAPH AT   N5A-N6

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     204.      5.25                68.         17.          6.           4.
                        (INCHES)    1.537       1.576       1.576        1.576
                         (AC-FT)     34.         35.         35.          35.

                        CUMULATIVE AREA =    0.41 SQ MI


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


            **************
            *            *
  394 KK    *        N6  *      COMBINE
            *            *
            **************

  396 KO          OUTPUT CONTROL VARIABLES
                        IPRNT           3  PRINT CONTROL
                        IPLOT           0  PLOT CONTROL
                        QSCAL          0.  HYDROGRAPH PLOT SCALE

  398 HC          HYDROGRAPH COMBINATION
                        ICOMP           3  NUMBER OF HYDROGRAPHS TO COMBINE

                                                                  ***

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

                         HYDROGRAPH AT STATION       N6
                       TRANSPOSITION AREA      0.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     348.      4.75               206.         79.         26.          19.
                        (INCHES)    0.785       1.200       1.202        1.202
                         (AC-FT)    102.        156.        156.         156.

                        CUMULATIVE AREA =    2.44 SQ MI

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

                         HYDROGRAPH AT STATION       N6
                       TRANSPOSITION AREA      0.5 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     346.      4.75               203.         78.         26.          19.
                        (INCHES)    0.775       1.184       1.186        1.186
                         (AC-FT)    101.        154.        154.         154.

                        CUMULATIVE AREA =    2.44 SQ MI

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

                         HYDROGRAPH AT STATION       N6
                       TRANSPOSITION AREA      1.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     326.      5.00               183.         69.         23.          17.
                        (INCHES)    0.698       1.057       1.059        1.059
                         (AC-FT)     91.        137.        138.         138.

                        CUMULATIVE AREA =    2.44 SQ MI
```

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

                        HYDROGRAPH AT STATION       N6
                      TRANSPOSITION AREA      5.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     258.      5.00                138.         52.         17.          13.
                       (INCHES)     0.526       0.796       0.799        0.799
                        (AC-FT)      68.         104.        104.         104.

                       CUMULATIVE AREA =    2.44 SQ MI


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

                        HYDROGRAPH AT STATION       N6
                      TRANSPOSITION AREA     10.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     229.      5.00                116.         45.         15.          11.
                       (INCHES)     0.443       0.693       0.696        0.696
                        (AC-FT)      58.         90.         90.          90.

                       CUMULATIVE AREA =    2.44 SQ MI

 -----DSS---ZWRITE Unit  71; Vers.    1:  /RBE/N6/FLOW/01JAN1994/15MIN/100Y6H-EX/
      ***             ***             ***             ***             ***


                       INTERPOLATED HYDROGRAPH AT       N6

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     288.      5.00                158.         60.         20.          14.
                       (INCHES)     0.603       0.913       0.915        0.915
                        (AC-FT)      78.         119.        119.         119.

                       CUMULATIVE AREA =    2.44 SQ MI

        ----- Entering ZRRTSX for unit 71 -----
 Pathname: /RID RID/57199 LAT STRUCT/FLOW-WEIR//15MIN/RID-100-06E/
        Time Window set.  Interval:    15  Number of data values:      1
        Starting date and time:  Jan 1, 1994  2400  (  34334 1440)
        Ending   date and time:  Jan 1, 1994  2400  (  34334 1440)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /RID RID/57199 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/RID-100-06E/
        Number of actual data: 2976  Header length:   0
        Compression:   0  Quality:   0  Double: F
 -----DSS--- ZREAD Unit  71; Vers.    1:  /RID RID/57199 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/RID-100-06E/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:    1    JULS:   34334  ISTIME:  1440
        NLDATA: 2976   JULSD:   34334
        JULS: 01JAN94       JULSD: 01JAN94
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:   96  NDATA: 2976  NREAD:    1  ILIM:    1
      ----- Exiting ZRRTS, Number of data values:      1,  Status:  0
        Offset:       0,  Units: CFS     ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
 Pathname: /RID RID/57199 LAT STRUCT/FLOW-WEIR//15MIN/RID-100-06E/
        Time Window set.  Interval:    15  Number of data values:    401
        Starting date and time:  Jan 1, 1994  2400  (  34334 1440)
        Ending   date and time:  Jan 6, 1994  0400  (  34339  240)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /RID RID/57199 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/RID-100-06E/
        Number of actual data: 2976  Header length:   0
        Compression:   0  Quality:   0  Double: F
 -----DSS--- ZREAD Unit  71; Vers.    1:  /RID RID/57199 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/RID-100-06E/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:  401    JULS:   34334  ISTIME:  1440
        NLDATA: 2976   JULSD:   34334
        JULS: 01JAN94       JULSD: 01JAN94
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:   96  NDATA: 2976  NREAD:  401  ILIM:  401
      ----- Exiting ZRRTS, Number of data values:    401,  Status:  1
        Offset:       0,  Units: CFS     ,  Type:INST-VAL
```

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

            **************
            *            *
  456 KK    *       O7   *      COMBINE   O7-O8
            *            *
            **************

  458 KO          OUTPUT CONTROL VARIABLES
                        IPRNT           3  PRINT CONTROL
                        IPLOT           0  PLOT CONTROL
                        QSCAL          0.  HYDROGRAPH PLOT SCALE

  459 HC          HYDROGRAPH COMBINATION
                        ICOMP           2  NUMBER OF HYDROGRAPHS TO COMBINE

                                                                  ***

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

                          HYDROGRAPH AT STATION       O7
                        TRANSPOSITION AREA      0.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                           (CFS)
+     431.      7.50                275.         86.         29.          21.
                        (INCHES)    1.156       1.447       1.449        1.449
                         (AC-FT)    137.        171.        171.         171.

                         CUMULATIVE AREA =    2.22 SQ MI

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

                          HYDROGRAPH AT STATION       O7
                        TRANSPOSITION AREA      0.5 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                           (CFS)
+     427.      7.50                273.         85.         29.          21.
                        (INCHES)    1.144       1.435       1.437        1.437
                         (AC-FT)    135.        170.        170.         170.

                         CUMULATIVE AREA =    2.22 SQ MI

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

                          HYDROGRAPH AT STATION       O7
                        TRANSPOSITION AREA      1.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                           (CFS)
+     366.      7.75                232.         74.         25.          18.
                        (INCHES)    0.975       1.246       1.248        1.248
                         (AC-FT)    115.        147.        147.         147.

                         CUMULATIVE AREA =    2.22 SQ MI

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

                          HYDROGRAPH AT STATION       O7
                        TRANSPOSITION AREA      5.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                           (CFS)
+     263.      8.00                168.         56.         19.          13.
                        (INCHES)    0.705       0.935       0.937        0.937
                         (AC-FT)    83.         111.        111.         111.

                         CUMULATIVE AREA =    2.22 SQ MI

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

                          HYDROGRAPH AT STATION       O7
                        TRANSPOSITION AREA     10.0 SQ MI
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  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     232.      8.25                148.         50.         17.          12.
                        (INCHES)    0.621       0.834       0.836        0.836
                         (AC-FT)     73.         99.         99.          99.

                         CUMULATIVE AREA =    2.22 SQ MI

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


                         INTERPOLATED HYDROGRAPH AT       O7

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     313.      8.00                202.         66.         22.          16.
                        (INCHES)    0.847       1.099       1.101        1.101
                         (AC-FT)    100.        130.        130.         130.

                         CUMULATIVE AREA =    2.22 SQ MI


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


            **************
            *            *
  477 KK    *        O8  *      COMBINE
            *            *
            **************

  479 KO          OUTPUT CONTROL VARIABLES
                        IPRNT           3  PRINT CONTROL
                        IPLOT           0  PLOT CONTROL
                        QSCAL          0.  HYDROGRAPH PLOT SCALE

  481 HC          HYDROGRAPH COMBINATION
                        ICOMP           2  NUMBER OF HYDROGRAPHS TO COMBINE

                                                                  ***

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

                          HYDROGRAPH AT STATION       O8
                        TRANSPOSITION AREA      0.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     387.      8.25                238.         91.         30.          22.
                        (INCHES)    0.932       1.432       1.434        1.434
                         (AC-FT)    118.        181.        181.         181.

                         CUMULATIVE AREA =    2.37 SQ MI

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

                          HYDROGRAPH AT STATION       O8
                        TRANSPOSITION AREA      0.5 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     382.      8.25                235.         90.         30.          22.
                        (INCHES)    0.922       1.419       1.422        1.422
                         (AC-FT)    117.        179.        180.         180.

                         CUMULATIVE AREA =    2.37 SQ MI

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

                          HYDROGRAPH AT STATION       O8
                        TRANSPOSITION AREA      1.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
```

```
+     302.      8.50                    198.         79.         26.          19.
                          (INCHES)     0.776       1.231       1.234        1.234
                           (AC-FT)      98.        156.        156.         156.

                           CUMULATIVE AREA =    2.37 SQ MI


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

                          HYDROGRAPH AT STATION       O8
                         TRANSPOSITION AREA      5.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                      6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                             (CFS)
+     169.      9.75                    145.         59.         20.          14.
                          (INCHES)     0.568       0.922       0.924        0.924
                           (AC-FT)      72.        117.        117.         117.

                           CUMULATIVE AREA =    2.37 SQ MI


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

                          HYDROGRAPH AT STATION       O8
                         TRANSPOSITION AREA     10.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                      6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                             (CFS)
+     144.     10.00                    134.         52.         17.          13.
                          (INCHES)     0.525       0.821       0.823        0.823
                           (AC-FT)      66.        104.        104.         104.

                           CUMULATIVE AREA =    2.37 SQ MI

-----DSS---ZWRITE Unit  71; Vers.    1:  /RBE/08/FLOW/01JAN1994/15MIN/100Y6H-EX/
      ***             ***             ***             ***             ***


                           INTERPOLATED HYDROGRAPH AT       O8

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                      6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                             (CFS)
+     225.      8.75                    171.         69.         23.          17.
                          (INCHES)     0.672       1.076       1.079        1.079
                           (AC-FT)      85.        136.        136.         136.

                           CUMULATIVE AREA =    2.37 SQ MI

        ----- Entering ZRRTSX for unit 71 -----
 Pathname: /RID RID/61999 LAT STRUCT/FLOW-WEIR//15MIN/RID-100-06E/
        Time Window set.  Interval:    15  Number of data values:      1
        Starting date and time:  Jan 1, 1994  2400  (  34334 1440)
        Ending   date and time:  Jan 1, 1994  2400  (  34334 1440)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /RID RID/61999 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/RID-100-06E/
        Number of actual data: 2976  Header length:   0
        Compression:   0  Quality:   0  Double: F
-----DSS--- ZREAD Unit  71; Vers.    1:  /RID RID/61999 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/RID-100-06E/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:    1    JULS:   34334  ISTIME:  1440
        NLDATA: 2976   JULSD:   34334
        JULS: 01JAN94       JULSD: 01JAN94
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:   96  NDATA: 2976  NREAD:    1  ILIM:    1
      ----- Exiting ZRRTS, Number of data values:      1,  Status:  0
        Offset:       0,  Units: CFS     ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
 Pathname: /RID RID/61999 LAT STRUCT/FLOW-WEIR//15MIN/RID-100-06E/
        Time Window set.  Interval:    15  Number of data values:    401
        Starting date and time:  Jan 1, 1994  2400  (  34334 1440)
        Ending   date and time:  Jan 6, 1994  0400  (  34339  240)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /RID RID/61999 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/RID-100-06E/
        Number of actual data: 2976  Header length:   0
        Compression:   0  Quality:   0  Double: F
-----DSS--- ZREAD Unit  71; Vers.    1:  /RID RID/61999 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/RID-100-06E/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:  401    JULS:   34334  ISTIME:  1440
        NLDATA: 2976   JULSD:   34334
        JULS: 01JAN94       JULSD: 01JAN94
```

```
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:   96  NDATA: 2976  NREAD:  401  ILIM:  401
      ----- Exiting ZRRTS, Number of data values:    401,  Status:  1
        Offset:       0,  Units: CFS     ,  Type:INST-VAL


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


            **************
            *            *
  524 KK    *        P4  *      COMBINE   P4-P5
            *            *
            **************

  526 KO          OUTPUT CONTROL VARIABLES
                        IPRNT           3  PRINT CONTROL
                        IPLOT           0  PLOT CONTROL
                        QSCAL          0.  HYDROGRAPH PLOT SCALE

  527 HC          HYDROGRAPH COMBINATION
                        ICOMP           2  NUMBER OF HYDROGRAPHS TO COMBINE

                                                                  ***

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

                          HYDROGRAPH AT STATION       P4
                        TRANSPOSITION AREA      0.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                            (CFS)
+     485.      6.75                 287.         88.         32.          24.
                        (INCHES)    1.347       1.654       1.787        1.854
                         (AC-FT)     142.        175.        189.         196.

                         CUMULATIVE AREA =    1.98 SQ MI


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

                          HYDROGRAPH AT STATION       P4
                        TRANSPOSITION AREA      0.5 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                            (CFS)
+     481.      6.75                 285.         87.         31.          24.
                        (INCHES)    1.336       1.642       1.774        1.841
                         (AC-FT)     141.        173.        187.         194.

                         CUMULATIVE AREA =    1.98 SQ MI


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

                          HYDROGRAPH AT STATION       P4
                        TRANSPOSITION AREA      1.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                            (CFS)
+     410.      6.75                 245.         76.         28.          21.
                        (INCHES)    1.148       1.433       1.565        1.632
                         (AC-FT)     121.        151.        165.         172.

                         CUMULATIVE AREA =    1.98 SQ MI


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

                          HYDROGRAPH AT STATION       P4
                        TRANSPOSITION AREA      5.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                            (CFS)
+     299.      6.75                 184.         59.         22.          17.
                        (INCHES)    0.863       1.114       1.246        1.314
                         (AC-FT)      91.        118.        132.         139.

                         CUMULATIVE AREA =    1.98 SQ MI
```

```
      ***             ***             ***             ***             ***

                        HYDROGRAPH AT STATION       P4
                      TRANSPOSITION AREA     10.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     263.      6.75                164.         54.         20.          16.
                        (INCHES)    0.772       1.011       1.144        1.211
                         (AC-FT)     81.         107.        121.         128.

                        CUMULATIVE AREA =    1.98 SQ MI

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


                        INTERPOLATED HYDROGRAPH AT       P4

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     363.      6.75                219.         69.         25.          19.
                        (INCHES)    1.027       1.298       1.430        1.497
                         (AC-FT)    108.        137.        151.         158.

                        CUMULATIVE AREA =    1.98 SQ MI


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


            **************
            *            *
  540 KK    *        P5  *      COMBINE   P5-P6
            *            *
            **************

  542 KO          OUTPUT CONTROL VARIABLES
                        IPRNT           3  PRINT CONTROL
                        IPLOT           0  PLOT CONTROL
                        QSCAL          0.  HYDROGRAPH PLOT SCALE

  543 HC          HYDROGRAPH COMBINATION
                        ICOMP           2  NUMBER OF HYDROGRAPHS TO COMBINE

                                                                  ***

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

                        HYDROGRAPH AT STATION       P5
                      TRANSPOSITION AREA      0.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     518.      4.00                284.         95.         34.          25.
                        (INCHES)    1.216       1.622       1.746        1.812
                         (AC-FT)    141.        188.        202.         210.

                        CUMULATIVE AREA =    2.17 SQ MI

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

                        HYDROGRAPH AT STATION       P5
                      TRANSPOSITION AREA      0.5 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     514.      4.00                281.         94.         34.          25.
                        (INCHES)    1.206       1.610       1.734        1.800
                         (AC-FT)    140.        186.        201.         208.

                        CUMULATIVE AREA =    2.17 SQ MI

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

                        HYDROGRAPH AT STATION       P5
```

```
                        TRANSPOSITION AREA      1.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                      6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     399.      7.50                  242.         82.         30.          22.
                        (INCHES)     1.035       1.409       1.533        1.599
                         (AC-FT)      120.        163.        177.         185.

                         CUMULATIVE AREA =    2.17 SQ MI


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

                          HYDROGRAPH AT STATION       P5
                        TRANSPOSITION AREA      5.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                      6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     290.      7.75                  181.         64.         24.          18.
                        (INCHES)     0.777       1.098       1.222        1.289
                         (AC-FT)       90.        127.        141.         149.

                         CUMULATIVE AREA =    2.17 SQ MI


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

                          HYDROGRAPH AT STATION       P5
                        TRANSPOSITION AREA     10.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                      6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     256.      7.75                  162.         58.         22.          17.
                        (INCHES)     0.694       0.995       1.119        1.187
                         (AC-FT)       80.        115.        130.         137.

                         CUMULATIVE AREA =    2.17 SQ MI

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


                         INTERPOLATED HYDROGRAPH AT       P5

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                      6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     351.      7.50                  216.         75.         27.          21.
                        (INCHES)     0.925       1.277       1.401        1.467
                         (AC-FT)      107.        148.        162.         170.

                         CUMULATIVE AREA =    2.17 SQ MI


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


            **************
            *            *
  560 KK    *        P6  *      COMBINE
            *            *
            **************

  562 KO          OUTPUT CONTROL VARIABLES
                        IPRNT           3  PRINT CONTROL
                        IPLOT           0  PLOT CONTROL
                        QSCAL          0.  HYDROGRAPH PLOT SCALE

  564 HC          HYDROGRAPH COMBINATION
                        ICOMP           2  NUMBER OF HYDROGRAPHS TO COMBINE

                                                                  ***

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

                          HYDROGRAPH AT STATION       P6
                        TRANSPOSITION AREA      0.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                      6-HR       24-HR       72-HR     99.75-HR
```

```
+   (CFS)        (HR)
                          (CFS)
+     471.       7.50                283.         98.         35.          26.
                        (INCHES)     1.167       1.613       1.733        1.796
                         (AC-FT)      140.        194.        208.         216.

                         CUMULATIVE AREA =    2.26 SQ MI


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

                          HYDROGRAPH AT STATION       P6
                        TRANSPOSITION AREA      0.5 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)        (HR)
                          (CFS)
+     467.       7.50                281.         97.         35.          26.
                        (INCHES)     1.158       1.601       1.720        1.784
                         (AC-FT)      139.        193.        207.         215.

                         CUMULATIVE AREA =    2.26 SQ MI


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

                          HYDROGRAPH AT STATION       P6
                        TRANSPOSITION AREA      1.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)        (HR)
                          (CFS)
+     395.       7.75                241.         85.         31.          23.
                        (INCHES)     0.995       1.403       1.522        1.586
                         (AC-FT)      120.        169.        183.         191.

                         CUMULATIVE AREA =    2.26 SQ MI


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

                          HYDROGRAPH AT STATION       P6
                        TRANSPOSITION AREA      5.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)        (HR)
                          (CFS)
+     287.       7.75                181.         66.         24.          19.
                        (INCHES)     0.747       1.092       1.212        1.276
                         (AC-FT)       90.        131.        146.         154.

                         CUMULATIVE AREA =    2.26 SQ MI


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

                          HYDROGRAPH AT STATION       P6
                        TRANSPOSITION AREA     10.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)        (HR)
                          (CFS)
+     253.       8.00                162.         60.         22.          17.
                        (INCHES)     0.668       0.989       1.109        1.174
                         (AC-FT)       80.        119.        133.         141.

                         CUMULATIVE AREA =    2.26 SQ MI

-----DSS---ZWRITE Unit  71; Vers.    1:  /RBE/P6/FLOW/01JAN1994/15MIN/100Y6H-EX/
      ***             ***             ***             ***             ***


                         INTERPOLATED HYDROGRAPH AT       P6

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)        (HR)
                          (CFS)
+     343.       7.75                212.         76.         28.          21.
                        (INCHES)     0.875       1.253       1.372        1.437
                         (AC-FT)      105.        151.        165.         173.

                         CUMULATIVE AREA =    2.26 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 | RIDKB | 523. | 5.00 | 123. | 31. | 10. | 0.00 | | |
| + | ROUTED TO | K3SBK4 | 332. | 5.50 | 121. | 31. | 10. | 0.00 | | |
| + | HYDROGRAPH AT | RIDKA | 547. | 5.75 | 215. | 57. | 19. | 0.00 | | |
| + | ROUTED TO | K3SAK4 | 316. | 6.50 | 193. | 57. | 19. | 0.00 | | |
| + | HYDROGRAPH AT | 34 | 147. | 5.75 | 69. | 18. | 6. | 0.64 | | |
| + | 3 COMBINED AT | K4 | 694. | 6.00 | 373. | 106. | 35. | 0.64 | | |
| + | ROUTED TO | K4-K5 | 675. | 6.50 | 361. | 106. | 35. | 0.64 | | |
| + | HYDROGRAPH AT | 35 | 229. | 6.50 | 132. | 36. | 12. | 1.50 | | |
| + | 2 COMBINED AT | K5 | 846. | 6.50 | 454. | 134. | 45. | 2.14 | | |
| + | ROUTED TO | K5-K6 | 801. | 7.50 | 441. | 134. | 45. | 2.14 | | |
| + | HYDROGRAPH AT | 46 | 651. | 5.50 | 199. | 51. | 17. | 1.38 | | |
| + | DIVERSION TO | 46RET | 651. | 5.50 | 120. | 30. | 10. | 1.38 | | |
| + | HYDROGRAPH AT | 46-O | 400. | 6.00 | 83. | 21. | 7. | 1.38 | | |
| + | 2 COMBINED AT | K6 | 832. | 7.25 | 469. | 143. | 48. | 3.52 | | |
| + | ROUTED TO | K6-K7 | 750. | 8.00 | 468. | 143. | 48. | 3.52 | | |
| + | HYDROGRAPH AT | 65 | 112. | 5.50 | 45. | 12. | 4. | 0.38 | | |
| + | 2 COMBINED AT | K7 | 754. | 7.75 | 478. | 149. | 50. | 3.90 | | |
| + | HYDROGRAPH AT | RIDL | 6. | 5.00 | 0. | 0. | 0. | 0.00 | | |
| + | ROUTED TO | L2S-L3 | 0. | 5.25 | 0. | 0. | 0. | 0.00 | | |
| + | HYDROGRAPH AT | 36 | 223. | 5.50 | 98. | 25. | 8. | 0.68 | | |
| + | 2 COMBINED AT | L3 | 223. | 5.50 | 99. | 25. | 8. | 0.68 | | |
| + | ROUTED TO | L3-L4 | 190. | 7.25 | 92. | 25. | 8. | 0.68 | | |
| + | HYDROGRAPH AT | 47 | 532. | 5.00 | 118. | 30. | 10. | 0.62 | | |
| + | DIVERSION TO | 47RET | 442. | 4.75 | 65. | 16. | 5. | 0.62 | | |
| + | HYDROGRAPH AT | 47-O | 393. | 5.25 | 53. | 13. | 4. | 0.62 | | |
| + | 2 COMBINED AT | L4 | 334. | 5.25 | 123. | 35. | 12. | 1.30 | | |
| + | ROUTED TO | L4-L5 | 183. | 5.75 | 123. | 35. | 12. | 1.30 | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| + | HYDROGRAPH AT | 66 | 158. | 5.00 | 45. | 11. | 4. | 0.29 |
| + | 2 COMBINED AT | L5 | 265. | 5.50 | 148. | 43. | 14. | 1.60 |
| + | HYDROGRAPH AT | RIDM | 863. | 5.25 | 199. | 50. | 17. | 0.00 |
| + | ROUTED TO | L2S2M1 | 230. | 6.50 | 146. | 49. | 17. | 0.00 |
| + | HYDROGRAPH AT | 37 | 333. | 6.00 | 170. | 45. | 15. | 1.42 |
| + | DIVERSION TO | 37RET | 333. | 6.00 | 105. | 26. | 9. | 1.42 |
| + | HYDROGRAPH AT | 37-O | 242. | 6.75 | 74. | 19. | 6. | 1.42 |
| + | 2 COMBINED AT | M1 | 466. | 6.75 | 218. | 68. | 23. | 1.42 |
| + | ROUTED TO | M1-M2 | 364. | 8.50 | 207. | 67. | 23. | 1.42 |
| + | HYDROGRAPH AT | 48 | 127. | 5.75 | 59. | 15. | 5. | 0.50 |
| + | 2 COMBINED AT | M2 | 359. | 8.50 | 213. | 76. | 26. | 1.92 |
| + | ROUTED TO | M2-M3 | 346. | 8.75 | 211. | 76. | 26. | 1.92 |
| + | HYDROGRAPH AT | 67 | 975. | 4.25 | 105. | 26. | 9. | 0.47 |
| + | 2 COMBINED AT | M3 | 686. | 4.25 | 217. | 96. | 33. | 2.39 |
| + | ROUTED TO | M3-M4 | 181. | 11.00 | 174. | 96. | 33. | 2.39 |
| + | HYDROGRAPH AT | 69 | 294. | 4.25 | 36. | 9. | 3. | 0.14 |
| + | 2 COMBINED AT | M4 | 372. | 4.25 | 184. | 103. | 36. | 2.53 |
| + | HYDROGRAPH AT | RIDN | 138. | 5.50 | 44. | 11. | 4. | 0.00 |
| + | ROUTED TO | N2S-N3 | 57. | 7.00 | 37. | 11. | 4. | 0.00 |
| + | HYDROGRAPH AT | 38 | 127. | 6.00 | 63. | 17. | 6. | 0.54 |
| + | 2 COMBINED AT | N3 | 176. | 6.25 | 98. | 28. | 9. | 0.54 |
| + | ROUTED TO | N3-N4 | 163. | 7.25 | 94. | 28. | 9. | 0.54 |
| + | HYDROGRAPH AT | 49 | 676. | 5.25 | 181. | 46. | 15. | 1.01 |
| + | DIVERSION TO | 49RET | 676. | 5.25 | 116. | 29. | 10. | 1.01 |
| + | HYDROGRAPH AT | 49-O | 436. | 5.75 | 67. | 17. | 6. | 1.01 |
| + | 2 COMBINED AT | N4 | 353. | 5.75 | 138. | 39. | 13. | 1.55 |
| + | ROUTED TO | N4-N5B | 254. | 6.75 | 132. | 39. | 13. | 1.55 |
| + | HYDROGRAPH AT | 56B | 1061. | 4.00 | 78. | 19. | 6. | 0.33 |
| + | DIVERSION TO | 56BRET | 733. | 4.00 | 55. | 14. | 5. | 0.33 |
| | HYDROGRAPH AT | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| + | | 56B-O | 328. | 4.00 | 23. | 6. | 2. | 0.33 |
| | 2 COMBINED AT | | | | | | | |
| + | | N5B | 251. | 6.75 | 132. | 43. | 14. | 1.89 |
| | ROUTED TO | | | | | | | |
| + | | N5B-N6 | 129. | 8.75 | 113. | 42. | 14. | 1.89 |
| | HYDROGRAPH AT | | | | | | | |
| + | | 56A | 219. | 5.00 | 67. | 17. | 6. | 0.41 |
| | ROUTED TO | | | | | | | |
| + | | N5A-N6 | 204. | 5.25 | 68. | 17. | 6. | 0.41 |
| | HYDROGRAPH AT | | | | | | | |
| + | | 70 | 99. | 4.75 | 26. | 7. | 2. | 0.14 |
| | 3 COMBINED AT | | | | | | | |
| + | | N6 | 288. | 5.00 | 158. | 60. | 20. | 2.44 |
| | HYDROGRAPH AT | | | | | | | |
| + | | RIDO | 260. | 6.00 | 68. | 17. | 6. | 0.00 |
| | ROUTED TO | | | | | | | |
| + | | O4S-O5 | 108. | 7.00 | 59. | 17. | 6. | 0.00 |
| | HYDROGRAPH AT | | | | | | | |
| + | | 39 | 156. | 5.75 | 79. | 21. | 7. | 0.73 |
| | 2 COMBINED AT | | | | | | | |
| + | | O5 | 239. | 6.75 | 133. | 38. | 13. | 0.73 |
| | ROUTED TO | | | | | | | |
| + | | O5-O6 | 228. | 7.25 | 129. | 38. | 13. | 0.73 |
| | HYDROGRAPH AT | | | | | | | |
| + | | 50 | 171. | 6.50 | 99. | 27. | 9. | 1.00 |
| | 2 COMBINED AT | | | | | | | |
| + | | O6 | 334. | 7.25 | 197. | 58. | 19. | 1.73 |
| | ROUTED TO | | | | | | | |
| + | | O6-O7 | 318. | 8.00 | 192. | 58. | 19. | 1.73 |
| | HYDROGRAPH AT | | | | | | | |
| + | | 57 | 168. | 5.25 | 55. | 14. | 5. | 0.49 |
| | 2 COMBINED AT | | | | | | | |
| + | | O7 | 313. | 8.00 | 202. | 66. | 22. | 2.22 |
| | ROUTED TO | | | | | | | |
| + | | O7-O8 | 226. | 8.75 | 171. | 65. | 22. | 2.22 |
| | HYDROGRAPH AT | | | | | | | |
| + | | 71 | 100. | 4.50 | 20. | 5. | 2. | 0.16 |
| | 2 COMBINED AT | | | | | | | |
| + | | O8 | 225. | 8.75 | 171. | 69. | 23. | 2.37 |
| | HYDROGRAPH AT | | | | | | | |
| + | | RIDP | 449. | 4.50 | 102. | 29. | 12. | 0.00 |
| | ROUTED TO | | | | | | | |
| + | | P2S-P3 | 116. | 6.00 | 81. | 28. | 12. | 0.00 |
| | HYDROGRAPH AT | | | | | | | |
| + | | 40 | 157. | 6.25 | 88. | 24. | 8. | 0.98 |
| | 2 COMBINED AT | | | | | | | |
| + | | P3 | 271. | 6.00 | 168. | 52. | 20. | 0.98 |
| | ROUTED TO | | | | | | | |
| + | | P3-P4 | 258. | 7.00 | 160. | 51. | 20. | 0.98 |
| | HYDROGRAPH AT | | | | | | | |
| + | | 51 | 163. | 6.25 | 93. | 25. | 8. | 1.00 |
| | 2 COMBINED AT | | | | | | | |
| + | | P4 | 363. | 6.75 | 219. | 69. | 25. | 1.98 |
| | ROUTED TO | | | | | | | |
| + | | P4-P5 | 351. | 7.50 | 216. | 69. | 25. | 1.98 |
| | HYDROGRAPH AT | | | | | | | |
| + | | 58 | 514. | 4.00 | 29. | 7. | 2. | 0.19 |
| | 2 COMBINED AT | | | | | | | |
| + | | P5 | 351. | 7.50 | 216. | 75. | 27. | 2.17 |

```
          ROUTED TO
+                        P5-P6      343.    7.75        212.        73.        27.      2.17

          HYDROGRAPH AT
+                           72      148.    4.00         13.         3.         1.      0.09

          2 COMBINED AT
+                           P6      343.    7.75        212.        76.        28.      2.26


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


    -----DSS---ZCLOSE Unit:  71,   File: J:\2006\10-0607\DESIGN~2\DRAINA~1\HEC-RAS\Model\A1.DSS
              Pointer Utilization:  1.02
              Number of Records:   1056
              File Size:   5407.4  Kbytes
              Percent Inactive:   0.0
```

# HEC-1 Existing Conditions

- RBW, 100-Yr, 6-Hr

```
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   28FEB08  TIME  16:35:48  *                                    *           (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        FCDMC
          2           ID        0607BASE_EXST_6HR - Buckeye ADMP Existing Conditions Hydrology Update
          3           ID        Major Basin: 06
          4           ID        100 Year - Return Period
          5           ID        6 Hour Storm
          6           ID        Multiple Storms
          7           ID        Unit Hydrograph: S-Graph
          8           ID        01/09/2008
                      * ******************************************************************************
                      *  Original Model prepared as: Buckeye/Sun Valley ADMS - November 2004
                      *                              by PBS&J - Modelers: Jacob Lesue & Wen Chen
                      * ************* THIS MODEL: Major Basin 06, Model Area RBW *********************
                      *  100-year 6-hour
                      *  NEW FILE NAME:  "RBW1006EX.DAT"
                      *  Existing Conditions
                      *  Area 1 - RID to BIC (West)
                      *  Major Basin Key:  01=BGE, 02=BGW, 03=FRE, 04=FRW, 05=RBE, 06=RBW, 07=AREA2
                      *  Rainfall Loss Method - Green & Ampt
                      *  Unit Hydrograph Method - FCDMC S-Graph
                      *  Channel Routing Method - Normal Depth
                      *  Soil Data - USDA SCS Soil Survey (1972 & 1981)
                      *  Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
                      *  Retention volume for newly developed areas accounted for with FCDMC
                      *  storage methodology equation - V=C(P/12)A, where C=0.71 & P=2.8
                      * ******************************************************************************
                      *  UPDATED BY DIBBLE ENGINEERING, SEPTEMBER 2007
                      *  Land Use Updated using - FCDMC GIS Data: mag_landuse (2005)
                      * ******************************************************************************
                      *
                      *DIAGRAM
                      *
          9           IT      15 02JAN94       0     400
         10           IO       5
         11           IN      15 02JAN94       0
                      *
                      *
         12           JD   3.300  0.0100
                      * 6-hour distribution, pattern 1.0
         13           PC   0.000   0.008   0.016   0.025   0.033   0.041   0.050   0.058   0.066   0.074
         14           PC   0.087   0.099   0.118   0.138   0.216   0.377   0.834   0.911   0.931   0.950
         15           PC   0.962   0.972   0.983   0.991   1.000
         16           JD   3.280  0.5000
                      * 6-hour distribution, pattern 1.0
         17           PC   0.000   0.008   0.016   0.025   0.033   0.041   0.050   0.058   0.066   0.074
         18           PC   0.087   0.099   0.118   0.138   0.216   0.377   0.834   0.911   0.931   0.950
         19           PC   0.962   0.972   0.983   0.991   1.000
         20           JD   3.257     1.0
                      * 6-hour distribution, pattern 1.4
         21           PC   0.000   0.008   0.016   0.025   0.033   0.041   0.050   0.058   0.066   0.075
         22           PC   0.087   0.099   0.119   0.148   0.230   0.407   0.778   0.881   0.919   0.945
         23           PC   0.957   0.968   0.980   0.990   1.000
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 24          JD   3.168     5.0
             * 6-hour distribution, pattern 2.3
 25          PC   0.000   0.011   0.017   0.027   0.039   0.049   0.060   0.070   0.080   0.091
 26          PC   0.103   0.118   0.139   0.183   0.270   0.458   0.686   0.823   0.889   0.929
1                                          HEC-1 INPUT                                          PAGE  2

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

 27          PC   0.949   0.962   0.974   0.988   1.000
 28          JD   3.102    10.0
             * 6-hour distribution, pattern 2.7
 29          PC   0.000   0.013   0.019   0.029   0.044   0.057   0.069   0.081   0.094   0.107
 30          PC   0.122   0.137   0.160   0.205   0.289   0.466   0.677   0.807   0.877   0.919
 31          PC   0.947   0.961   0.974   0.987   1.000
             *
             *

 32          KK      68   BASIN
 33          KM   ******************************************************************************
 34          KM   **   SUB-WATERSHED E   ******************************************************
 35          KM   ******************************************************************************
 36          KM   S-GRAPH TYPE=DESERT RANGELAND
 37          BA   0.413
 38          LG    0.52    0.29    4.35    0.37       4
 39          UI      76     275     331     195      96      49      24       9       9       0
             *

 40          KK   E1-E2              E1
 41          KM   STORAGE ROUTE FROM E1 TO E2 THROUGH SPRR TRESTLE
 42          KO       3
 43          RS       1    ELEV   871.0     0.0
 44          SV     0.0    1.39    5.84   13.36   41.09   96.81  182.04   292.0  426.27  581.71
 45          SV  756.67  957.16  1179.1  1179.1  1179.1  1179.1  1179.1  1179.1  1179.1  1179.1
 46          SE   872.0   874.0   876.0   878.0   880.0   882.0   884.0   886.0   888.0   890.0
 47          SE   892.0   894.0   896.0   896.0   896.0   896.0   896.0   896.0   896.0   896.0
 48          SQ     0.0   100.0   240.0   360.0   480.0   600.0  1020.0  2000.0  2760.0  2760.0
 49          SQ  2760.0  2760.0  2760.0  2760.0  2760.0  2760.0  2760.0  2760.0  2760.0  2760.0
 50          SE  873.07  874.07  875.07  876.07  877.07  878.07  879.07  880.07  881.07  881.07
 51          SE  881.07  881.07  881.07  881.07  881.07  881.07  881.07  881.07  881.07  881.07
             *

 52          KK      59   BASIN
 53          KM   S-GRAPH TYPE=AGRICULTURE
 54          BA   0.252
 55          LG    0.75    0.27    4.10    0.50      11
 56          UI      47     170     191     126      59      28      15       4       3       3
 57          UI       3       0       0       0       0       0       0       0       0       0
             *
             *

 58          KK      E2 COMBINE
 59          KM   COMBINE STORAGE HYDROGRAPH FROM E1 WITH RUNOFF FROM 59 @ E2
 60          KO       3
 61          ZW   A=RBW B=E2 C=FLOW E=15MIN F=100Y6H-EX
 62          HC       2
             *

 63          KK    RIDF
 64          KM   ******************************************************************************
 65          KM   **   SUB-WATERSHED F   ******************************************************
 66          KM   ******************************************************************************
 67          KM   FALSE BASIN TO SIMULATE INFLOW FROM RID
 68          BA  0.0001
1                                          HEC-1 INPUT                                          PAGE  3

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

 69          ZR  =QI A=RID RID B=8199 LAT STRUCT C=FLOW-WEIR D=02JAN1994 E=15MIN F=RID-100-06E
             *

 70          KK  F1S-F2   ROUTE     F1S
 71          KM   ROUTE INFLOW FROM RID CONCENTRATED AT F1S TO F2 (CHANNEL A)
 72          RS       1    FLOW     0.0     0.0
 73          RC   0.100   0.100   0.100    3225  0.0080    0.00
 74          RX    0.00  250.00  500.00  750.00 1000.00 1333.30 1666.60 2000.00
 75          RY   10.00    7.50    5.00    2.50    0.00    3.30    6.60   10.00
             *

 76          KK      27   BASIN
 77          KM   S-GRAPH TYPE=AGRICULTURE
 78          BA   0.241
 79          LG    1.00    0.25    3.95    0.57       0
 80          UI       8      11      26      44      53      63      65      61      57      47
 81          UI      43      31      23      20      14      11      10       6       6       5
 82          UI       4       3       1       0       1       1       1       1       1       1
 83          UI       1       1       1       1       0       0       0       0       0       0
             *

 84          KK      F2 COMBINE   F2-F3
```

```
 85          KM   COMBINE ROUTED HYDROGRAPH FROM F1S WITH RUNOFF FROM 27 @ F2
 86          HC       2
             *

 87          KK   F2-F3   ROUTE      F2
 88          KM   ROUTE HYDROGRAPH FROM F2 TO F3 (CHANNEL A)
 89          RS       8    FLOW     0.0     0.0
 90          RC   0.100   0.100   0.100    5242  0.0060    0.00
 91          RX    0.00  250.00  500.00  750.00 1000.00 1333.30 1666.60 2000.00
 92          RY   10.00    7.50    5.00    2.50    0.00    3.30    6.60   10.00
             *

 93          KK      29   BASIN
 94          KM   S-GRAPH TYPE=AGRICULTURE
 95          BA   0.999
 96          LG    1.00    0.25    3.95    0.55       0
 97          UI      23      23      40      67     121     128     170     171     190     190
 98          UI     185     158     167     143     122     114      86      71      66      57
 99          UI      41      36      29      27      21      21      16      13      12      13
100          UI       8       2       3       3       3       3       3       2       3       3
101          UI       3       3       3       3       2       3       3       3       0       0
             *

102          KK      F3 COMBINE   F3-F4
103          KM   COMBINE ROUTED HYDROGRAPH FROM F2 WITH RUNOFF FROM 29 @ F3
104          HC       2
             *
1                                          HEC-1 INPUT                                                    PAGE   4

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

105          KK   F3-F4   ROUTE      F3
106          KM   ROUTE HYDROGRAPH FROM F3 TO F4 (CHANNEL A)
107          RS       7    FLOW     0.0     0.0
108          RC   0.100   0.100   0.100    5502  0.0060    0.00
109          RX    0.00  250.00  500.00  750.00 1000.00 1333.30 1666.60 2000.00
110          RY   10.00    7.50    5.00    2.50    0.00    3.30    6.60   10.00
             *

111          KK      41   BASIN
112          KM   S-GRAPH TYPE=AGRICULTURE
113          BA   1.202
114          LG    1.00    0.25    3.95    0.47       0
115          UI      26      27      45      75     131     154     179     205     222     221
116          UI     222     192     190     190     138     152     105      94      76      82
117          UI      52      45      41      32      30      24      24      17      15      15
118          UI      15       7       3       4       3       3       4       3       3       3
119          UI       4       3       3       4       3       3       4       3       3       3
120          UI       0       0       0       0       0       0       0       0       0       0
             *

121          KK      F4 COMBINE  F4-F5B
122          KM   COMBINE ROUTED HYDROGRAPH FROM F3 WITH RUNOFF FROM 41 @ F4
123          HC       2
             *

124          KK  F4-F5B   ROUTE      F4
125          KM   ROUTE HYDROGRAPH FROM F4 TO F5B (CHANNEL A)
126          RS       4    FLOW     0.0     0.0
127          RC   0.100   0.100   0.100    3705  0.0060    0.00
128          RX    0.00  250.00  500.00  750.00 1000.00 1333.30 1666.60 2000.00
129          RY   10.00    7.50    5.00    2.50    0.00    3.30    6.60   10.00
             *

130          KK     52B   BASIN
131          KM   S-GRAPH TYPE=AGRICULTURE
132          BA   0.495
133          LG    0.97    0.25    4.10    0.53       1
134          UI      23      53     122     170     187     171     153     117      78      61
135          UI      39      27      21      14      13       5       3       3       3       2
136          UI       3       3       3       3       0       0       0       0       0       0
             *

137          KK     F5B COMBINE F5B-F6B
138          KM   COMBINE ROUTED HYDROGRAPH FROM F4 WITH RUNOFF FROM 52B @ F5B
139          KO       3
140          HC       2
             *

141          KK  F5BF6B             F5B
142          KM   STORAGE ROUTE FROM F5B TO F6B THROUGH SPRR TRESTLE
143          RS       1    ELEV   886.0     0.0
144          SV     0.0    0.08    0.94    6.13   37.02  122.46  262.93   479.0  749.83  749.83
145          SV  749.83  749.83  749.83  749.83  749.83  749.83  749.83  749.83  749.83  749.83
146          SE   886.0   888.0   890.0   892.0   894.0   896.0   898.0   900.0   902.0   902.0
1                                          HEC-1 INPUT                                                    PAGE   5

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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147          SE   902.0   902.0   902.0   902.0   902.0   902.0   902.0   902.0   902.0   902.0
148          SQ     0.0    80.0   120.0   230.0  1145.0  1980.0  2670.0  2670.0  2670.0  2670.0
149          SQ  2670.0  2670.0  2670.0  2670.0  2670.0  2670.0  2670.0  2670.0  2670.0  2670.0
150          SE   886.0  887.07  888.07  889.07  890.07  891.07  892.07  892.07  892.07  892.07
151          SE  892.07  892.07  892.07  892.07  892.07  892.07  892.07  892.07  892.07  892.07
             *

152          KK     60B   BASIN
153          KM   S-GRAPH TYPE=AGRICULTURE
154          BA   0.574
155          LG    0.86    0.26    4.15    0.55       3
156          UI      24      45     119     153     189     195     166     150     121      81
157          UI      66      41      32      24      19      13      14       3       3       3
158          UI       3       3       3       2       3       3       3       0       0       0
159          UI       0       0       0       0       0       0       0       0       0       0
             *

160          KK     F6B COMBINE
161          KM   COMBINE STORAGE HYDROGRAPH FROM F5B WITH RUNOFF FROM 60B @ F6B
162          KO       3
163          ZW   A=RBW B=F6B C=FLOW E=15MIN F=100Y6H-EX
164          HC       2
             *

165          KK     52A   BASIN
166          KM   S-GRAPH TYPE=AGRICULTURE
167          BA   0.313
168          LG    1.00    0.25    3.95    0.44       0
169          UI       7       8      14      26      43      41      55      62      62      63
170          UI      55      53      53      40      40      29      25      21      20      13
171          UI      12       9       9       7       7       5       4       5       4       1
172          UI       1       1       1       1       0       1       1       1       1       1
173          UI       1       1       1       1       1       1       0       0       0       0
             *

174          KK  F5AF6A             F5A
175          KM   STORAGE ROUTE FROM F5A TO F6A THROUGH SPRR TRESTLE
176          KO       3
177          RS       1    ELEV   894.0     0.0
178          SV     0.0    0.02    0.64   12.91   61.76   61.76   61.76   61.76   61.76   61.76
179          SV   61.76   61.76   61.76   61.76   61.76   61.76   61.76   61.76   61.76   61.76
180          SE   894.0   896.0   898.0   900.0   902.0   902.0   902.0   902.0   902.0   902.0
181          SE   902.0   902.0   902.0   902.0   902.0   902.0   902.0   902.0   902.0   902.0
182          SQ     0.0    58.1   112.2   146.6   174.0   198.5   218.5   237.6   255.3   271.8
183          SQ   287.4   302.2   316.3   329.7   342.7   355.2   367.2   378.9   401.2   422.3
184          SE   894.0   896.4   896.9   897.4   897.9   898.4   898.9   899.4   899.9   900.4
185          SE   900.9   901.4   901.9   902.4   902.9   903.4   903.9   904.4   905.4   906.4
             *

186          KK     60A   BASIN
187          KM   S-GRAPH TYPE=AGRICULTURE
188          BA   0.412
189          LG    0.85    0.25    4.00    0.54      13
190          UI      15      26      66      93     122     128     120     111      88      75
191          UI      51      44      27      22      17      14       9       9       6       2
1                                          HEC-1 INPUT                                          PAGE  6

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

192          UI       2       2       2       2       2       2       2       2       2       0
193          UI       0       0       0       0       0       0       0       0       0       0
             *

194          KK     F6A COMBINE
195          KM   COMBINE STORAGE HYDROGRAPH FROM F5A WITH RUNOFF FROM 60A @ F6A
196          KO       3
197          ZW   A=RBW B=F6A C=FLOW E=15MIN F=100Y6H-EX
198          HC       2
             *

199          KK    RIDG
200          KM   ******************************************************************************
201          KM   **   SUB-WATERSHED G   ******************************************************
202          KM   ******************************************************************************
203          KM   FALSE BASIN TO SIMULATE INFLOW FROM RID
204          BA  0.0001
205          ZR  =QI A=RID RID B=13399 LAT STRUCT C=FLOW-WEIR D=02JAN1994 E=15MIN F=RID-100-06E
             *

206          KK  G3S-G4   ROUTE     G3S
207          KM   ROUTE INFLOW FROM RID CONCENTRATED AT G3S TO G4 (CHANNEL A)
208          RS       1    FLOW     0.0     0.0
209          RC   0.100   0.100   0.100    4594  0.0040    0.00
210          RX    0.00  250.00  500.00  750.00 1000.00 1333.30 1666.60 2000.00
211          RY   10.00    7.50    5.00    2.50    0.00    3.30    6.60   10.00
             *

212          KK      28   BASIN
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 213          KM   S-GRAPH TYPE=AGRICULTURE
 214          BA   0.335
 215          LG    0.97    0.25    4.15    0.47       1
 216          UI       9      12      26      50      56      73      81      80      76      69
 217          UI      63      54      41      33      28      22      17      13      12       8
 218          UI       8       6       5       5       1       2       1       1       1       2
 219          UI       1       1       1       2       1       1       1       2       0       0
              *

 220          KK      G4 COMBINE   G4-G5
 221          KM   COMBINE ROUTED HYDROGRAPH FROM G3S WITH RUNOFF FROM 28 @ G4
 222          HC       2
              *

 223          KK   G4-G5   ROUTE      G4
 224          KM   ROUTE HYDROGRAPH FROM G4 TO G5 (CHANNEL A)
 225          RS      11    FLOW     0.0     0.0
 226          RC   0.100   0.100   0.100    7128  0.0040    0.00
 227          RX    0.00  250.00  500.00  750.00 1000.00 1333.30 1666.60 2000.00
 228          RY   10.00    7.50    5.00    2.50    0.00    3.30    6.60   10.00
              *
1                                          HEC-1 INPUT                                          PAGE  7

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

 229          KK      30   BASIN
 230          KM   S-GRAPH TYPE=AGRICULTURE
 231          BA   0.983
 232          LG    0.99    0.25    4.00    0.47       0
 233          UI      21      22      36      59     106     125     136     170     180     179
 234          UI     180     158     149     164     112     124      89      80      62      64
 235          UI      48      38      33      27      25      20      20      15      13      12
 236          UI      12       9       3       2       3       2       3       3       2       3
 237          UI       3       2       3       2       3       3       2       3       3       2
 238          UI       0       0       0       0       0       0       0       0       0       0
              *

 239          KK      G5 COMBINE   G5-G6
 240          KM   COMBINE ROUTED HYDROGRAPH FROM G4 WITH RUNOFF FROM 30 @ G5
 241          HC       2
              *

 242          KK   G5-G6   ROUTE      G5
 243          KM   ROUTE HYDROGRAPH FROM G5 TO G6 (CHANNEL A)
 244          RS       8    FLOW     0.0     0.0
 245          RC   0.100   0.100   0.100    5820  0.0050    0.00
 246          RX    0.00  250.00  500.00  750.00 1000.00 1333.30 1666.60 2000.00
 247          RY   10.00    7.50    5.00    2.50    0.00    3.30    6.60   10.00
              *

 248          KK      42   BASIN
 249          KM   S-GRAPH TYPE=AGRICULTURE
 250          BA   0.778
 251          LG    1.00    0.25    4.25    0.45       0
 252          UI      17      16      28      46      82      97     106     131     141     140
 253          UI     141     127     117     129      92      94      76      64      50      49
 254          UI      42      30      28      22      20      16      16      13      10       9
 255          UI      10       9       2       2       2       2       2       3       2       2
 256          UI       2       2       2       2       2       2       2       2       2       3
 257          UI       2       0       0       0       0       0       0       0       0       0
              *

 258          KK      G6 COMBINE   G6-G7
 259          KM   COMBINE ROUTED HYDROGRAPH FROM G5 WITH RUNOFF FROM 42 @ G6
 260          HC       2
              *

 261          KK   G6-G7   ROUTE      G6
 262          KM   ROUTE HYDROGRAPH FROM G6 TO G7 (CHANNEL A)
 263          RS       4    FLOW     0.0     0.0
 264          RC   0.100   0.100   0.100    2613  0.0070    0.00
 265          RX    0.00  250.00  500.00  750.00 1000.00 1333.30 1666.60 2000.00
 266          RY   10.00    7.50    5.00    2.50    0.00    3.30    6.60   10.00
              *
1                                          HEC-1 INPUT                                          PAGE  8

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

 267          KK      53   BASIN
 268          KM   S-GRAPH TYPE=AGRICULTURE
 269          BA   0.339
 270          LG    0.99    0.25    4.00    0.44       1
 271          UI      11      17      39      63      77      94      93      85      81      65
 272          UI      59      41      32      27      18      15      12      10       7       6
 273          UI       6       1       2       1       2       1       1       2       1       1
 274          UI       2       1       1       0       0       0       0       0       0       0
              *
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275          KK      G7 COMBINE   G7-G8
276          KM   COMBINE ROUTED HYDROGRAPH FROM G6 WITH RUNOFF FROM 53 @ G7
277          KO       3
278          HC       2
             *

279          KK   G7-G8              G7
280          KM   STORAGE ROUTE FROM G7 TO G8 THROUGH SPRR TRESTLE
281          RS       1    ELEV   888.0     0.0
282          SV     0.0     0.6    4.25   26.94  108.66  257.97   449.6   449.6   449.6   449.6
283          SV   449.6   449.6   449.6   449.6   449.6   449.6   449.6   449.6   449.6   449.6
284          SE   888.0   890.0   892.0   894.0   896.0   898.0   900.0   900.0   900.0   900.0
285          SE   900.0   900.0   900.0   900.0   900.0   900.0   900.0   900.0   900.0   900.0
286          SQ     0.0   100.0   200.0   480.0  1480.0  2060.0  2520.0  2900.0  2900.0  2900.0
287          SQ  2900.0  2900.0  2900.0  2900.0  2900.0  2900.0  2900.0  2900.0  2900.0  2900.0
288          SE   888.0  888.07  889.07  890.07  891.07  892.07  893.07  894.07  894.07  894.07
289          SE  894.07  894.07  894.07  894.07  894.07  894.07  894.07  894.07  894.07  894.07
             *

290          KK      61   BASIN
291          KM   S-GRAPH TYPE=AGRICULTURE
292          BA   0.508
293          LG    0.76    0.25    3.92    0.46       8
294          UI      22      48     118     154     184     175     160     122      91      65
295          UI      46      33      24      19      12      12       3       2       3       3
296          UI       3       2       3       3       2       0       0       0       0       0
             *

297          KK      G8 COMBINE
298          KM   COMBINE STORAGE HYDROGRAPH FROM G7 WITH RUNOFF FROM 61 @ G8
299          KO       3
300          ZW   A=RBW B=G8 C=FLOW E=15MIN F=100Y6H-EX
301          HC       2
             *

302          KK    RIDH
303          KM   ****************************************************************************
304          KM   **   SUB-WATERSHED H   ******************************************************
305          KM   ****************************************************************************
306          KM   FALSE BASIN TO SIMULATE INFLOW FROM RID
307          BA  0.0001
308          ZR  =QI A=RID RID B=19799 LAT STRUCT C=FLOW-WEIR D=02JAN1994 E=15MIN F=RID-100-06E
             *
1                                        HEC-1 INPUT                                          PAGE  9

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

309          KK  H3S-H4   ROUTE     H3S
310          KM   ROUTE INFLOW FROM RID CONCENTRATED AT H3S TO H4 (CHANNEL A)
311          RS       1    FLOW     0.0     0.0
312          RC   0.100   0.100   0.100   10193  0.0050    0.00
313          RX    0.00  250.00  500.00  750.00 1000.00 1333.30 1666.60 2000.00
314          RY   10.00    7.50    5.00    2.50    0.00    3.30    6.60   10.00
             *

315          KK      31   BASIN
316          KM   S-GRAPH TYPE=AGRICULTURE
317          BA   1.079
318          LG    0.99    0.25    4.00    0.46       0
319          UI      21      20      27      43      81     116     115     137     161     172
320          UI     173     174     169     144     150     151     109     116      97      80
321          UI      68      58      64      42      36      33      26      26      21      19
322          UI      19      14      12      12      11      12       3       3       2       3
323          UI       2       3       3       2       3       2       3       2       3       2
324          UI       3       0       0       0       0       0       0       0       0       0
             *

325          KK      H4 COMBINE   H4-H5
326          KM   COMBINE ROUTED HYDROGRAPH FROM H3S WITH RUNOFF FROM 31 @ H4
327          HC       2
             *

328          KK   H4-H5   ROUTE      H4
329          KM   ROUTE HYDROGRAPH FROM H4 TO H5 (CHANNEL B)
330          RS       5    FLOW     0.0     0.0
331          RC   0.100   0.020   0.100    5383  0.0060    0.00
332          RX    0.00 1000.00 1006.00 1010.00 1050.00 1054.00 1060.00 2060.00
333          RY   10.00    0.00    0.00    1.00    1.00    0.00    0.00   10.00
             *

334          KK      43   BASIN
335          KM   S-GRAPH TYPE=AGRICULTURE
336          BA   1.002
337          LG    0.99    0.25    3.95    0.43       1
338          UI      18      19      22      37      61      96     108     112     137     150
339          UI     153     154     154     140     127     137     123      96     107      80
340          UI      70      59      52      57      38      33      30      24      23      20
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341          UI      17      17      15      10      11      10      10       9       2       2
342          UI       2       3       2       2       2       3       2       2       2       3
343          UI       2       0       0       0       0       0       0       0       0       0
             *

344          KK      H5 COMBINE   H5-H6
345          KM   COMBINE ROUTED HYDROGRAPH FROM H4 WITH RUNOFF FROM 43 @ H5
346          HC       2
             *
1                                          HEC-1 INPUT                                          PAGE 10

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

347          KK   H5-H6   ROUTE      H5
348          KM   ROUTE HYDROGRAPH FROM H5 TO H6 (CHANNEL B)
349          RS       3    FLOW     0.0     0.0
350          RC   0.100   0.020   0.100    2888  0.0050    0.00
351          RX    0.00 1000.00 1006.00 1010.00 1050.00 1054.00 1060.00 2060.00
352          RY   10.00    0.00    0.00    1.00    1.00    0.00    0.00   10.00
             *

353          KK      54   BASIN
354          KM   S-GRAPH TYPE=AGRICULTURE
355          BA   0.386
356          LG    0.98    0.25    4.00    0.45       1
357          UI       9       9      18      32      53      51      68      77      77      76
358          UI      69      66      65      48      50      36      30      27      24      17
359          UI      15      11      11       8       9       5       5       5       5       1
360          UI       1       1       2       1       1       1       1       1       1       2
361          UI       1       1       1       1       1       2       0       0       0       0
             *

362          KK      H6 COMBINE   H6-H7
363          KM   COMBINE ROUTED HYDROGRAPH FROM H5 WITH RUNOFF FROM 54 @ H6
364          KO       3
365          HC       2
             *

366          KK   H6-H7              H6
367          KM   STORAGE ROUTE FROM H6 TO H7 THROUGH SPRR TRESTLE
368          RS       1    ELEV   890.0     0.0
369          SV     0.0    0.45   30.43  148.25  336.08  336.08  336.08  336.08  336.08  336.08
370          SV  336.08  336.08  336.08  336.08  336.08  336.08  336.08  336.08  336.08  336.08
371          SE   890.0   892.0   894.0   896.0   898.0   898.0   898.0   898.0   898.0   898.0
372          SE   898.0   898.0   898.0   898.0   898.0   898.0   898.0   898.0   898.0   898.0
373          SQ     0.0   185.0   720.0  1025.0  1075.0  1150.0  1355.0  1800.0  1800.0  1800.0
374          SQ  1800.0  1800.0  1800.0  1800.0  1800.0  1800.0  1800.0  1800.0  1800.0  1800.0
375          SE   890.0  891.07  893.47  895.47  895.57  895.67  895.77  895.87  895.87  895.87
376          SE  895.87  895.87  895.87  895.87  895.87  895.87  895.87  895.87  895.87  895.87
             *

377          KK      62   BASIN
378          KM   S-GRAPH TYPE=AGRICULTURE
379          BA   0.572
380          LG    0.94    0.25    4.20    0.44       3
381          UI      19      27      61     105     129     150     156     145     134     114
382          UI     100      72      53      49      32      26      21      17      13      11
383          UI      10       5       2       2       3       2       3       2       2       3
384          UI       2       2       3       0       0       0       0       0       0       0
             *

385          KK      H7 COMBINE
386          KM   COMBINE STORAGE HYDROGRAPH FROM H6 WITH RUNOFF FROM 62 @ H7
387          KO       3
388          ZW   A=RBW B=H7 C=FLOW E=15MIN F=100Y6H-EX
389          HC       2
             *
1                                          HEC-1 INPUT                                          PAGE 11

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

390          KK    RIDI
391          KM   ******************************************************************************
392          KM   **   SUB-WATERSHED I   ********************************************************
393          KM   ******************************************************************************
394          KM   FALSE BASIN TO SIMULATE INFLOW FROM RID
395          BA  0.0001
396          ZR  =QI A=RID RID B=24399 LAT STRUCT C=FLOW-WEIR D=02JAN1994 E=15MIN F=RID-100-06E
             *

397          KK  I2S-I3   ROUTE     I2S
398          KM   ROUTE INFLOW FROM RID CONCENTRATED AT I2S TO I3 (CHANNEL A)
399          RS       1    FLOW     0.0     0.0
400          RC   0.100   0.100   0.100    8174  0.0050    0.00
401          RX    0.00  250.00  500.00  750.00 1000.00 1333.30 1666.60 2000.00
402          RY   10.00    7.50    5.00    2.50    0.00    3.30    6.60   10.00
             *
```

```
 403          KK      32   BASIN
 404          KM   S-GRAPH TYPE=AGRICULTURE
 405          BA   0.896
 406          LG    0.98    0.25    4.00    0.52       1
 407          UI      17      18      24      40      71     102      93     132     131     146
 408          UI     147     147     137     122     131     115      91     102      70      66
 409          UI      51      51      46      34      28      25      22      19      16      16
 410          UI      14      10      10      10      10       5       2       2       2       2
 411          UI       2       3       2       2       2       2       2       3       2       2
 412          UI       2       0       0       0       0       0       0       0       0       0
              *

 413          KK      I3 COMBINE   I3-I4
 414          KM   COMBINE ROUTED HYDROGRAPH FROM I2S WITH RUNOFF FROM 32 @ I3
 415          HC       2
              *

 416          KK   I3-I4   ROUTE      I3
 417          KM   ROUTE HYDROGRAPH FROM I3 TO I4 (CHANNEL B)
 418          RS      10    FLOW     0.0     0.0
 419          RC   0.100   0.020   0.100   10388  0.0040    0.00
 420          RX    0.00 1000.00 1006.00 1010.00 1050.00 1054.00 1060.00 2060.00
 421          RY   10.00    0.00    0.00    1.00    1.00    0.00    0.00   10.00
              *

 422          KK      44   BASIN
 423          KM   S-GRAPH TYPE=AGRICULTURE
 424          BA   1.007
 425          LG    0.96    0.26    4.10    0.49       0
 426          UI      19      19      26      40      75     107     107     126     151     161
 427          UI     162     161     158     135     138     143     101     108      93      73
 428          UI      63      55      60      39      34      31      25      24      20      17
 429          UI      18      13      11      11      11      10       4       2       3       2
 430          UI       3       2       2       3       2       3       2       2       3       2
 431          UI       3       0       0       0       0       0       0       0       0       0
              *
1                                          HEC-1 INPUT                                          PAGE 12

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

 432          KK      I4 COMBINE   I4-I5
 433          KM   COMBINE ROUTED HYDROGRAPH FROM I3 WITH RUNOFF FROM 44 @ I4
 434          HC       2
              *

 435          KK   I4-I5   ROUTE      I4
 436          KM   ROUTE HYDROGRAPH FROM I4 TO I5 (CHANNEL A)
 437          RS       4    FLOW     0.0     0.0
 438          RC   0.100   0.100   0.100    2589  0.0030    0.00
 439          RX    0.00  250.00  500.00  750.00 1000.00 1333.30 1666.60 2000.00
 440          RY   10.00    7.50    5.00    2.50    0.00    3.30    6.60   10.00
              *

 441          KK      55   BASIN
 442          KM   S-GRAPH TYPE=AGRICULTURE
 443          BA   0.263
 444          LG    1.00    0.25    4.10    0.45       0
 445          UI       8       8      18      35      42      54      61      61      60      52
 446          UI      54      38      39      28      21      20      14      12       9       8
 447          UI       7       5       4       4       3       1       1       1       1       1
 448          UI       1       1       1       1       1       1       1       0       1       0
 449          UI       0       0       0       0       0       0       0       0       0       0
              *

 450          KK      I5 COMBINE   I5-I6
 451          KM   COMBINE ROUTED HYDROGRAPH FROM I4 WITH RUNOFF FROM 55 @ I5
 452          KO       3
 453          HC       2
              *

 454          KK   I5-I6              I5
 455          KM   STORAGE ROUTE FROM I5 TO I6 THROUGH SPRR TRESTLE
 456          RS       1    ELEV   892.0     0.0
 457          SV     0.0     0.1    25.1  124.92  273.66  273.66  273.66  273.66  273.66  273.66
 458          SV  273.66  273.66  273.66  273.66  273.66  273.66  273.66  273.66  273.66  273.66
 459          SE   892.0   894.0   896.0   898.0   900.0   900.0   900.0   900.0   900.0   900.0
 460          SE   900.0   900.0   900.0   900.0   900.0   900.0   900.0   900.0   900.0   900.0
 461          SQ     0.0    60.0   150.0   221.0   400.0   830.0  1134.0  1488.0  1892.0  1892.0
 462          SQ  1892.0  1892.0  1892.0  1892.0  1892.0  1892.0  1892.0  1892.0  1892.0  1892.0
 463          SE  892.00  894.08  895.18  895.88  896.08  896.28  896.38  896.48  896.58  896.58
 464          SE  896.58  896.58  896.58  896.58  896.58  896.58  896.58  896.58  896.58  896.58
              *

 465          KK      63   BASIN
 466          KM   S-GRAPH TYPE=AGRICULTURE
 467          BA   0.499
 468          LG    0.97    0.25    4.15    0.40       1
```

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469          UI      16      22      49      89     109     123     132     129     111     106
470          UI      88      64      51      47      29      24      20      15      14       9
471          UI       8       7       2       2       2       2       2       2       2       2
472          UI       2       2       2       2       0       0       0       0       0       0
             *
1                                          HEC-1 INPUT                                          PAGE 13

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

473          KK      I6 COMBINE
474          KM   COMBINE STORAGE HYDROGRAPH FROM I5 WITH RUNOFF FROM 63 @ I6
475          KO       3
476          ZW   A=RBW B=I6 C=FLOW E=15MIN F=100Y6H-EX
477          HC       2
             *

478          KK    RIDJ
479          KM   ******************************************************************************
480          KM   **   SUB-WATERSHED J   ***********************************************************
481          KM   ******************************************************************************
482          KM   FALSE BASIN TO SIMULATE INFLOW FROM RID
483          BA  0.0001
484          ZR  =QI A=RID RID B=27599 LAT STRUCT C=FLOW-WEIR D=02JAN1994 E=15MIN F=RID-100-06E
             *

485          KK  J3S-J4   ROUTE     J3S
486          KM   ROUTE INFLOW FROM RID CONCENTRATED AT J3S TO J4 (CHANNEL A)
487          RS       1    FLOW     0.0     0.0
488          RC   0.100   0.100   0.100    8057  0.0060    0.00
489          RX    0.00  250.00  500.00  750.00 1000.00 1333.30 1666.60 2000.00
490          RY   10.00    7.50    5.00    2.50    0.00    3.30    6.60   10.00
             *

491          KK      33   BASIN
492          KM   S-GRAPH TYPE=AGRICULTURE
493          BA   1.002
494          LG    0.91    0.26    3.95    0.44       1
495          UI      23      23      41      68     126     127     173     176     191     192
496          UI     185     160     167     141     126     109      87      69      67      54
497          UI      41      36      28      26      21      21      15      13      13      13
498          UI       5       3       3       3       2       3       3       3       3       2
499          UI       3       3       3       3       2       3       3       3       0       0
             *

500          KK      J4 COMBINE   J4-J5
501          KM   COMBINE ROUTED HYDROGRAPH FROM J3S WITH RUNOFF FROM 33 @ J4
502          HC       2
             *

503          KK   J4-J5   ROUTE      J4
504          KM   ROUTE HYDROGRAPH FROM J4 TO J5 (CHANNEL A)
505          RS       5    FLOW     0.0     0.0
506          RC   0.100   0.100   0.100    5307  0.0080    0.00
507          RX    0.00  250.00  500.00  750.00 1000.00 1333.30 1666.60 2000.00
508          RY   10.00    7.50    5.00    2.50    0.00    3.30    6.60   10.00
             *

509          KK     45A   BASIN
510          KM   S-GRAPH TYPE=AGRICULTURE
511          BA   1.003
512          LG    0.94    0.26    4.00    0.44       0
513          UI      20      20      30      48      86     118     110     155     155     169
514          UI     168     169     149     140     156     111     111     101      77      67
1                                          HEC-1 INPUT                                          PAGE 14

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

515          UI      57      62      39      34      32      25      25      18      19      17
516          UI      11      11      12      11       6       2       3       2       3       2
517          UI       3       2       3       2       3       2       3       2       3       2
518          UI       3       0       0       0       0       0       0       0       0       0
             *

519          KK     J5A COMBINE  J5A-5B
520          KM   COMBINE ROUTED HYDROGRAPH FROM J4 WITH RUNOFF FROM 45A @ J5A
521          KO       3
522          HC       2
             *

523          KK  J5A-5B   ROUTE     J5A
524          KM   ROUTE HYDROGRAPH FROM J5A TO J5B (CHANNEL A)
525          RS       6    FLOW     0.0     0.0
526          RC   0.100   0.100   0.100    2736  0.0010    0.00
527          RX    0.00  250.00  500.00  750.00 1000.00 1333.30 1666.60 2000.00
528          RY   10.00    7.50    5.00    2.50    0.00    3.30    6.60   10.00
             *

529          KK     45B   BASIN
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```
530          KM   S-GRAPH TYPE=AGRICULTURE
531          BA   0.140
532          LG    0.68    0.26    4.00    0.42      18
533          UI      10      40      66      73      61      42      27      15      10       6
534          UI       4       1       1       1       1       2       1       0       0       0
             *

535          KK     J5B COMBINE  J5B-J6
536          KM   COMBINE ROUTED HYDROGRAPH FROM J5A WITH RUNOFF FROM 45B @ J5B
537          KO       3
538          HC       2
             *

539          KK  J5B-J6            J5B
540          KM   STORAGE ROUTE FROM J5B TO J6 THROUGH SPRR TRESTLE
541          RS       1    ELEV   892.0     0.0
542          SV     0.0   20.33   91.45  223.99  223.99  223.99  223.99  223.99  223.99  223.99
543          SV  223.99  223.99  223.99  223.99  223.99  223.99  223.99  223.99  223.99  223.99
544          SE   892.0   894.0   896.0   898.0   898.0   898.0   898.0   898.0   898.0   898.0
545          SE   898.0   898.0   898.0   898.0   898.0   898.0   898.0   898.0   898.0   898.0
546          SQ     0.0   150.0   230.0   308.0   825.0  1144.0  1970.0  1970.0  1970.0  1970.0
547          SQ  1970.0  1970.0  1970.0  1970.0  1970.0  1970.0  1970.0  1970.0  1970.0  1970.0
548          SE   892.0  893.68  895.08  895.48  895.68  895.88  896.08  896.08  896.08  896.08
549          SE  896.08  896.08  896.08  896.08  896.08  896.08  896.08  896.08  896.08  896.08
             *

550          KK      64   BASIN
551          KM   S-GRAPH TYPE=AGRICULTURE
552          BA   0.415
553          LG    0.98    0.25    4.35    0.45       0
554          UI      13      19      43      76      92     106     111     106      96      84
555          UI      74      52      40      38      23      20      15      12      11       7
556          UI       8       5       1       2       2       1       2       2       1       2
557          UI       2       1       2       1       0       0       0       0       0       0
             *
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1 HEC-1 INPUT PAGE 15

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

558          KK      J6 COMBINE
559          KM   COMBINE STORAGE HYDROGRAPH FROM J5B WITH RUNOFF FROM 64 @ J6
560          KO       3
561          ZW   A=RBW B=J6 C=FLOW E=15MIN F=100Y6H-EX
562          HC       2
563          ZZ
```

1

```
     SCHEMATIC DIAGRAM OF STREAM NETWORK
INPUT
 LINE     (V) ROUTING          (--->) DIVERSION OR PUMP FLOW

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

   32         68
               V
               V
   40      E1-E2
               .
               .
   52          .          59
               .           .
               .           .
   58         E2............
               .
               .
   63          .        RIDF
               .           V
               .           V
   70          .      F1S-F2
               .           .
               .           .
   76          .           .          27
               .           .           .
               .           .           .
   84          .          F2............
               .           V
               .           V
   87          .       F2-F3
               .           .
               .           .
   93          .           .          29
               .           .           .
               .           .           .
  102          .          F3............
               .           V
               .           V
  105          .       F3-F4
               .           .
               .           .
```

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111          .           .         41
             .           .          .
             .           .          .
121          .         F4............
             .          V
             .          V
124          .     F4-F5B
             .           .
             .           .
130          .           .       52B
             .           .          .
             .           .          .
137          .       F5B............
             .          V
             .          V
141          .     F5BF6B
             .           .
             .           .
152          .           .       60B
             .           .          .
             .           .          .
160          .       F6B............
             .           .
             .           .
165          .           .       52A
             .           .         V
             .           .         V
174          .           .    F5AF6A
             .           .          .
             .           .          .
186          .           .          .       60A
             .           .          .         .
             .           .          .         .
194          .           .       F6A............
             .           .          .
             .           .          .
199          .           .          .      RIDG
             .           .          .         V
             .           .          .         V
206          .           .          .    G3S-G4
             .           .          .         .
             .           .          .         .
212          .           .          .         .          28
             .           .          .         .           .
             .           .          .         .           .
220          .           .          .        G4............
             .           .          .         V
             .           .          .         V
223          .           .          .     G4-G5
             .           .          .         .
             .           .          .         .
229          .           .          .         .          30
             .           .          .         .           .
             .           .          .         .           .
239          .           .          .        G5............
             .           .          .         V
             .           .          .         V
242          .           .          .     G5-G6
             .           .          .         .
             .           .          .         .
248          .           .          .         .          42
             .           .          .         .           .
             .           .          .         .           .
258          .           .          .        G6............
             .           .          .         V
             .           .          .         V
261          .           .          .     G6-G7
             .           .          .         .
             .           .          .         .
267          .           .          .         .          53
             .           .          .         .           .
             .           .          .         .           .
275          .           .          .        G7............
             .           .          .         V
             .           .          .         V
279          .           .          .     G7-G8
             .           .          .         .
             .           .          .         .
290          .           .          .         .          61
             .           .          .         .           .
             .           .          .         .           .
297          .           .          .        G8............
             .           .          .         .
             .           .          .         .
302          .           .          .         .        RIDH
             .           .          .         .           V
             .           .          .         .           V
309          .           .          .         .      H3S-H4
             .           .          .         .           .
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315                                   31
                                       .
                                       .
325                                 H4.....
                                     V
                                     V
328                               H4-H5
                                       .
                                       .
334                                   43
                                       .
                                       .
344                                 H5.....
                                     V
                                     V
347                               H5-H6
                                       .
                                       .
353                                   54
                                       .
                                       .
362                                 H6.....
                                     V
                                     V
366                               H6-H7
                                       .
                                       .
377                                   62
                                       .
                                       .
385                                 H7.....
                                       .
                                       .
390                                RIDI
                                      V
                                      V
397                              I2S-I3
                                       .
                                       .
403                                   .          32
                                       .           .
                                       .           .
413                                   I3.....
                                      V
                                      V
416                                I3-I4
                                       .
                                       .
422                                   .          44
                                       .           .
                                       .           .
432                                   I4.....
                                      V
                                      V
435                                I4-I5
                                       .
                                       .
441                                   .          55
                                       .           .
                                       .           .
450                                   I5.....
                                      V
                                      V
454                                I5-I6
                                       .
                                       .
465                                   .          63
                                       .           .
                                       .           .
473                                   I6.....
                                       .
                                       .
478                                   .        RIDJ
                                       .          V
                                       .          V
485                                   .      J3S-J4
                                       .           .
                                       .           .
491                                   .           .          33
                                       .           .           .
                                       .           .           .
500                                   .          J4.....
                                       .           V
                                       .           V
503                                   .       J4-J5
                                       .           .
                                       .           .
509                                   .           .         45A
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                .         .         .         .         .         .         .         .
                .         .         .         .         .         .         .         .
  519           .         .         .         .         .         .      J5A...........
                .         .         .         .         .         .        V
                .         .         .         .         .         .        V
  523           .         .         .         .         .         .    J5A-5B
                .         .         .         .         .         .        .
                .         .         .         .         .         .        .
  529           .         .         .         .         .         .        .         45B
                .         .         .         .         .         .        .          .
                .         .         .         .         .         .        .          .
  535           .         .         .         .         .         .      J5B...........
                .         .         .         .         .         .        V
                .         .         .         .         .         .        V
  539           .         .         .         .         .         .    J5B-J6
                .         .         .         .         .         .        .
                .         .         .         .         .         .        .
  550           .         .         .         .         .         .        .          64
                .         .         .         .         .         .        .          .
                .         .         .         .         .         .        .          .
  558           .         .         .         .         .         .      J6...........
```

```
(***) RUNOFF ALSO COMPUTED AT THIS LOCATION
1****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*              JUN   1998              *
*           VERSION 4.1                *
*                                      *
*  RUN DATE   28FEB08  TIME  16:35:48  *
*                                      *
****************************************
```

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

```
                          FCDMC
                          0607BASE_EXST_6HR - Buckeye ADMP Existing Conditions Hydrology Update
                          Major Basin: 06
                          100 Year - Return Period
                          6 Hour Storm
                          Multiple Storms
                          Unit Hydrograph: S-Graph
                          01/09/2008

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

     IT          HYDROGRAPH TIME DATA
                        NMIN         15  MINUTES IN COMPUTATION INTERVAL
                       IDATE     2JAN94  STARTING DATE
                       ITIME       0000  STARTING TIME
                          NQ        400  NUMBER OF HYDROGRAPH ORDINATES
                      NDDATE     6JAN94  ENDING DATE
                      NDTIME       0345  ENDING TIME
                       ICENT         19  CENTURY MARK

                 COMPUTATION INTERVAL    0.25 HOURS
                      TOTAL TIME BASE   99.75 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

  12 JD          INDEX STORM NO. 1
                        STRM       3.30  PRECIPITATION DEPTH
                        TRDA       0.01  TRANSPOSITION DRAINAGE AREA

  13 PI            PRECIPITATION PATTERN
                      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                      0.01      0.02      0.02      0.08      0.16      0.46      0.08      0.02      0.02      0.01
                      0.01      0.01      0.01      0.01

  16 JD          INDEX STORM NO. 2
                        STRM       3.28  PRECIPITATION DEPTH
                        TRDA       0.50  TRANSPOSITION DRAINAGE AREA

  17 PI            PRECIPITATION PATTERN
                      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                      0.01      0.02      0.02      0.08      0.16      0.46      0.08      0.02      0.02      0.01
                      0.01      0.01      0.01      0.01
```

```
 20 JD          INDEX STORM NO. 3
                      STRM        3.26  PRECIPITATION DEPTH
                      TRDA        1.00  TRANSPOSITION DRAINAGE AREA

 21 PI            PRECIPITATION PATTERN
                    0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                    0.01      0.02      0.03      0.08      0.18      0.37      0.10      0.04      0.03      0.01
                    0.01      0.01      0.01      0.01

 24 JD          INDEX STORM NO. 4
                      STRM        3.17  PRECIPITATION DEPTH
                      TRDA        5.00  TRANSPOSITION DRAINAGE AREA

 25 PI            PRECIPITATION PATTERN
                    0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                    0.02      0.02      0.04      0.09      0.19      0.23      0.14      0.07      0.04      0.02
                    0.01      0.01      0.01      0.01

 28 JD          INDEX STORM NO. 5
                      STRM        3.10  PRECIPITATION DEPTH
                      TRDA       10.00  TRANSPOSITION DRAINAGE AREA

 29 PI            PRECIPITATION PATTERN
                    0.01      0.01      0.01      0.02      0.01      0.01      0.01      0.01      0.01      0.02
                    0.01      0.02      0.05      0.08      0.18      0.21      0.13      0.07      0.04      0.03
                    0.01      0.01      0.01      0.01


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


          **************
          *            *
 40 KK    *     E1-E2  *                  E1
          *            *
          **************

 42 KO          OUTPUT CONTROL VARIABLES
                     IPRNT           3  PRINT CONTROL
                     IPLOT           0  PLOT CONTROL
                     QSCAL          0.  HYDROGRAPH PLOT SCALE

             HYDROGRAPH ROUTING DATA

 43 RS          STORAGE ROUTING
                     NSTPS           1  NUMBER OF SUBREACHES
                      ITYP        ELEV  TYPE OF INITIAL CONDITION
                    RSVRIC      871.00  INITIAL CONDITION
                         X        0.00 WORKING R AND D COEFFICIENT

 44 SV            STORAGE         0.0       1.4       5.8      13.4      41.1      96.8     182.0     292.0     426.3     581.7
                                756.7     957.2    1179.1    1179.1    1179.1    1179.1    1179.1    1179.1    1179.1    1179.1

 46 SE          ELEVATION      872.00    874.00    876.00    878.00    880.00    882.00    884.00    886.00    888.00    890.00
                               892.00    894.00    896.00    896.00    896.00    896.00    896.00    896.00    896.00    896.00

 48 SQ          DISCHARGE          0.      100.      240.      360.      480.      600.     1020.     2000.     2760.     2760.
                                 2760.     2760.     2760.     2760.     2760.     2760.     2760.     2760.     2760.     2760.

 50 SE          ELEVATION      873.07    874.07    875.07    876.07    877.07    878.07    879.07    880.07    881.07    881.07
                               881.07    881.07    881.07    881.07    881.07    881.07    881.07    881.07    881.07    881.07

                                                                  ***

                                          COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

          STORAGE       0.00      0.74      1.39      1.55      3.77      5.84      6.10      9.86     13.36     14.33
          OUTFLOW       0.00      0.00     93.00    100.00    240.00    351.60    360.00    480.00    591.60    600.00
        ELEVATION     872.00    873.07    874.00    874.07    875.07    876.00    876.07    877.07    878.00    878.07

          STORAGE      28.20     41.09     43.04     70.90     96.81    182.04    292.00    426.27    581.71    756.67
          OUTFLOW    1020.00   1931.39   2000.00   2760.00   2760.00   2760.00   2760.00   2760.00   2760.00   2760.00
        ELEVATION     879.07    880.00    880.07    881.07    882.00    884.00    886.00    888.00    890.00    892.00

          STORAGE     957.16   1179.10
          OUTFLOW    2760.00   2760.00
        ELEVATION     894.00    896.00

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN        0. TO       93.
                THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
                THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

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

                        HYDROGRAPH AT STATION    E1-E2
                      TRANSPOSITION AREA      0.0 SQ MI
```

```
  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                      6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     370.      4.75                  65.         16.          5.           4.
                         (INCHES)    1.467       1.467       1.467        1.467
                          (AC-FT)     32.         32.         32.          32.

 PEAK STORAGE   TIME                         MAXIMUM AVERAGE STORAGE
                                      6-HR       24-HR       72-HR     99.75-HR
+  (AC-FT)      (HR)
       6.       4.75                   2.          1.          1.           1.

  PEAK STAGE    TIME                          MAXIMUM AVERAGE STAGE
                                      6-HR       24-HR       72-HR     99.75-HR
+   (FEET)      (HR)
    876.15      4.75                873.62      873.21      873.11       873.07

                         CUMULATIVE AREA =    0.41 SQ MI


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

                          HYDROGRAPH AT STATION    E1-E2
                        TRANSPOSITION AREA      0.5 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                      6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     367.      4.50                  64.         16.          5.           4.
                         (INCHES)    1.451       1.451       1.451        1.451
                          (AC-FT)     32.         32.         32.          32.

 PEAK STORAGE   TIME                         MAXIMUM AVERAGE STORAGE
                                      6-HR       24-HR       72-HR     99.75-HR
+  (AC-FT)      (HR)
       6.       4.50                   2.          1.          1.           1.

  PEAK STAGE    TIME                          MAXIMUM AVERAGE STAGE
                                      6-HR       24-HR       72-HR     99.75-HR
+   (FEET)      (HR)
    876.13      4.50                873.62      873.21      873.11       873.07

                         CUMULATIVE AREA =    0.41 SQ MI


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

                          HYDROGRAPH AT STATION    E1-E2
                        TRANSPOSITION AREA      1.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                      6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     330.      4.50                  59.         15.          5.           4.
                         (INCHES)    1.320       1.320       1.320        1.320
                          (AC-FT)     29.         29.         29.          29.

 PEAK STORAGE   TIME                         MAXIMUM AVERAGE STORAGE
                                      6-HR       24-HR       72-HR     99.75-HR
+  (AC-FT)      (HR)
       5.       4.50                   1.          1.          1.           1.

  PEAK STAGE    TIME                          MAXIMUM AVERAGE STAGE
                                      6-HR       24-HR       72-HR     99.75-HR
+   (FEET)      (HR)
    875.82      4.50                873.57      873.20      873.11       873.06

                         CUMULATIVE AREA =    0.41 SQ MI


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

                          HYDROGRAPH AT STATION    E1-E2
                        TRANSPOSITION AREA      5.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                      6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     246.      4.75                  46.         12.          4.           3.
                         (INCHES)    1.045       1.045       1.045        1.045
                          (AC-FT)     23.         23.         23.          23.

 PEAK STORAGE   TIME                         MAXIMUM AVERAGE STORAGE
                                      6-HR       24-HR       72-HR     99.75-HR
+  (AC-FT)      (HR)
```

```
        4.      4.75                    1.          1.          1.          1.

  PEAK STAGE    TIME                          MAXIMUM AVERAGE STAGE
                                       6-HR       24-HR       72-HR     99.75-HR
+   (FEET)      (HR)
    875.12      4.75                873.48      873.17      873.10      873.06

                         CUMULATIVE AREA =    0.41 SQ MI


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

                          HYDROGRAPH AT STATION    E1-E2
                        TRANSPOSITION AREA     10.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                       6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                             (CFS)
+     218.      4.75                    41.         10.          3.          2.
                        (INCHES)     0.933       0.933       0.933       0.933
                         (AC-FT)       21.         21.         21.         21.

 PEAK STORAGE   TIME                          MAXIMUM AVERAGE STORAGE
                                       6-HR       24-HR       72-HR     99.75-HR
+  (AC-FT)      (HR)
        3.      4.75                     1.          1.          1.          1.

  PEAK STAGE    TIME                          MAXIMUM AVERAGE STAGE
                                       6-HR       24-HR       72-HR     99.75-HR
+   (FEET)      (HR)
    874.91      4.75                873.44      873.16      873.10      873.06

                         CUMULATIVE AREA =    0.41 SQ MI

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


                         INTERPOLATED HYDROGRAPH AT    E1-E2

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                       6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                             (CFS)
+     367.      4.50                    64.         16.          5.          4.
                        (INCHES)     1.451       1.451       1.451       1.451
                         (AC-FT)       32.         32.         32.         32.

                         CUMULATIVE AREA =    0.41 SQ MI


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


            **************
            *            *
   58 KK    *        E2  *      COMBINE
            *            *
            **************

   60 KO          OUTPUT CONTROL VARIABLES
                        IPRNT           3  PRINT CONTROL
                        IPLOT           0  PLOT CONTROL
                        QSCAL          0.  HYDROGRAPH PLOT SCALE

   62 HC          HYDROGRAPH COMBINATION
                        ICOMP           2  NUMBER OF HYDROGRAPHS TO COMBINE

                                                                  ***

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

                          HYDROGRAPH AT STATION       E2
                        TRANSPOSITION AREA      0.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                       6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                             (CFS)
+     616.      4.50                   103.         26.          9.          6.
                        (INCHES)     1.443       1.446       1.446       1.446
                         (AC-FT)       51.         51.         51.         51.

                         CUMULATIVE AREA =    0.66 SQ MI
```

```
      ***             ***             ***             ***             ***

                        HYDROGRAPH AT STATION       E2
                      TRANSPOSITION AREA      0.5 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     611.      4.50                102.         26.          9.           6.
                        (INCHES)    1.428       1.430       1.430        1.430
                         (AC-FT)     51.         51.         51.          51.

                        CUMULATIVE AREA =    0.66 SQ MI


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

                        HYDROGRAPH AT STATION       E2
                      TRANSPOSITION AREA      1.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     539.      4.50                 92.         23.          8.           6.
                        (INCHES)    1.291       1.293       1.293        1.293
                         (AC-FT)     46.         46.         46.          46.

                        CUMULATIVE AREA =    0.66 SQ MI


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

                        HYDROGRAPH AT STATION       E2
                      TRANSPOSITION AREA      5.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     388.      4.50                 72.         18.          6.           4.
                        (INCHES)    1.011       1.014       1.014        1.014
                         (AC-FT)     36.         36.         36.          36.

                        CUMULATIVE AREA =    0.66 SQ MI


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

                        HYDROGRAPH AT STATION       E2
                      TRANSPOSITION AREA     10.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     339.      4.50                 64.         16.          5.           4.
                        (INCHES)    0.900       0.903       0.903        0.903
                         (AC-FT)     32.         32.         32.          32.

                        CUMULATIVE AREA =    0.66 SQ MI

   -----DSS---ZOPEN:  Existing File Opened,  File: J:\2006\10-0607\DESIGN~2\DRAINA~1\HEC-RAS\Model\A1.DSS
                      Unit: 71;  DSS Versions - Software: 6-LD, File: 6-LD
 -----DSS---ZWRITE Unit  71; Vers.    1:  /RBW/E2/FLOW/01JAN1994/15MIN/100Y6H-EX/
      ***             ***             ***             ***             ***


                        INTERPOLATED HYDROGRAPH AT       E2

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     581.      4.50                 98.         25.          8.           6.
                        (INCHES)    1.371       1.374       1.374        1.374
                         (AC-FT)     49.         49.         49.          49.

                        CUMULATIVE AREA =    0.66 SQ MI

        ----- Entering ZRRTSX for unit 71 -----
 Pathname: /RID RID/8199 LAT STRUCT/FLOW-WEIR//15MIN/RID-100-06E/
        Time Window set.  Interval:    15  Number of data values:      1
        Starting date and time:  Jan 1, 1994  2400  (  34334 1440)
        Ending   date and time:  Jan 1, 1994  2400  (  34334 1440)
        Input time offset:      0
        After ZRDINF, Record found: T
```

```
        Pathname: /RID RID/8199 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/RID-100-06E/
        Number of actual data: 2976  Header length:   0
        Compression:   0  Quality:   0  Double: F
-----DSS--- ZREAD Unit  71; Vers.    1:  /RID RID/8199 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/RID-100-06E/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:    1    JULS:   34334  ISTIME:  1440
        NLDATA: 2976   JULSD:   34334
        JULS: 01JAN94       JULSD: 01JAN94
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:   96  NDATA: 2976  NREAD:    1  ILIM:    1
      ----- Exiting ZRRTS, Number of data values:      1,  Status:  0
        Offset:       0,  Units: CFS     ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
Pathname: /RID RID/8199 LAT STRUCT/FLOW-WEIR//15MIN/RID-100-06E/
        Time Window set.  Interval:    15  Number of data values:    401
        Starting date and time:  Jan 1, 1994  2400  (  34334 1440)
        Ending   date and time:  Jan 6, 1994  0400  (  34339  240)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /RID RID/8199 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/RID-100-06E/
        Number of actual data: 2976  Header length:   0
        Compression:   0  Quality:   0  Double: F
-----DSS--- ZREAD Unit  71; Vers.    1:  /RID RID/8199 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/RID-100-06E/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:  401    JULS:   34334  ISTIME:  1440
        NLDATA: 2976   JULSD:   34334
        JULS: 01JAN94       JULSD: 01JAN94
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:   96  NDATA: 2976  NREAD:  401  ILIM:  401
      ----- Exiting ZRRTS, Number of data values:    401,  Status:  1
        Offset:       0,  Units: CFS     ,  Type:INST-VAL


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


            **************
            *            *
 137 KK     *       F5B  *      COMBINE F5B-F6B
            *            *
            **************

 139 KO          OUTPUT CONTROL VARIABLES
                       IPRNT           3  PRINT CONTROL
                       IPLOT           0  PLOT CONTROL
                       QSCAL          0.  HYDROGRAPH PLOT SCALE

 140 HC          HYDROGRAPH COMBINATION
                       ICOMP           2  NUMBER OF HYDROGRAPHS TO COMBINE

                                                                  ***

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

                         HYDROGRAPH AT STATION      F5B
                       TRANSPOSITION AREA      0.0 SQ MI

 PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                         (CFS)
+     398.      9.00                337.        125.         42.          30.
                       (INCHES)     1.067       1.588       1.589        1.589
                        (AC-FT)     167.        249.        249.         249.

                        CUMULATIVE AREA =    2.94 SQ MI


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

                         HYDROGRAPH AT STATION      F5B
                       TRANSPOSITION AREA      0.5 SQ MI

 PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                         (CFS)
+     393.      9.00                334.        124.         41.          30.
                       (INCHES)     1.057       1.575       1.576        1.576
                        (AC-FT)     165.        247.        247.         247.

                        CUMULATIVE AREA =    2.94 SQ MI


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

                         HYDROGRAPH AT STATION      F5B
                       TRANSPOSITION AREA      1.0 SQ MI
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  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     338.      9.50                 287.        109.         36.         26.
                        (INCHES)    0.909       1.380       1.381       1.381
                         (AC-FT)    142.        216.        216.        216.

                        CUMULATIVE AREA =    2.94 SQ MI


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

                        HYDROGRAPH AT STATION      F5B
                      TRANSPOSITION AREA      5.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     271.     10.25                 215.         83.         28.         20.
                        (INCHES)    0.680       1.052       1.053       1.053
                         (AC-FT)    106.        165.        165.        165.

                        CUMULATIVE AREA =    2.94 SQ MI


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

                        HYDROGRAPH AT STATION      F5B
                      TRANSPOSITION AREA     10.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     254.     10.50                 194.         75.         25.         18.
                        (INCHES)    0.614       0.951       0.952       0.952
                         (AC-FT)     96.        149.        149.        149.

                        CUMULATIVE AREA =    2.94 SQ MI

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


                        INTERPOLATED HYDROGRAPH AT      F5B

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     291.     10.00                 242.         93.         31.         22.
                        (INCHES)    0.766       1.180       1.181       1.181
                         (AC-FT)    120.        185.        185.        185.

                        CUMULATIVE AREA =    2.94 SQ MI


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


            **************
            *            *
  160 KK    *       F6B  *      COMBINE
            *            *
            **************

  162 KO          OUTPUT CONTROL VARIABLES
                        IPRNT           3  PRINT CONTROL
                        IPLOT           0  PLOT CONTROL
                        QSCAL          0.  HYDROGRAPH PLOT SCALE

  164 HC          HYDROGRAPH COMBINATION
                        ICOMP           2  NUMBER OF HYDROGRAPHS TO COMBINE

                                                                  ***

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

                        HYDROGRAPH AT STATION      F6B
                      TRANSPOSITION AREA      0.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
```

```
                                (CFS)
+     440.      5.25                    385.        144.         48.          35.
                            (INCHES)    1.018       1.520       1.522        1.522
                             (AC-FT)     191.        285.        285.         285.

                             CUMULATIVE AREA =    3.51 SQ MI


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

                             HYDROGRAPH AT STATION      F6B
                           TRANSPOSITION AREA      0.5 SQ MI

  PEAK FLOW     TIME                            MAXIMUM AVERAGE FLOW
                                        6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                                (CFS)
+     434.      5.25                    380.        142.         47.          34.
                            (INCHES)    1.007       1.507       1.509        1.509
                             (AC-FT)     189.        282.        283.         283.

                             CUMULATIVE AREA =    3.51 SQ MI


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

                             HYDROGRAPH AT STATION      F6B
                           TRANSPOSITION AREA      1.0 SQ MI

  PEAK FLOW     TIME                            MAXIMUM AVERAGE FLOW
                                        6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                                (CFS)
+     352.      5.25                    315.        124.         41.          30.
                            (INCHES)    0.835       1.311       1.312        1.312
                             (AC-FT)     156.        245.        246.         246.

                             CUMULATIVE AREA =    3.51 SQ MI


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

                             HYDROGRAPH AT STATION      F6B
                           TRANSPOSITION AREA      5.0 SQ MI

  PEAK FLOW     TIME                            MAXIMUM AVERAGE FLOW
                                        6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                                (CFS)
+     273.     10.25                    218.         93.         31.          22.
                            (INCHES)    0.578       0.986       0.988        0.988
                             (AC-FT)     108.        185.        185.         185.

                             CUMULATIVE AREA =    3.51 SQ MI


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

                             HYDROGRAPH AT STATION      F6B
                           TRANSPOSITION AREA     10.0 SQ MI

  PEAK FLOW     TIME                            MAXIMUM AVERAGE FLOW
                                        6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                                (CFS)
+     256.     10.50                    196.         83.         28.          20.
                            (INCHES)    0.519       0.884       0.885        0.885
                             (AC-FT)      97.        166.        166.         166.

                             CUMULATIVE AREA =    3.51 SQ MI

 -----DSS---ZWRITE Unit  71; Vers.    1:  /RBW/F6B/FLOW/01JAN1994/15MIN/100Y6H-EX/
       ***             ***             ***             ***             ***


                             INTERPOLATED HYDROGRAPH AT      F6B

  PEAK FLOW     TIME                            MAXIMUM AVERAGE FLOW
                                        6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                                (CFS)
+     283.     10.25                    235.        100.         33.          24.
                            (INCHES)    0.621       1.057       1.059        1.059
                             (AC-FT)     116.        198.        198.         198.

                             CUMULATIVE AREA =    3.51 SQ MI
```

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

              **************
              *            *
  174 KK      *    F5AF6A  *                F5A
              *            *
              **************

  176 KO          OUTPUT CONTROL VARIABLES
                        IPRNT          3  PRINT CONTROL
                        IPLOT          0  PLOT CONTROL
                        QSCAL         0.  HYDROGRAPH PLOT SCALE

                HYDROGRAPH ROUTING DATA

  177 RS          STORAGE ROUTING
                        NSTPS          1  NUMBER OF SUBREACHES
                         ITYP       ELEV  TYPE OF INITIAL CONDITION
                        RSVRIC     894.00  INITIAL CONDITION
                             X       0.00 WORKING R AND D COEFFICIENT

  178 SV            STORAGE        0.0       0.0       0.6      12.9      61.8      61.8      61.8      61.8      61.8      61.8
                                  61.8      61.8      61.8      61.8      61.8      61.8      61.8      61.8      61.8      61.8

  180 SE          ELEVATION      894.00    896.00    898.00    900.00    902.00    902.00    902.00    902.00    902.00    902.00
                                 902.00    902.00    902.00    902.00    902.00    902.00    902.00    902.00    902.00    902.00

  182 SQ          DISCHARGE         0.       58.      112.      147.      174.      199.      219.      238.      255.      272.
                                  287.      302.      316.      330.      343.      355.      367.      379.      401.      422.

  184 SE          ELEVATION      894.00    896.40    896.90    897.40    897.90    898.40    898.90    899.40    899.90    900.40
                                 900.90    901.40    901.90    902.40    902.90    903.40    903.90    904.40    905.40    906.40

                                                                  ***

                                          COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

            STORAGE       0.00      0.02      0.14      0.30      0.45      0.61      0.64      3.09      6.16      9.23
            OUTFLOW       0.00     48.42     58.10    112.20    146.60    174.00    178.90    198.50    218.50    237.60
          ELEVATION     894.00    896.00    896.40    896.90    897.40    897.90    898.00    898.40    898.90    899.40

            STORAGE      12.30     12.91     22.68     34.89     47.11     59.32     61.76 NaN       NaN       NaN
            OUTFLOW     255.30    258.60    271.80    287.40    302.20    316.30    318.98    329.70    342.70    355.20
          ELEVATION     899.90    900.00    900.40    900.90    901.40    901.90    902.00    902.40    902.90    903.40

            STORAGE  NaN       NaN       NaN       NaN
            OUTFLOW     367.20    378.90    401.20    422.30
          ELEVATION     903.90    904.40    905.40    906.40

 *** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN        0. TO      179.
                 THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
                 THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

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

                        HYDROGRAPH AT STATION   F5AF6A
                      TRANSPOSITION AREA      0.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+      72.      6.25                 37.         10.          3.          2.
                        (INCHES)    1.086       1.144       1.144       1.144
                         (AC-FT)     18.         19.         19.         19.

 PEAK STORAGE   TIME                         MAXIMUM AVERAGE STORAGE
                                     6-HR       24-HR       72-HR     99.75-HR
+  (AC-FT)      (HR)
       0.       6.25                  0.          0.          0.          0.

  PEAK STAGE    TIME                          MAXIMUM AVERAGE STAGE
                                     6-HR       24-HR       72-HR     99.75-HR
+   (FEET)      (HR)
    896.53      6.25                895.44      894.38      894.13      894.09

                         CUMULATIVE AREA =    0.31 SQ MI

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

                        HYDROGRAPH AT STATION   F5AF6A
                      TRANSPOSITION AREA      0.5 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
```

```
+   (CFS)        (HR)
                                (CFS)
+      71.       6.25                 36.         10.          3.           2.
                            (INCHES)     1.073       1.131       1.131        1.131
                             (AC-FT)       18.         19.         19.          19.

 PEAK STORAGE   TIME                          MAXIMUM AVERAGE STORAGE
                                        6-HR       24-HR       72-HR     99.75-HR
+  (AC-FT)       (HR)
        0.       6.25                   0.          0.          0.           0.

  PEAK STAGE    TIME                           MAXIMUM AVERAGE STAGE
                                        6-HR       24-HR       72-HR     99.75-HR
+   (FEET)       (HR)
    896.52       6.25                895.43      894.38      894.13       894.09

                             CUMULATIVE AREA =    0.31 SQ MI


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

                              HYDROGRAPH AT STATION   F5AF6A
                            TRANSPOSITION AREA      1.0 SQ MI

  PEAK FLOW     TIME                           MAXIMUM AVERAGE FLOW
                                        6-HR       24-HR       72-HR     99.75-HR
+   (CFS)        (HR)
                                (CFS)
+      60.       6.25                 31.          8.          3.           2.
                            (INCHES)     0.912       0.962       0.962        0.962
                             (AC-FT)       15.         16.         16.          16.

 PEAK STORAGE   TIME                          MAXIMUM AVERAGE STORAGE
                                        6-HR       24-HR       72-HR     99.75-HR
+  (AC-FT)       (HR)
        0.       6.25                   0.          0.          0.           0.

  PEAK STAGE    TIME                           MAXIMUM AVERAGE STAGE
                                        6-HR       24-HR       72-HR     99.75-HR
+   (FEET)       (HR)
    896.42       6.25                895.26      894.33      894.11       894.08

                             CUMULATIVE AREA =    0.31 SQ MI


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

                              HYDROGRAPH AT STATION   F5AF6A
                            TRANSPOSITION AREA      5.0 SQ MI

  PEAK FLOW     TIME                           MAXIMUM AVERAGE FLOW
                                        6-HR       24-HR       72-HR     99.75-HR
+   (CFS)        (HR)
                                (CFS)
+      40.       6.25                 20.          5.          2.           1.
                            (INCHES)     0.605       0.638       0.638        0.638
                             (AC-FT)       10.         11.         11.          11.

 PEAK STORAGE   TIME                          MAXIMUM AVERAGE STORAGE
                                        6-HR       24-HR       72-HR     99.75-HR
+  (AC-FT)       (HR)
        0.       5.75                   0.          0.          0.           0.

  PEAK STAGE    TIME                           MAXIMUM AVERAGE STAGE
                                        6-HR       24-HR       72-HR     99.75-HR
+   (FEET)       (HR)
    895.65       6.25                894.84      894.22      894.07       894.05

                             CUMULATIVE AREA =    0.31 SQ MI


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

                              HYDROGRAPH AT STATION   F5AF6A
                            TRANSPOSITION AREA     10.0 SQ MI

  PEAK FLOW     TIME                           MAXIMUM AVERAGE FLOW
                                        6-HR       24-HR       72-HR     99.75-HR
+   (CFS)        (HR)
                                (CFS)
+      34.       6.25                 17.          5.          2.           1.
                            (INCHES)     0.512       0.540       0.540        0.540
                             (AC-FT)        9.          9.          9.           9.

 PEAK STORAGE   TIME                          MAXIMUM AVERAGE STORAGE
                                        6-HR       24-HR       72-HR     99.75-HR
+  (AC-FT)       (HR)
        0.       5.75                   0.          0.          0.           0.
```

```
  PEAK STAGE    TIME                          MAXIMUM AVERAGE STAGE
                                     6-HR       24-HR       72-HR     99.75-HR
+   (FEET)      (HR)
    895.40      6.25                894.71      894.19      894.06       894.05

                         CUMULATIVE AREA =    0.31 SQ MI

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


                         INTERPOLATED HYDROGRAPH AT   F5AF6A

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                           (CFS)
+      71.      6.25                 36.         10.          3.           2.
                         (INCHES)   1.074       1.132       1.132        1.132
                          (AC-FT)    18.         19.         19.          19.

                         CUMULATIVE AREA =    0.31 SQ MI


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


            **************
            *            *
  194 KK    *       F6A  *      COMBINE
            *            *
            **************

  196 KO          OUTPUT CONTROL VARIABLES
                        IPRNT          3  PRINT CONTROL
                        IPLOT          0  PLOT CONTROL
                        QSCAL         0.  HYDROGRAPH PLOT SCALE

  198 HC          HYDROGRAPH COMBINATION
                        ICOMP          2  NUMBER OF HYDROGRAPHS TO COMBINE

                                                                  ***

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

                          HYDROGRAPH AT STATION      F6A
                        TRANSPOSITION AREA      0.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                           (CFS)
+     220.      5.75                 97.         25.          8.           6.
                         (INCHES)   1.246       1.300       1.300        1.300
                          (AC-FT)    48.         50.         50.          50.

                         CUMULATIVE AREA =    0.73 SQ MI

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

                          HYDROGRAPH AT STATION      F6A
                        TRANSPOSITION AREA      0.5 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                           (CFS)
+     217.      5.25                 96.         25.          8.           6.
                         (INCHES)   1.234       1.286       1.286        1.286
                          (AC-FT)    48.         50.         50.          50.

                         CUMULATIVE AREA =    0.73 SQ MI

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

                          HYDROGRAPH AT STATION      F6A
                        TRANSPOSITION AREA      1.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                           (CFS)
+     188.      5.50                 83.         22.          7.           5.
                         (INCHES)   1.065       1.113       1.113        1.113
                          (AC-FT)    41.         43.         43.          43.
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                        CUMULATIVE AREA =    0.73 SQ MI

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

                        HYDROGRAPH AT STATION      F6A
                      TRANSPOSITION AREA      5.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                            (CFS)
+     136.      5.50                60.         16.          5.           4.
                        (INCHES)   0.775       0.817       0.817        0.817
                         (AC-FT)     30.         32.         32.          32.

                        CUMULATIVE AREA =    0.73 SQ MI

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

                        HYDROGRAPH AT STATION      F6A
                      TRANSPOSITION AREA     10.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                            (CFS)
+     118.      5.50                53.         14.          5.           3.
                        (INCHES)   0.674       0.715       0.715        0.715
                         (AC-FT)     26.         28.         28.          28.

                        CUMULATIVE AREA =    0.73 SQ MI

 -----DSS---ZWRITE Unit  71; Vers.    1:  /RBW/F6A/FLOW/01JAN1994/15MIN/100Y6H-EX/
      ***             ***             ***             ***             ***


                        INTERPOLATED HYDROGRAPH AT      F6A

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                            (CFS)
+     200.      5.25                89.         23.          8.           6.
                        (INCHES)   1.143       1.193       1.193        1.193
                         (AC-FT)     44.         46.         46.          46.

                        CUMULATIVE AREA =    0.73 SQ MI

        ----- Entering ZRRTSX for unit 71 -----
 Pathname: /RID RID/13399 LAT STRUCT/FLOW-WEIR//15MIN/RID-100-06E/
        Time Window set.  Interval:    15  Number of data values:      1
        Starting date and time:  Jan 1, 1994  2400  (  34334 1440)
        Ending   date and time:  Jan 1, 1994  2400  (  34334 1440)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /RID RID/13399 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/RID-100-06E/
        Number of actual data: 2976  Header length:   0
        Compression:   0  Quality:   0  Double: F
 -----DSS--- ZREAD Unit  71; Vers.    1:  /RID RID/13399 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/RID-100-06E/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:    1    JULS:   34334  ISTIME:  1440
        NLDATA: 2976   JULSD:   34334
        JULS: 01JAN94       JULSD: 01JAN94
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:   96  NDATA: 2976  NREAD:    1  ILIM:    1
      ----- Exiting ZRRTS, Number of data values:      1,  Status:  0
        Offset:       0,  Units: CFS     ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
 Pathname: /RID RID/13399 LAT STRUCT/FLOW-WEIR//15MIN/RID-100-06E/
        Time Window set.  Interval:    15  Number of data values:    401
        Starting date and time:  Jan 1, 1994  2400  (  34334 1440)
        Ending   date and time:  Jan 6, 1994  0400  (  34339  240)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /RID RID/13399 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/RID-100-06E/
        Number of actual data: 2976  Header length:   0
        Compression:   0  Quality:   0  Double: F
 -----DSS--- ZREAD Unit  71; Vers.    1:  /RID RID/13399 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/RID-100-06E/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:  401    JULS:   34334  ISTIME:  1440
        NLDATA: 2976   JULSD:   34334
        JULS: 01JAN94       JULSD: 01JAN94
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:   96  NDATA: 2976  NREAD:  401  ILIM:  401
      ----- Exiting ZRRTS, Number of data values:    401,  Status:  1
```

```
        Offset:       0,  Units: CFS     ,  Type:INST-VAL


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


            **************
            *            *
  275 KK    *        G7  *      COMBINE   G7-G8
            *            *
            **************

  277 KO          OUTPUT CONTROL VARIABLES
                        IPRNT           3  PRINT CONTROL
                        IPLOT           0  PLOT CONTROL
                        QSCAL          0.  HYDROGRAPH PLOT SCALE

  278 HC          HYDROGRAPH COMBINATION
                        ICOMP           2  NUMBER OF HYDROGRAPHS TO COMBINE

                                                                  ***

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

                        HYDROGRAPH AT STATION       G7
                      TRANSPOSITION AREA      0.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     321.     10.25                279.        106.         36.          26.
                        (INCHES)    1.065       1.627       1.635        1.635
                         (AC-FT)     138.        211.        212.         212.

                        CUMULATIVE AREA =    2.44 SQ MI


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

                        HYDROGRAPH AT STATION       G7
                      TRANSPOSITION AREA      0.5 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     319.     10.25                276.        106.         35.          26.
                        (INCHES)    1.055       1.613       1.621        1.621
                         (AC-FT)     137.        210.        211.         211.

                        CUMULATIVE AREA =    2.44 SQ MI


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

                        HYDROGRAPH AT STATION       G7
                      TRANSPOSITION AREA      1.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     292.     10.50                241.         94.         32.          23.
                        (INCHES)    0.919       1.437       1.445        1.445
                         (AC-FT)     119.        187.        188.         188.

                        CUMULATIVE AREA =    2.44 SQ MI


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

                        HYDROGRAPH AT STATION       G7
                      TRANSPOSITION AREA      5.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     245.     11.00                181.         73.         24.          18.
                        (INCHES)    0.689       1.112       1.120        1.120
                         (AC-FT)      90.        144.        145.         145.

                        CUMULATIVE AREA =    2.44 SQ MI


      ***             ***             ***             ***             ***
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                        HYDROGRAPH AT STATION       G7
                      TRANSPOSITION AREA     10.0 SQ MI

  PEAK FLOW     TIME                        MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                         (CFS)
+     232.     11.25                 163.         66.         22.          16.
                      (INCHES)     0.624      1.011       1.019        1.019
                       (AC-FT)      81.        131.        132.         132.

                       CUMULATIVE AREA =    2.44 SQ MI

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


                       INTERPOLATED HYDROGRAPH AT       G7

  PEAK FLOW     TIME                        MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                         (CFS)
+     261.     10.75                 206.         82.         28.          20.
                      (INCHES)     0.787      1.257       1.265        1.265
                       (AC-FT)      102.        163.        164.         164.

                       CUMULATIVE AREA =    2.44 SQ MI


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


            **************
            *            *
  297 KK    *        G8  *      COMBINE
            *            *
            **************

  299 KO          OUTPUT CONTROL VARIABLES
                        IPRNT           3  PRINT CONTROL
                        IPLOT           0  PLOT CONTROL
                        QSCAL          0.  HYDROGRAPH PLOT SCALE

  301 HC          HYDROGRAPH COMBINATION
                        ICOMP           2  NUMBER OF HYDROGRAPHS TO COMBINE

                                                                  ***

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

                        HYDROGRAPH AT STATION       G8
                      TRANSPOSITION AREA      0.0 SQ MI

  PEAK FLOW     TIME                        MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                         (CFS)
+     379.      5.50                 312.        125.         42.          30.
                      (INCHES)     0.985      1.585       1.595        1.595
                       (AC-FT)      155.        249.        250.         250.

                       CUMULATIVE AREA =    2.94 SQ MI

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

                        HYDROGRAPH AT STATION       G8
                      TRANSPOSITION AREA      0.5 SQ MI

  PEAK FLOW     TIME                        MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                         (CFS)
+     374.      5.50                 308.        124.         42.          30.
                      (INCHES)     0.973      1.571       1.581        1.581
                       (AC-FT)      153.        247.        248.         248.

                       CUMULATIVE AREA =    2.94 SQ MI

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

                        HYDROGRAPH AT STATION       G8
                      TRANSPOSITION AREA      1.0 SQ MI

  PEAK FLOW     TIME                        MAXIMUM AVERAGE FLOW
```

```
                                        6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     322.      5.50                    262.        111.         37.          27.
                        (INCHES)      0.826       1.403       1.413        1.413
                         (AC-FT)       130.        220.        222.         222.

                         CUMULATIVE AREA =    2.94 SQ MI


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

                          HYDROGRAPH AT STATION       G8
                        TRANSPOSITION AREA      5.0 SQ MI

  PEAK FLOW     TIME                            MAXIMUM AVERAGE FLOW
                                        6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     246.     11.00                    183.         86.         29.          21.
                        (INCHES)      0.578       1.084       1.095        1.095
                         (AC-FT)        91.        170.        172.         172.

                         CUMULATIVE AREA =    2.94 SQ MI


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

                          HYDROGRAPH AT STATION       G8
                        TRANSPOSITION AREA     10.0 SQ MI

  PEAK FLOW     TIME                            MAXIMUM AVERAGE FLOW
                                        6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     233.     11.25                    165.         78.         26.          19.
                        (INCHES)      0.520       0.982       0.993        0.993
                         (AC-FT)        82.        154.        156.         156.

                         CUMULATIVE AREA =    2.94 SQ MI

 -----DSS---ZWRITE Unit  71; Vers.    1:  /RBW/G8/FLOW/01JAN1994/15MIN/100Y6H-EX/
      ***             ***             ***             ***             ***


                         INTERPOLATED HYDROGRAPH AT       G8

  PEAK FLOW     TIME                            MAXIMUM AVERAGE FLOW
                                        6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     257.      5.25                    204.         94.         32.          23.
                        (INCHES)      0.646       1.189       1.200        1.200
                         (AC-FT)       101.        187.        188.         188.

                         CUMULATIVE AREA =    2.94 SQ MI

        ----- Entering ZRRTSX for unit 71 -----
 Pathname: /RID RID/19799 LAT STRUCT/FLOW-WEIR//15MIN/RID-100-06E/
        Time Window set.  Interval:    15  Number of data values:      1
        Starting date and time:  Jan 1, 1994  2400  (  34334 1440)
        Ending   date and time:  Jan 1, 1994  2400  (  34334 1440)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /RID RID/19799 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/RID-100-06E/
        Number of actual data: 2976  Header length:   0
        Compression:   0  Quality:   0  Double: F
 -----DSS--- ZREAD Unit  71; Vers.    1:  /RID RID/19799 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/RID-100-06E/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:    1    JULS:   34334  ISTIME:  1440
        NLDATA: 2976   JULSD:   34334
        JULS: 01JAN94       JULSD: 01JAN94
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:   96  NDATA: 2976  NREAD:    1  ILIM:    1
      ----- Exiting ZRRTS, Number of data values:      1,  Status:  0
        Offset:       0,  Units: CFS     ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
 Pathname: /RID RID/19799 LAT STRUCT/FLOW-WEIR//15MIN/RID-100-06E/
        Time Window set.  Interval:    15  Number of data values:    401
        Starting date and time:  Jan 1, 1994  2400  (  34334 1440)
        Ending   date and time:  Jan 6, 1994  0400  (  34339  240)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /RID RID/19799 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/RID-100-06E/
        Number of actual data: 2976  Header length:   0
        Compression:   0  Quality:   0  Double: F
 -----DSS--- ZREAD Unit  71; Vers.    1:  /RID RID/19799 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/RID-100-06E/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
```

```
        NSTART:    1   NVALS:  401    JULS:   34334  ISTIME:  1440
        NLDATA: 2976   JULSD:   34334
        JULS: 01JAN94       JULSD: 01JAN94
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:   96  NDATA: 2976  NREAD:  401  ILIM:  401
      ----- Exiting ZRRTS, Number of data values:    401,  Status:  1
        Offset:       0,  Units: CFS     ,  Type:INST-VAL


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


            **************
            *            *
  362 KK    *        H6  *      COMBINE   H6-H7
            *            *
            **************

  364 KO          OUTPUT CONTROL VARIABLES
                        IPRNT           3  PRINT CONTROL
                        IPLOT           0  PLOT CONTROL
                        QSCAL          0.  HYDROGRAPH PLOT SCALE

  365 HC          HYDROGRAPH COMBINATION
                        ICOMP           2  NUMBER OF HYDROGRAPHS TO COMBINE

                                                                  ***

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

                          HYDROGRAPH AT STATION       H6
                        TRANSPOSITION AREA      0.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                       6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                            (CFS)
+     421.      7.50                 279.         91.         31.          22.
                        (INCHES)     1.050       1.371       1.384        1.384
                         (AC-FT)      138.        180.        182.         182.

                         CUMULATIVE AREA =    2.47 SQ MI


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

                          HYDROGRAPH AT STATION       H6
                        TRANSPOSITION AREA      0.5 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                       6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                            (CFS)
+     416.      7.50                 276.         90.         30.          22.
                        (INCHES)     1.040       1.359       1.373        1.373
                         (AC-FT)      137.        179.        181.         181.

                         CUMULATIVE AREA =    2.47 SQ MI


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

                          HYDROGRAPH AT STATION       H6
                        TRANSPOSITION AREA      1.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                       6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                            (CFS)
+     355.      8.00                 237.         79.         27.          19.
                        (INCHES)     0.892       1.190       1.203        1.203
                         (AC-FT)      117.        157.        158.         158.

                         CUMULATIVE AREA =    2.47 SQ MI


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

                          HYDROGRAPH AT STATION       H6
                        TRANSPOSITION AREA      5.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                       6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                            (CFS)
+     240.      8.50                 164.         58.         20.          14.
                        (INCHES)     0.619       0.870       0.883        0.883
                         (AC-FT)       81.        115.        116.         116.
```

```
                    CUMULATIVE AREA =    2.47 SQ MI

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

                     HYDROGRAPH AT STATION       H6
                   TRANSPOSITION AREA     10.0 SQ MI

  PEAK FLOW     TIME                        MAXIMUM AVERAGE FLOW
                                   6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                         (CFS)
+     204.      8.50                143.         51.         17.          13.
                        (INCHES)   0.538       0.773       0.786        0.786
                        (AC-FT)     71.        102.        103.         103.

                    CUMULATIVE AREA =    2.47 SQ MI

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


                    INTERPOLATED HYDROGRAPH AT       H6

  PEAK FLOW     TIME                        MAXIMUM AVERAGE FLOW
                                   6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                         (CFS)
+     289.      8.25                196.         67.         23.          16.
                        (INCHES)   0.738       1.010       1.024        1.024
                        (AC-FT)     97.        133.        135.         135.

                    CUMULATIVE AREA =    2.47 SQ MI


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


            **************
            *            *
  385 KK    *        H7  *      COMBINE
            *            *
            **************

  387 KO          OUTPUT CONTROL VARIABLES
                        IPRNT          3  PRINT CONTROL
                        IPLOT          0  PLOT CONTROL
                        QSCAL         0.  HYDROGRAPH PLOT SCALE

  389 HC          HYDROGRAPH COMBINATION
                        ICOMP          2  NUMBER OF HYDROGRAPHS TO COMBINE

                                                                  ***

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

                     HYDROGRAPH AT STATION       H7
                   TRANSPOSITION AREA      0.0 SQ MI

  PEAK FLOW     TIME                        MAXIMUM AVERAGE FLOW
                                   6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                         (CFS)
+     446.      7.25                336.        110.         37.          27.
                        (INCHES)   1.028       1.342       1.354        1.354
                        (AC-FT)    167.        217.        219.         219.

                    CUMULATIVE AREA =    3.04 SQ MI


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

                     HYDROGRAPH AT STATION       H7
                   TRANSPOSITION AREA      0.5 SQ MI

  PEAK FLOW     TIME                        MAXIMUM AVERAGE FLOW
                                   6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                         (CFS)
+     441.      7.25                333.        109.         37.          26.
                        (INCHES)   1.017       1.330       1.342        1.342
                        (AC-FT)    165.        216.        217.         217.

                    CUMULATIVE AREA =    3.04 SQ MI
```

```
      ***             ***             ***             ***             ***

                        HYDROGRAPH AT STATION       H7
                      TRANSPOSITION AREA      1.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     382.      7.75                 284.         95.         32.          23.
                        (INCHES)    0.868       1.160       1.172        1.172
                         (AC-FT)    141.        188.        190.         190.

                        CUMULATIVE AREA =    3.04 SQ MI


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

                        HYDROGRAPH AT STATION       H7
                      TRANSPOSITION AREA      5.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     254.      8.25                 193.         69.         23.          17.
                        (INCHES)    0.592       0.843       0.855        0.855
                         (AC-FT)     96.        137.        139.         139.

                        CUMULATIVE AREA =    3.04 SQ MI


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

                        HYDROGRAPH AT STATION       H7
                      TRANSPOSITION AREA     10.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     213.      8.50                 166.         61.         21.          15.
                        (INCHES)    0.508       0.746       0.758        0.758
                         (AC-FT)     82.        121.        123.         123.

                        CUMULATIVE AREA =    3.04 SQ MI

 -----DSS---ZWRITE Unit  71; Vers.    1:  /RBW/H7/FLOW/01JAN1994/15MIN/100Y6H-EX/
      ***             ***             ***             ***             ***


                        INTERPOLATED HYDROGRAPH AT       H7

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     290.      8.25                 221.         77.         26.          19.
                        (INCHES)    0.677       0.941       0.953        0.953
                         (AC-FT)    110.        153.        155.         155.

                        CUMULATIVE AREA =    3.04 SQ MI

        ----- Entering ZRRTSX for unit 71 -----
 Pathname: /RID RID/24399 LAT STRUCT/FLOW-WEIR//15MIN/RID-100-06E/
        Time Window set.  Interval:    15  Number of data values:      1
        Starting date and time:  Jan 1, 1994  2400  (  34334 1440)
        Ending   date and time:  Jan 1, 1994  2400  (  34334 1440)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /RID RID/24399 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/RID-100-06E/
        Number of actual data: 2976  Header length:   0
        Compression:   0  Quality:   0  Double: F
 -----DSS--- ZREAD Unit  71; Vers.    1:  /RID RID/24399 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/RID-100-06E/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:    1    JULS:   34334  ISTIME:  1440
        NLDATA: 2976   JULSD:   34334
        JULS: 01JAN94       JULSD: 01JAN94
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:   96  NDATA: 2976  NREAD:    1  ILIM:    1
      ----- Exiting ZRRTS, Number of data values:      1,  Status:  0
        Offset:       0,  Units: CFS     ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
 Pathname: /RID RID/24399 LAT STRUCT/FLOW-WEIR//15MIN/RID-100-06E/
        Time Window set.  Interval:    15  Number of data values:    401
        Starting date and time:  Jan 1, 1994  2400  (  34334 1440)
        Ending   date and time:  Jan 6, 1994  0400  (  34339  240)
        Input time offset:      0
```

```
        After ZRDINF, Record found: T
        Pathname: /RID RID/24399 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/RID-100-06E/
        Number of actual data: 2976  Header length:   0
        Compression:   0  Quality:   0  Double: F
-----DSS--- ZREAD Unit  71; Vers.    1:  /RID RID/24399 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/RID-100-06E/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:  401    JULS:   34334  ISTIME:  1440
        NLDATA: 2976   JULSD:   34334
        JULS: 01JAN94       JULSD: 01JAN94
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:   96  NDATA: 2976  NREAD:  401  ILIM:  401
      ----- Exiting ZRRTS, Number of data values:    401,  Status:  1
        Offset:       0,  Units: CFS     ,  Type:INST-VAL


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


            **************
            *            *
  450 KK    *        I5  *      COMBINE   I5-I6
            *            *
            **************

  452 KO          OUTPUT CONTROL VARIABLES
                        IPRNT           3  PRINT CONTROL
                        IPLOT           0  PLOT CONTROL
                        QSCAL          0.  HYDROGRAPH PLOT SCALE

  453 HC          HYDROGRAPH COMBINATION
                        ICOMP           2  NUMBER OF HYDROGRAPHS TO COMBINE

                                                                  ***

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

                        HYDROGRAPH AT STATION       I5
                      TRANSPOSITION AREA      0.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                       6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     210.      9.50                 179.         65.         22.          16.
                        (INCHES)    0.766       1.109       1.110        1.110
                         (AC-FT)     89.        128.        128.         128.

                        CUMULATIVE AREA =    2.17 SQ MI


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

                        HYDROGRAPH AT STATION       I5
                      TRANSPOSITION AREA      0.5 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                       6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     206.      9.50                 176.         64.         21.          15.
                        (INCHES)    0.756       1.096       1.097        1.097
                         (AC-FT)     87.        127.        127.         127.

                        CUMULATIVE AREA =    2.17 SQ MI


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

                        HYDROGRAPH AT STATION       I5
                      TRANSPOSITION AREA      1.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                       6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     169.      7.00                 141.         53.         18.          13.
                        (INCHES)    0.603       0.906       0.907        0.907
                         (AC-FT)     70.        105.        105.         105.

                        CUMULATIVE AREA =    2.17 SQ MI


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

                        HYDROGRAPH AT STATION       I5
                      TRANSPOSITION AREA      5.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
```

```
                                        6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     107.      7.25                    85.         34.         11.          8.
                        (INCHES)     0.363       0.582       0.582        0.582
                         (AC-FT)      42.         67.         67.          67.

                         CUMULATIVE AREA =    2.17 SQ MI


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

                          HYDROGRAPH AT STATION       I5
                        TRANSPOSITION AREA     10.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                        6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+      86.      7.25                    68.         28.          9.          7.
                        (INCHES)     0.293       0.481       0.481        0.481
                         (AC-FT)      34.         56.         56.          56.

                         CUMULATIVE AREA =    2.17 SQ MI

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


                         INTERPOLATED HYDROGRAPH AT       I5

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                        6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     138.      7.00                   114.         44.         15.         11.
                        (INCHES)     0.488       0.751       0.751        0.751
                         (AC-FT)      56.         87.         87.          87.

                         CUMULATIVE AREA =    2.17 SQ MI


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


            **************
            *            *
  473 KK    *        I6  *      COMBINE
            *            *
            **************

  475 KO          OUTPUT CONTROL VARIABLES
                        IPRNT           3  PRINT CONTROL
                        IPLOT           0  PLOT CONTROL
                        QSCAL          0.  HYDROGRAPH PLOT SCALE

  477 HC          HYDROGRAPH COMBINATION
                        ICOMP           2  NUMBER OF HYDROGRAPHS TO COMBINE

                                                                  ***

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

                          HYDROGRAPH AT STATION       I6
                        TRANSPOSITION AREA      0.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                        6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     219.      5.75                   189.         81.         27.         19.
                        (INCHES)     0.659       1.126       1.127        1.127
                         (AC-FT)      94.        160.        160.         160.

                         CUMULATIVE AREA =    2.67 SQ MI


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

                          HYDROGRAPH AT STATION       I6
                        TRANSPOSITION AREA      0.5 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                        6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     217.      5.75                   186.         80.         27.         19.
```

```
                    (INCHES)     0.650       1.113       1.114       1.114
                     (AC-FT)      92.         158.        158.        158.

                     CUMULATIVE AREA =    2.67 SQ MI


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

                      HYDROGRAPH AT STATION       I6
                    TRANSPOSITION AREA      1.0 SQ MI

  PEAK FLOW     TIME                        MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                        (CFS)
+     192.      5.50                154.         67.         22.         16.
                    (INCHES)     0.537       0.928       0.929       0.929
                     (AC-FT)      76.         132.        132.        132.

                     CUMULATIVE AREA =    2.67 SQ MI


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

                      HYDROGRAPH AT STATION       I6
                    TRANSPOSITION AREA      5.0 SQ MI

  PEAK FLOW     TIME                        MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                        (CFS)
+     147.      5.75                103.         44.         15.         10.
                    (INCHES)     0.361       0.608       0.609       0.609
                     (AC-FT)      51.         86.         87.         87.

                     CUMULATIVE AREA =    2.67 SQ MI


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

                      HYDROGRAPH AT STATION       I6
                    TRANSPOSITION AREA     10.0 SQ MI

  PEAK FLOW     TIME                        MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                        (CFS)
+     126.      6.00                 89.         36.         12.          9.
                    (INCHES)     0.309       0.509       0.509       0.509
                     (AC-FT)      44.         72.         72.         72.

                     CUMULATIVE AREA =    2.67 SQ MI

-----DSS---ZWRITE Unit  71; Vers.    1:  /RBW/I6/FLOW/01JAN1994/15MIN/100Y6H-EX/
     ***            ***            ***            ***            ***


                     INTERPOLATED HYDROGRAPH AT       I6

  PEAK FLOW     TIME                        MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                        (CFS)
+     164.      5.75                123.         53.         18.         13.
                    (INCHES)     0.429       0.733       0.734       0.734
                     (AC-FT)      61.         104.        104.        104.

                     CUMULATIVE AREA =    2.67 SQ MI

       ----- Entering ZRRTSX for unit 71 -----
 Pathname: /RID RID/27599 LAT STRUCT/FLOW-WEIR//15MIN/RID-100-06E/
       Time Window set.  Interval:    15  Number of data values:      1
       Starting date and time:  Jan 1, 1994  2400  (  34334 1440)
       Ending   date and time:  Jan 1, 1994  2400  (  34334 1440)
       Input time offset:      0
       After ZRDINF, Record found: T
       Pathname: /RID RID/27599 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/RID-100-06E/
       Number of actual data: 2976  Header length:   0
       Compression:   0  Quality:   0  Double: F
-----DSS--- ZREAD Unit  71; Vers.    1:  /RID RID/27599 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/RID-100-06E/
     ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
       NSTART:    1   NVALS:    1    JULS:   34334  ISTIME:  1440
       NLDATA: 2976   JULSD:   34334
       JULS: 01JAN94        JULSD: 01JAN94
       Quality Read: F,  Quality Requested: F
       ---ZRRTSB Calculations:  NPOS:   96  NDATA: 2976  NREAD:    1  ILIM:    1
     ----- Exiting ZRRTS, Number of data values:      1,  Status:  0
       Offset:       0,  Units: CFS     ,  Type:INST-VAL
```

```
        ----- Entering ZRRTSX for unit 71 -----
 Pathname: /RID RID/27599 LAT STRUCT/FLOW-WEIR//15MIN/RID-100-06E/
        Time Window set.  Interval:    15  Number of data values:    401
        Starting date and time:  Jan 1, 1994  2400  (  34334 1440)
        Ending   date and time:  Jan 6, 1994  0400  (  34339  240)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /RID RID/27599 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/RID-100-06E/
        Number of actual data: 2976  Header length:   0
        Compression:   0  Quality:   0  Double: F
 -----DSS--- ZREAD Unit  71; Vers.    1:  /RID RID/27599 LAT STRUCT/FLOW-WEIR/01JAN1994/15MIN/RID-100-06E/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:  401    JULS:   34334  ISTIME:  1440
        NLDATA: 2976   JULSD:   34334
        JULS: 01JAN94       JULSD: 01JAN94
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:   96  NDATA: 2976  NREAD:  401  ILIM:  401
      ----- Exiting ZRRTS, Number of data values:    401,  Status:  1
        Offset:       0,  Units: CFS     ,  Type:INST-VAL


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


            **************
            *            *
 519 KK     *       J5A  *      COMBINE  J5A-5B
            *            *
            **************

 521 KO          OUTPUT CONTROL VARIABLES
                       IPRNT           3  PRINT CONTROL
                       IPLOT           0  PLOT CONTROL
                       QSCAL          0.  HYDROGRAPH PLOT SCALE

 522 HC          HYDROGRAPH COMBINATION
                       ICOMP           2  NUMBER OF HYDROGRAPHS TO COMBINE

                                                                  ***

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

                         HYDROGRAPH AT STATION      J5A
                       TRANSPOSITION AREA      0.0 SQ MI

 PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                    6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     405.      7.50                235.         67.         22.          16.
                        (INCHES)    1.090       1.247       1.248        1.248
                         (AC-FT)    117.        133.        133.         133.

                         CUMULATIVE AREA =    2.01 SQ MI


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

                         HYDROGRAPH AT STATION      J5A
                       TRANSPOSITION AREA      0.5 SQ MI

 PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                    6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     401.      7.50                233.         67.         22.          16.
                        (INCHES)    1.080       1.236       1.237        1.237
                         (AC-FT)    115.        132.        132.         132.

                         CUMULATIVE AREA =    2.01 SQ MI


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

                         HYDROGRAPH AT STATION      J5A
                       TRANSPOSITION AREA      1.0 SQ MI

 PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                    6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     343.      7.50                199.         57.         19.          14.
                        (INCHES)    0.924       1.064       1.065        1.065
                         (AC-FT)     99.        114.        114.         114.

                         CUMULATIVE AREA =    2.01 SQ MI
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      ***             ***             ***             ***             ***

                        HYDROGRAPH AT STATION      J5A
                      TRANSPOSITION AREA      5.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     237.      7.50                140.         41.         14.          10.
                        (INCHES)    0.649       0.760       0.761        0.761
                         (AC-FT)     69.         81.         81.          81.

                        CUMULATIVE AREA =    2.01 SQ MI


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

                        HYDROGRAPH AT STATION      J5A
                      TRANSPOSITION AREA     10.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     204.      7.50                121.         36.         12.           9.
                        (INCHES)    0.559       0.661       0.663        0.663
                         (AC-FT)     60.         71.         71.          71.

                        CUMULATIVE AREA =    2.01 SQ MI

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


                        INTERPOLATED HYDROGRAPH AT      J5A

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     297.      7.50                174.         50.         17.          12.
                        (INCHES)    0.805       0.933       0.934        0.934
                         (AC-FT)     86.        100.        100.         100.

                        CUMULATIVE AREA =    2.01 SQ MI


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


            **************
            *            *
  535 KK    *       J5B  *      COMBINE  J5B-J6
            *            *
            **************

  537 KO          OUTPUT CONTROL VARIABLES
                        IPRNT           3  PRINT CONTROL
                        IPLOT           0  PLOT CONTROL
                        QSCAL          0.  HYDROGRAPH PLOT SCALE

  538 HC          HYDROGRAPH COMBINATION
                        ICOMP           2  NUMBER OF HYDROGRAPHS TO COMBINE

                                                                  ***

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

                        HYDROGRAPH AT STATION      J5B
                      TRANSPOSITION AREA      0.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                          (CFS)
+     379.      8.25                230.         73.         25.          18.
                        (INCHES)    0.997       1.271       1.276        1.276
                         (AC-FT)    114.        145.        146.         146.

                        CUMULATIVE AREA =    2.15 SQ MI

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

                        HYDROGRAPH AT STATION      J5B
                      TRANSPOSITION AREA      0.5 SQ MI
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  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                           (CFS)
+     376.      8.25                228.         73.         24.          18.
                         (INCHES)    0.988       1.259       1.265        1.265
                          (AC-FT)    113.        144.        145.         145.

                          CUMULATIVE AREA =    2.15 SQ MI


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

                           HYDROGRAPH AT STATION      J5B
                         TRANSPOSITION AREA      1.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                           (CFS)
+     321.      8.25                195.         63.         21.          15.
                         (INCHES)    0.843       1.091       1.097        1.097
                          (AC-FT)     96.        125.        125.         125.

                          CUMULATIVE AREA =    2.15 SQ MI


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

                           HYDROGRAPH AT STATION      J5B
                         TRANSPOSITION AREA      5.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                           (CFS)
+     217.      8.50                136.         46.         15.          11.
                         (INCHES)    0.590       0.790       0.796        0.796
                          (AC-FT)     67.         90.         91.          91.

                          CUMULATIVE AREA =    2.15 SQ MI


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

                           HYDROGRAPH AT STATION      J5B
                         TRANSPOSITION AREA     10.0 SQ MI

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                           (CFS)
+     185.      8.75                117.         40.         13.          10.
                         (INCHES)    0.507       0.692       0.697        0.697
                          (AC-FT)     58.         79.         80.          80.

                          CUMULATIVE AREA =    2.15 SQ MI

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


                          INTERPOLATED HYDROGRAPH AT      J5B

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                           (CFS)
+     273.      8.50                169.         55.         19.          13.
                         (INCHES)    0.730       0.957       0.963        0.963
                          (AC-FT)     84.        110.        110.         110.

                          CUMULATIVE AREA =    2.15 SQ MI


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


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            *            *
  558 KK    *        J6  *      COMBINE
            *            *
            **************

  560 KO          OUTPUT CONTROL VARIABLES
                        IPRNT           3  PRINT CONTROL
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                    IPLOT          0  PLOT CONTROL
                    QSCAL         0.  HYDROGRAPH PLOT SCALE

  562 HC          HYDROGRAPH COMBINATION
                    ICOMP          2  NUMBER OF HYDROGRAPHS TO COMBINE

                                                                  ***

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

                      HYDROGRAPH AT STATION       J6
                    TRANSPOSITION AREA      0.0 SQ MI

  PEAK FLOW     TIME                        MAXIMUM AVERAGE FLOW
                                   6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                        (CFS)
+     211.     10.00                198.         86.         29.          21.
                    (INCHES)     0.719       1.246       1.251        1.251
                     (AC-FT)      98.        170.        171.         171.

                    CUMULATIVE AREA =    2.56 SQ MI


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

                      HYDROGRAPH AT STATION       J6
                    TRANSPOSITION AREA      0.5 SQ MI

  PEAK FLOW     TIME                        MAXIMUM AVERAGE FLOW
                                   6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                        (CFS)
+     210.     10.00                197.         85.         28.          21.
                    (INCHES)     0.715       1.234       1.240        1.240
                     (AC-FT)      98.        169.        169.         169.

                    CUMULATIVE AREA =    2.56 SQ MI


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

                      HYDROGRAPH AT STATION       J6
                    TRANSPOSITION AREA      1.0 SQ MI

  PEAK FLOW     TIME                        MAXIMUM AVERAGE FLOW
                                   6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                        (CFS)
+     193.     10.00                179.         73.         25.          18.
                    (INCHES)     0.649       1.065       1.070        1.070
                     (AC-FT)      89.        145.        146.         146.

                    CUMULATIVE AREA =    2.56 SQ MI


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

                      HYDROGRAPH AT STATION       J6
                    TRANSPOSITION AREA      5.0 SQ MI

  PEAK FLOW     TIME                        MAXIMUM AVERAGE FLOW
                                   6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                        (CFS)
+     167.      9.75                131.         52.         18.          13.
                    (INCHES)     0.475       0.760       0.765        0.765
                     (AC-FT)      65.        104.        104.         104.

                    CUMULATIVE AREA =    2.56 SQ MI


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

                      HYDROGRAPH AT STATION       J6
                    TRANSPOSITION AREA     10.0 SQ MI

  PEAK FLOW     TIME                        MAXIMUM AVERAGE FLOW
                                   6-HR       24-HR       72-HR     99.75-HR
+   (CFS)       (HR)
                        (CFS)
+     147.      9.75                112.         45.         15.          11.
                    (INCHES)     0.408       0.661       0.666        0.666
                     (AC-FT)      56.         90.         91.          91.

                    CUMULATIVE AREA =    2.56 SQ MI

-----DSS---ZWRITE Unit  71; Vers.    1:  /RBW/J6/FLOW/01JAN1994/15MIN/100Y6H-EX/
      ***             ***             ***             ***             ***
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INTERPOLATED HYDROGRAPH AT J6

| PEAK FLOW (CFS) | TIME (HR) | | MAXIMUM AVERAGE FLOW 6-HR | 24-HR | 72-HR | 99.75-HR |
|---|---|---|---|---|---|---|
| 179. | 10.00 | (CFS) | 153. | 62. | 21. | 15. |
| | | (INCHES) | 0.555 | 0.901 | 0.906 | 0.906 |
| | | (AC-FT) | 76. | 123. | 124. | 124. |

CUMULATIVE AREA = 2.56 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 | 68 | 458. | 4.50 | 66. | 16. | 5. | 0.41 | | |
| ROUTED TO | E1-E2 | 367. | 4.50 | 64. | 16. | 5. | 0.41 | | |
| HYDROGRAPH AT | 59 | 244. | 4.50 | 38. | 9. | 3. | 0.25 | | |
| 2 COMBINED AT | E2 | 581. | 4.50 | 98. | 25. | 8. | 0.66 | | |
| HYDROGRAPH AT | RIDF | 261. | 6.25 | 156. | 39. | 13. | 0.00 | | |
| ROUTED TO | F1S-F2 | 226. | 7.50 | 148. | 39. | 13. | 0.00 | | |
| HYDROGRAPH AT | 27 | 68. | 5.50 | 27. | 7. | 2. | 0.24 | | |
| 2 COMBINED AT | F2 | 247. | 7.25 | 165. | 46. | 15. | 0.24 | | |
| ROUTED TO | F2-F3 | 239. | 8.50 | 162. | 46. | 15. | 0.24 | | |
| HYDROGRAPH AT | 29 | 162. | 6.25 | 86. | 23. | 8. | 1.00 | | |
| 2 COMBINED AT | F3 | 293. | 7.75 | 211. | 66. | 22. | 1.24 | | |
| ROUTED TO | F3-F4 | 283. | 9.25 | 208. | 66. | 22. | 1.24 | | |
| HYDROGRAPH AT | 41 | 198. | 6.50 | 108. | 29. | 10. | 1.20 | | |
| 2 COMBINED AT | F4 | 299. | 9.50 | 246. | 85. | 28. | 2.44 | | |
| ROUTED TO | F4-F5B | 294. | 10.00 | 243. | 85. | 28. | 2.44 | | |
| HYDROGRAPH AT | 52B | 204. | 5.00 | 58. | 15. | 5. | 0.50 | | |
| 2 COMBINED AT | F5B | 291. | 10.00 | 242. | 93. | 31. | 2.94 | | |
| ROUTED TO | F5BF6B | 287. | 10.00 | 238. | 92. | 31. | 2.94 | | |
| HYDROGRAPH AT | 60B | 215. | 5.25 | 68. | 17. | 6. | 0.57 | | |
| 2 COMBINED AT | F6B | 283. | 10.25 | 235. | 100. | 33. | 3.51 | | |
| HYDROGRAPH AT | 52A | 71. | 6.25 | 36. | 10. | 3. | 0.31 | | |
| ROUTED TO | F5AF6A | 71. | 6.25 | 36. | 10. | 3. | 0.31 | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| + | HYDROGRAPH AT | 60A | 170. | 5.25 | 60. | 16. | 5. | 0.41 |
| + | 2 COMBINED AT | F6A | 200. | 5.25 | 89. | 23. | 8. | 0.73 |
| + | HYDROGRAPH AT | RIDG | 378. | 6.25 | 132. | 33. | 11. | 0.00 |
| + | ROUTED TO | G3S-G4 | 232. | 7.25 | 121. | 33. | 11. | 0.00 |
| + | HYDROGRAPH AT | 28 | 92. | 5.50 | 40. | 10. | 3. | 0.34 |
| + | 2 COMBINED AT | G4 | 272. | 7.00 | 154. | 43. | 14. | 0.34 |
| + | ROUTED TO | G4-G5 | 251. | 8.75 | 147. | 43. | 14. | 0.34 |
| + | HYDROGRAPH AT | 30 | 168. | 6.50 | 92. | 25. | 8. | 0.98 |
| + | 2 COMBINED AT | G5 | 293. | 8.75 | 194. | 64. | 21. | 1.32 |
| + | ROUTED TO | G5-G6 | 269. | 10.25 | 190. | 64. | 21. | 1.32 |
| + | HYDROGRAPH AT | 42 | 140. | 6.50 | 77. | 21. | 7. | 0.78 |
| + | 2 COMBINED AT | G6 | 271. | 10.25 | 208. | 77. | 26. | 2.10 |
| + | ROUTED TO | G6-G7 | 264. | 10.75 | 207. | 77. | 26. | 2.10 |
| + | HYDROGRAPH AT | 53 | 108. | 5.25 | 41. | 11. | 4. | 0.34 |
| + | 2 COMBINED AT | G7 | 261. | 10.75 | 206. | 82. | 28. | 2.44 |
| + | ROUTED TO | G7-G8 | 261. | 10.75 | 206. | 82. | 28. | 2.44 |
| + | HYDROGRAPH AT | 61 | 245. | 5.00 | 74. | 19. | 6. | 0.51 |
| + | 2 COMBINED AT | G8 | 257. | 5.25 | 204. | 94. | 32. | 2.94 |
| + | HYDROGRAPH AT | RIDH | 182. | 6.25 | 63. | 16. | 5. | 0.00 |
| + | ROUTED TO | H3S-H4 | 56. | 7.75 | 42. | 15. | 5. | 0.00 |
| + | HYDROGRAPH AT | 31 | 161. | 6.75 | 97. | 27. | 9. | 1.08 |
| + | 2 COMBINED AT | H4 | 206. | 7.00 | 134. | 42. | 14. | 1.08 |
| + | ROUTED TO | H4-H5 | 197. | 7.75 | 129. | 42. | 14. | 1.08 |
| + | HYDROGRAPH AT | 43 | 153. | 6.75 | 96. | 27. | 9. | 1.00 |
| + | 2 COMBINED AT | H5 | 288. | 7.75 | 184. | 61. | 20. | 2.08 |
| + | ROUTED TO | H5-H6 | 278. | 8.25 | 182. | 61. | 20. | 2.08 |
| + | HYDROGRAPH AT | 54 | 88. | 6.00 | 45. | 12. | 4. | 0.39 |
| + | 2 COMBINED AT | H6 | 289. | 8.25 | 196. | 67. | 23. | 2.47 |
| + | ROUTED TO | H6-H7 | 290. | 8.25 | 196. | 67. | 23. | 2.47 |
| | HYDROGRAPH AT | | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| + | 62 | 181. | 5.50 | 71. | 18. | 6. | 0.57 |
| 2 COMBINED AT + | H7 | 290. | 8.25 | 221. | 77. | 26. | 3.04 |
| HYDROGRAPH AT + | RIDI | 0. | 0.00 | 0. | 0. | 0. | 0.00 |
| ROUTED TO + | I2S-I3 | 0. | 0.00 | 0. | 0. | 0. | 0.00 |
| HYDROGRAPH AT + | 32 | 138. | 6.50 | 82. | 23. | 8. | 0.90 |
| 2 COMBINED AT + | I3 | 138. | 6.50 | 82. | 23. | 8. | 0.90 |
| ROUTED TO + | I3-I4 | 109. | 9.25 | 73. | 23. | 8. | 0.90 |
| HYDROGRAPH AT + | 44 | 146. | 6.50 | 88. | 24. | 8. | 1.01 |
| 2 COMBINED AT + | I4 | 128. | 9.50 | 109. | 40. | 13. | 1.90 |
| ROUTED TO + | I4-I5 | 120. | 7.50 | 107. | 40. | 13. | 1.90 |
| HYDROGRAPH AT + | 55 | 68. | 5.75 | 31. | 8. | 3. | 0.26 |
| 2 COMBINED AT + | I5 | 138. | 7.00 | 114. | 44. | 15. | 2.17 |
| ROUTED TO + | I5-I6 | 110. | 10.50 | 105. | 44. | 15. | 2.17 |
| HYDROGRAPH AT + | 63 | 156. | 5.50 | 63. | 16. | 5. | 0.50 |
| 2 COMBINED AT + | I6 | 164. | 5.75 | 123. | 53. | 18. | 2.67 |
| HYDROGRAPH AT + | RIDJ | 109. | 5.50 | 16. | 4. | 1. | 0.00 |
| ROUTED TO + | J3S-J4 | 20. | 6.50 | 11. | 4. | 1. | 0.00 |
| HYDROGRAPH AT + | 33 | 194. | 6.25 | 103. | 27. | 9. | 1.00 |
| 2 COMBINED AT + | J4 | 212. | 6.25 | 112. | 31. | 10. | 1.00 |
| ROUTED TO + | J4-J5 | 192. | 7.50 | 109. | 31. | 10. | 1.00 |
| HYDROGRAPH AT + | 45A | 164. | 6.75 | 96. | 26. | 9. | 1.00 |
| 2 COMBINED AT + | J5A | 297. | 7.50 | 174. | 50. | 17. | 2.01 |
| ROUTED TO + | J5A-5B | 274. | 8.50 | 169. | 50. | 17. | 2.01 |
| HYDROGRAPH AT + | 45B | 110. | 4.75 | 25. | 6. | 2. | 0.14 |
| 2 COMBINED AT + | J5B | 273. | 8.50 | 169. | 55. | 19. | 2.15 |
| ROUTED TO + | J5B-J6 | 179. | 9.75 | 152. | 55. | 18. | 2.15 |
| HYDROGRAPH AT + | 64 | 123. | 5.50 | 49. | 12. | 4. | 0.41 |
| 2 COMBINED AT + | J6 | 179. | 10.00 | 153. | 62. | 21. | 2.56 |

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