Table of Contents:

Section 1: Introduction .......................................................................................................................... 1
   1.1 Purpose ........................................................................................................................................ 1
   1.2 Project Authority ........................................................................................................................ 1
   1.3 Project Location ........................................................................................................................ 1
   1.4 Hydrologic and Hydraulic Methods .......................................................................................... 1
   1.5 Acknowledgements .................................................................................................................. 2
   1.6 Study Results .......................................................................................................................... 2

Section 2: Local Government Abstract ............................................................................................ 6
   2.1 Project Contact Information ..................................................................................................... 6
   2.2 General Information ................................................................................................................ 6
   2.3 Survey and Mapping Information ............................................................................................ 6
   2.4 Hydrology .................................................................................................................................. 7
   2.5 Hydraulics .................................................................................................................................. 7
   2.6 Erosion, Sediment Transport and Geomorphic Analysis ...................................................... 7
   2.7 Additional Study Information .................................................................................................. 7

Section 3: Survey and Mapping Information ....................................................................................... 7
   3.1 Digital Projection Information .................................................................................................. 7
   3.2 Field Survey Information ........................................................................................................ 8
   3.3 Mapping ..................................................................................................................................... 8

Section 4: Hydrology .......................................................................................................................... 8
   4.1 Method Description .................................................................................................................... 8
   4.2 Parameter Estimation ................................................................................................................ 8
      4.2.1 Drainage Area Boundaries ............................................................................................... 8
      4.2.2 Watershed Work Maps ..................................................................................................... 9
      4.2.3 Gage Data ....................................................................................................................... 11
      4.2.4 Statistical Parameters ........................................................................................................ 11
      4.2.5 Precipitation ..................................................................................................................... 11
      4.2.6 Physical Parameters .......................................................................................................... 11
   4.3 Issues Encountered During the Study ....................................................................................... 12
      4.3.1 Special Problems and Solutions ....................................................................................... 12
      4.3.2 Modeling Warning and Error Messages ........................................................................ 12
   4.4 Calibration .................................................................................................................................. 12
   4.5 Final Results ............................................................................................................................ 13
      4.5.1 Hydrologic Analysis Results .............................................................................................. 13
      4.5.2 Verification of Results ....................................................................................................... 13
Table of Contents (Continued):

Section 5: Hydraulics ................................................................. 15
  5.1 Method Description ............................................................ 15
  5.2 Work Study Maps ............................................................... 15
  5.3 Parameter Estimation .......................................................... 15
    5.3.1 Roughness Coefficients .................................................. 15
    5.3.2 Expansion, Contraction Coefficients ............................... 15
  5.4 Cross Section Description .................................................. 16
  5.5 Modeling Considerations ................................................... 16
    5.5.1 Hydraulic Jump and Drop Analysis .................................. 16
    5.5.2 Bridges and Culverts ...................................................... 16
    5.5.3 Levees and Dikes ........................................................... 16
    5.5.4 Non-Levee Embankments ................................................. 16
    5.5.5 Islands and Flow Splits .................................................... 16
    5.5.6 Ineffective Flow Areas .................................................... 16
    5.5.7 Supercritical Flow .......................................................... 16
  5.6 Floodway Modeling ............................................................ 16
  5.7 Issues Encountered during the Study .................................... 17
    5.7.1 Special Problems and Solutions ....................................... 17
    5.7.2 Model Warning and Error Messages ................................. 17
  5.8 Calibration ................................................................. 17
  5.9 Final Results ................................................................. 17
    5.9.1 Hydraulic Analysis Results ............................................. 17
    5.9.2 Verification of Results ................................................... 17

Section 6: Erosion and Sediment Transport .................................... 17

Section 7: Canyon Wash Determination ........................................ 17

List of Tables:
Table 4.1 - Methods for HEC-HMS Analysis ........................................... 12
Table 4.2 - Sub-basin Characteristics ............................................... 12
Table 4.3 - Summary of 100-yr and 10-yr Discharges .................................. 13
Table 4.4 - Comparison of 100-yr Peak Discharge Values to Eychaner 1987 ... 14
Table 4.5 - Comparison of 100-yr Peak Discharge Values to TSMS .............. 14

List of Figures:
Figure 1.1 - Watershed Map ......................................................... 3
Figure 1.2 - Study limit ............................................................. 4
Figure 1.3 - Soil Classification ..................................................... 5
Figure 4.1 - Flow Chart of Mapping Process .................................... 10
Table of Contents (Continued):

Appendices:
Appendix A: References
Appendix B: General Documentation and Correspondence
Appendix C: Field Review Photos and Survey Field Notes
Appendix D: Hydrologic Analysis, Supporting Documentation
Appendix E: Hydraulic Analysis, Supporting Documentation

Exhibits
Exhibit 1: 100-yr Floodplain Limit Map for South Tucson

Exhibit 2: 10-yr Floodplain Limit Map South Tucson

Attachments
Attachment A: General Stormdrain Map
Attachment B: Exhibits of Results Excluding Stormdrain
Attachment C: Stormdrain Memo by Solis Engineering
Attachment D: Pima County’s Resultant Regulatory Flood Map
Attachment E: CD including this TDN, Supporting Models, Worksheets, and GIS data.
Section 1: Introduction

1.1 Purpose
The objective of this Technical Data Notebook (TDN) is to provide 100-yr and 10-yr peak discharges and associated floodplain boundaries, for the City of South Tucson.

This TDN was prepared in accordance with the “Instructions for Organizing and Submitting Technical Documentation for Flood Studies” prepared by the Arizona Department of Water Resources, Flood Mitigation Section (Arizona State Standard, SS1-2012) and Pima County Standards.

1.2 Project Authority
The State of Arizona has delegated the responsibility to each county flood control district to delineate or require the delineation of floodplains and to regulate development within floodplains (ARS § 48-3609):

1.3 Project Location
This site is located within Sections 24 and 25 of Township 14 South, Range 13 East, Pima County, Arizona. Refer to Figure 1.1. The city of South Tucson is currently in FEMA unshaded Zone X, as shown on the current Flood Insurance Rate Map (FIRM) numbers 04019C-2278 L, 04019C-2279 L, and 04019C-2287 L, and also on Figure 1.2.

The study watershed area is approximately 1.51 square miles, and is divided into 5 subbasins that encompass a hydrologic soil type composed of primarily of Type D and C soils, see Figure 1.3. The study area for the City of South Tucson includes four reaches ranging from an approximately 1.2 miles to 2.0 miles, each generally flowing from south east to north west.

1.4 Hydrologic and Hydraulic Methods
Hydrologic analysis was performed to estimate the 100-yr and 10-yr peak discharges using HEC-HMS Version 4.3 (HEC-HMS). The proposed regulatory discharge is a flow rate that has a 1-percent chance of being equaled or exceeded each year (“100-year” discharge). Parameterization followed Technical Policy 018 (Tech 018, Appendix A) developed by Pima County Regional Flood Control District. A parameterization technical memorandum was also prepared as part of this study and is included in Appendix A.

Hydraulic analysis was performed with the 2 dimensional model FLO-2D (Pro Version) on a 10’ grid.
1.5 Acknowledgements

This study relied on assistance of District GIS staff, who were integral to the development of the models and maps.

1.6 Study Results

The 100-yr discharges were calculated for the City of South Tucson. Subbasin boundaries and corresponding Concentration Points (CPs) are illustrated in Figure 1.1. Hydrologic characteristics for the studied subbasins are presented in Table 4.2. Calculated discharges are summarized in Table 4.3. The calculated discharges are compared with Ungauged Urban Sites (Eychaner 1987) and the TSMS data, and summarized in Tables 4.4 and 4.5, respectively. The comparison shows that the peak discharges calculated in this study are near the prediction envelope of the Regression Equations where expected, with deviations having a logical cause. This study found several properties at risk for flooding during the 100-yr flood, which is illustrated in Exhibit 1. As a result of this study, the County has established the regulatory flood limits for South Tucson which are depicted on the map included as Attachment D.
Figure 1.1 – Watershed Map
Figure 1.1
Watershed Map
City of South Tucson

Legend
- Discharge Point
- Culverts
- Wash Centerline
- 10-ft. Contour
- West Model
- East Model
- South Tucson Watershed A
- Watershed B
- Watershed C
- Watershed D
- FLO-2D Area

The information depicted on this display is the result of digital analyses performed on a variety of databases provided and maintained by various governmental agencies. The accuracy of the information presented is limited to the collective accuracy of these databases on the date of the analysis. The Pima County Department of Transportation Technical Services Division makes no claims regarding the accuracy of the information depicted herein. This product is subject to the Department of Transportation Technical Services Division's Disclaimer and Use Restrictions.

Pima County Regional Flood Control District
201 N. Stone Ave - 9th Floor
Tucson, Arizona 85701-1797
(520) 724-4600, FAX: (520) 724-4621
http://www.rfcd.pima.gov

Aerial: 2020 Pictometry Orthophoto Imagery
Figure 1.2 – Study Limits
Figure 1.3 – Soil Classifications
Figure 1.3
Soil Classifications
City of South Tucson

Legend
- **Discharge Point**
- **Culverts**
- **Wash Centerline**
- **Watersheds**
- **South Tucson**

**MAPTIP_1**
- Soil Group: A (100%)
- Soil Group: A (32%) B (68%)
- Soil Group: B (100%)
- Soil Group: B (37%) D (63%)
- Soil Group: C (100%)
- Soil Group: D (100%)

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The information depicted on this display is the result of digital analyses performed on a variety of databases provided and maintained by several governmental agencies. The accuracy of the information presented is limited to the collective accuracy of these databases on the date of the analysis. Pima County Department of Transportation Technical Services Division makes no claims regarding the accuracy of the information depicted herein. This product is subject to the Department of Transportation Technical Services Division’s Disclaimer and Use Restrictions.

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http://www.rfcd.pima.gov

Aerial: 2020 Orthophoto Imagery
Section 2 Local Government Abstract

2.1 Project Contact Information

Contact Information:
Eleonora Demaria, Ph.D.
Pima County Regional Flood Control District
201 N Stone Ave., 9th Floor
Tucson, AZ 85701
Eleonora.Demaria@pima.gov

Local Technical Reviewer:
Eleonora Demaria, Ph.D.
Pima County Regional Flood Control District
201 N Stone Ave., 9th Floor
Tucson, AZ 85701
Eleonora.Demaria@pima.gov

Date Study Submitted: September 14, 2021

Date Study Approved: __________________________

2.2 General Information

Community: Pima County Regional Flood Control
County: Pima County
River or Stream Name: City of South Tucson
Reach Description: Urban Drainage and Washes
Study Type: Hydrology and Hydraulics study of an Urban System
Purpose of the Study: Estimate regulatory discharge and map a floodplain boundary

2.3 Survey and Mapping Information

Digital Projection Information: PAG 2015 orthophoto
USGS Quad Sheets if available: Tucson, Ariz.
Mapping for Hydrologic Study: LiDAR based on 2015 flight used to derive 2-ft contour interval maps using ArcGIS 10.0
Mapping for Hydraulic Study: LiDAR based on 2015 flight used to derive a DEM (5-ft point grid) for use with AutoCAD Civil 3D
2.4 Hydrology


Storm Duration: 3 hour
Hydrograph Type: SCS Type II 3-hr storm
Frequencies Determined: 100 yr, 10 yr
List of Gages used in Frequency Analysis or Calibration: None
Rainfall Amounts and Reference: NOAA 14 Upper 90% Confidence Interval
Unique Conditions and Problems: None
Coordination of Q’s: Comparison with USGS Ungauged Urban Sites (Eychaner 1987)

2.5 Hydraulics

Model or Method Used: HEC-RAS, Version 5.0.7.
Regime: Modeled as subcritical
Frequencies for which Profiles were computed: 100 yr, 10 yr
Method of Floodway Calculation: No Floodway
Unique Conditions and Problems: Not used for mapping, only for Tc calculation

Model or Method Used: FLO-2D, Pro Version Build 20.07.22
Regime: Modeled as subcritical, Froude limited
Frequencies for which Profiles were computed: 100 yr, 10 yr
Method of Floodway Calculation: No Floodway
Unique Conditions and Problems: Includes stormdrain

2.6 Erosion, Sediment Transport and Geomorphic Analysis

NA

2.7 Additional Study Information

None

Section 3: Survey and Mapping Information

3.1 Digital Projection Information

The data below are included in this TDN (see “GIS” folder)
Aerial Photo: PAG 2015 Orthophotos
Contour: 2 feet interval
Topographic Data: 5-ft DEM

Projection: State Plane, Arizona Central Zone
Horizontal Datum: NAD83-92 (HARN)
Vertical Datum: NAVD-88
Units: International Feet
3.2 Field Survey Information
Field survey information includes the collection of culvert data, including inverts, type, diameter, etc. This task was conducted by Solis Engineering and results are included under separate cover-Memorandum of Findings for Drainage Infrastructure Mapping Within City of South Tucson, Pima County Arizona, July 6, 2020.

3.3 Mapping
Digital Elevation Model (DEM) derived from 2015 Light Detection and Ranging (LiDAR) data was used for the FLO-2D analysis. The contour interval of the topographic map is 2 feet.

Following data are included in this TDN (see “GIS” folder):
- **Aerial Photo**: PAG 2015 Orthophotos
- **Contour**: 2 feet interval
- **Topographic Data**: 5-ft DEM

Section 4: Hydrology

4.1 Method Description
Two methods were used in this study; one for the offsite discharges and another for the onsite discharges. The offsite hydrologic analysis was performed using HEC-HMS, version 4.3, and the onsite hydrologic analysis was performed using FLO-2D. These models require parameters such as rainfall, topography, soil type, vegetation, and channel characteristics to determine runoff volume and peak discharges. Those parameters were determined by following the Pima County Regional Flood Control District Technical Policies 018 (Tech-018) and 033 (Tech-033). Tech-018, Tech-033, and summarized in the Summary of Hydrologic and Hydraulic Modeling Parameters Technical Memorandum included in Appendix B. The data processing methods are summarized in Fig. 4.1.

4.2 Parameter Estimation

4.2.1 Drainage Area Boundaries
The City of South Tucson watershed is primarily located within private land (FEMA Unshaded Zone X). The approximate upstream study limit is Park and I-10 north to 36th, east to Kino Parkway, and north west to the north east corner of the City of South Tucson, at 25th street and the railroad. The downstream limit includes the northern edge of South Tucson (25th street), as well as the western boundary (I-10). See (Fig.1.2). The entire study watershed is 1.51 square miles and was divided into six sub-basins, four offsite basins, Watersheds A thru D, and two onsite basins, FLO-2D East and FLO-2D West (Fig.1.1).
These watersheds were established based on the PAG Digital Elevation Model (DEM) derived from 2015 Light Detection and Ranging (LiDAR). The dominant hydrologic soils of the area are soil types D and C (Fig 1.3).

There is a significant diversion of storm water east and upstream of Watersheds C and D. This diversion was constructed in 2009 as part of the Mission View Wash Drainage Improvements Project, and includes a large regional detention basin just north of Tucson Marketplace and a 60 inch pipe culvert that discharges to the Tucson Diversion Channel to the south. Based on the design of these facilities, no overtopping of, or discharge from these facilities is expected to impact South Tucson during the design storm (100-yr event), and was not considered in this model.

The railroad embankment results in a significant restriction of incoming offsite discharges and generates substantial ponding on the east side of the embankment. This study does account for the discharge restriction and storage volume generated by the embankment but does not include a breach or embankment failure analysis.

4.2.2 Watershed Work Maps
Watershed work maps with a background aerial orthophoto are included as Figures 1.1 thru 1.3. As mentioned previously, the study watershed was divided into five sub-basins. The work maps include sub-basin boundaries, concentration points, flow center lines, soils types (Figure 1.3), FEMA Flood Zones (Figure 1.2), and topographic contours.
Figure 4.1 – Flow Chart of Mapping Process

1. **Topographic Data Preparation using ArcGIS with TIN or DEM**
   - Impervious from 2018 LULC

2. **Hydrologic Analysis using HEC-HMS**
3. **Geometric Data Preparation using GIS/GDS**
   - (Grid network, buildings, culverts, stormdrain, surface)

4. **Hydraulic Analysis using FLO-2D**
   - (Input the following data; Manning’s n-values, culvert data, width reduction factors, stormdrain data)

5. **Floodplain Delineation using FLO-2D/ArcGIS**
4.2.3 Gage Data

NA

4.2.4 Statistical Parameters

NA

4.2.5 Precipitation

The NOAA 14 Atlas 90% upper confidence rainfall depth for the centroid of the study watershed was used for the both the HEC-HMS and FLO-2D analysis. An aerial reduction factor was applied to watersheds larger than 1 square mile as noted in Tech-018. The 3-hr, SCS Type II rainfall distribution described in Haan et al (1994) was used. The point rainfall value tabular output is included in Appendix D.

4.2.6 Physical Parameters

Methods based in Tech-018 and Tech-033 for the HEC-HMS and FLO-2D models are summarized in Table 4.1. A hydrologic soils group map for the study watershed is presented in Figure 1.3. The study watershed is primarily covered with Desert Brush. Hydrologic Soil Group D and C are the dominant soil types in the watershed.

The SCS Curve Number (CN) method was utilized in the both the HEC-HMS and FLO-2D models. The CN was determined using the Curve Number table associated with the PC Hydro User Guide (Arroyo Engineering, 2007) and the Hydrologic Soils Group Map. The CN was not adjusted for rainfall intensity or antecedent moisture conditions in the HEC-HMS or the FLO-2D models. Impervious and vegetative cover was determined using the 2015 PAG orthophotos, the 2018 Land Use Land Cover (LULC) layer provided by the County, and Tables 1 and 3 of the PC Hydro User Guide (Arroyo Engineering, 2007). The SCS Unit Hydrograph method was used as the transform method unique to the HEC-HMS model. Also unique to the HEC-HMS model, the combination of the kinematic wave method and the U.S. Natural Resources Conservation Service (NRCS) segmented Time of Concentration (Tc) calculation method (USDA-NRCS, 1986) was used to determine Tc, following the recommendation of Tech-018. The Tc was calculated by summing the travel time for sheet flow, shallow concentrated flow and channel flow. The Tc for sheet flow was estimated using the kinematic wave equation. Manning’s roughness coefficient for sheet flow was obtained using Table 3-1 in Technical Release 55, Urban Hydrology for Small Watersheds (USDA-NRCS, 1986). HEC-RAS was used to estimate average velocity of channels. No routing of offsite subbasins was required for this study. A summary of HEC-HMS parameters is included in Appendix D. Refer to Appendix B for the Summary of Hydrologic and Hydraulic Modeling Parameters Technical Memorandum for additional parameterization details.
Table 4.1 – Methods for HEC-HMS Analysis

<table>
<thead>
<tr>
<th>Selected Method</th>
<th>Applicable Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rainfall Depth</td>
<td>NOAA 14, upper 90% CI</td>
</tr>
<tr>
<td>Rainfall Distribution</td>
<td>3-hr SCS Type II Storm</td>
</tr>
<tr>
<td>Rainfall Loss</td>
<td>SCS Curve number</td>
</tr>
<tr>
<td>Time of Concentration</td>
<td>SCS Segmental Method</td>
</tr>
<tr>
<td>Transform</td>
<td>SCS Unit Hydrograph</td>
</tr>
<tr>
<td>Routing</td>
<td>Modified-Puls</td>
</tr>
</tbody>
</table>

Table 4.2 - Sub-basin Characteristics

<table>
<thead>
<tr>
<th>Sub-Basin</th>
<th>Area (sq mi)</th>
<th>CN³</th>
<th>Impervious Area¹ (%)</th>
<th>Vegetation Cover² (%)</th>
<th>Tc 100-yr (min)</th>
<th>Lag Time 100-yr (min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>0.138</td>
<td>96.20</td>
<td>65</td>
<td>20</td>
<td>22.13</td>
<td>13.28</td>
</tr>
<tr>
<td>B</td>
<td>0.189</td>
<td>96.20</td>
<td>65</td>
<td>20</td>
<td>18.05</td>
<td>10.83</td>
</tr>
<tr>
<td>C</td>
<td>0.100</td>
<td>95.54</td>
<td>65</td>
<td>20</td>
<td>18.78</td>
<td>11.27</td>
</tr>
<tr>
<td>D</td>
<td>0.071</td>
<td>90.76</td>
<td>10</td>
<td>20</td>
<td>11.33</td>
<td>6.80</td>
</tr>
<tr>
<td>Onsite (FLO-2D Area)</td>
<td>1.01</td>
<td>93.4</td>
<td>65</td>
<td>20</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

¹ Based on 2018 LULC layer provided by the County and Table 3 of the PC-Hydro Users Guide
² Based on 2018 LULC layer provided by the County and Table 1 of the PC-Hydro Users Guide
³ Composite CN, accounts for listed impervious area

4.3 Issues Encountered During the Study

4.3.1 Special Problems and Solutions
N/A

4.3.2 Modeling Warning and Error Messages
The time interval of the rainfall data used in this study is 5 minutes, while the HEC-HMS simulation time interval is 1 minute. The HEC-HMS model interpolated the 5-minute time interval of the rainfall data to 1-minute time interval.

4.4 Calibration
No calibration was performed.
4.5 Final Results

4.5.1 Hydrologic Analysis Results
The 100-yr and the 10-yr peak discharges for the subbasins and concentration points, including impacts from the onsite stormdrain, are summarized in Table 4.3. No area reduction factors were required for these subbasins or concentration points. The onsite (FLO-2D area) discharges are illustrated at various locations as ‘FLO-2D recording sections’ in Exhibits 1 and 2, and include the impacts of the existing stormdrain.

Table 4.3 – Summary of 100-yr and 10-yr discharges

<table>
<thead>
<tr>
<th>Concentration Point</th>
<th>Sub-Basin(s)</th>
<th>Area (sq mi)</th>
<th>10-yr Peak Discharge (cfs)</th>
<th>Time to Peak (hh:mm)</th>
<th>100-yr Peak Discharge (cfs)</th>
<th>Time to Peak (hh:mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A</td>
<td>0.138</td>
<td>245¹</td>
<td>1:36</td>
<td>401¹</td>
<td>1:36</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>0.189</td>
<td>368¹</td>
<td>1:34</td>
<td>600¹</td>
<td>1:34</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>0.100</td>
<td>186¹</td>
<td>1:34</td>
<td>307¹</td>
<td>1:34</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>0.071</td>
<td>124¹</td>
<td>1:31</td>
<td>224¹</td>
<td>1:30</td>
</tr>
<tr>
<td>5</td>
<td>A, Onsite³</td>
<td>0.157</td>
<td>136²</td>
<td>1:45</td>
<td>211²</td>
<td>1:43</td>
</tr>
<tr>
<td>6</td>
<td>B, Onsite³</td>
<td>0.410</td>
<td>133²</td>
<td>2:29</td>
<td>204²</td>
<td>2:14</td>
</tr>
<tr>
<td>7</td>
<td>Onsite³</td>
<td>0.091</td>
<td>91²</td>
<td>1:47</td>
<td>225²</td>
<td>1:39</td>
</tr>
<tr>
<td>8</td>
<td>C, D, Onsite³</td>
<td>0.572</td>
<td>271²</td>
<td>2:28</td>
<td>541²</td>
<td>2:10</td>
</tr>
<tr>
<td>9</td>
<td>Onsite³</td>
<td>0.077</td>
<td>53²</td>
<td>1:33</td>
<td>103²</td>
<td>1:31</td>
</tr>
<tr>
<td>10</td>
<td>Onsite³</td>
<td>0.087</td>
<td>74²</td>
<td>1:58</td>
<td>132²</td>
<td>1:52</td>
</tr>
</tbody>
</table>

¹ HEC-HMS
² FLO-2D
³ Estimated onsite FLO-2D area based on topography

4.5.2 Verification of Results
No current regulatory discharge point data is available within the City of South Tucson. Results of the offsite (HEC-HMS) analysis were compared with Ungauged Urban Sites (Eychaner 1987) and are summarized in Table 4.5. The 100-yr HMS results are smaller than those from the Eychaner equations, while the 10-yr results are larger. The reported standard error of prediction of these equations is 46% for the 100-yr and 41% for the 10-yr, respectively.

Several considerations when comparing results include shared flow between local drainage areas, impacts of stormdrain, and influence of the railroad embankment. It is expected that these would generate a lower result than the Eychaner equations. With maximum differences near the regression prediction envelope (-79.8% to 58.7%), including the aforementioned considerations, these results are anticipated to be representative and acceptable.
The Tucson Stormwater Management Study was also used as a comparison; although the Tucson Marketplace/Mission View Wash Drainage Improvements detention basin was constructed (2009) after the TSMS nodes in the area were last verified (2006). Table 4.5 summarizes the result discharges compared to the TSMS nodes.

**Table 4.4 – Comparison of Peak Discharge Values to Eychaner 1987**

<table>
<thead>
<tr>
<th>Concentration Point</th>
<th>Area (sq mile)</th>
<th>Calculated</th>
<th>Eychaner 1987</th>
<th>% Difference From Eychaner 1987</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Q100 (cfs)</td>
<td>Q10 (cfs)</td>
<td>Q100 (cfs)</td>
</tr>
<tr>
<td>1</td>
<td>0.138</td>
<td>401(^1)</td>
<td>245(^1)</td>
<td>476</td>
</tr>
<tr>
<td>2</td>
<td>0.189</td>
<td>600(^1)</td>
<td>368(^1)</td>
<td>602</td>
</tr>
<tr>
<td>3</td>
<td>0.100</td>
<td>307(^1)</td>
<td>186(^1)</td>
<td>314</td>
</tr>
<tr>
<td>4</td>
<td>0.071</td>
<td>224(^1)</td>
<td>124(^1)</td>
<td>251</td>
</tr>
<tr>
<td>5</td>
<td>0.157</td>
<td>211(^2)</td>
<td>137(^2)</td>
<td>490</td>
</tr>
<tr>
<td>6</td>
<td>0.410</td>
<td>231(^2)</td>
<td>135(^2)</td>
<td>1012</td>
</tr>
<tr>
<td>7</td>
<td>0.091</td>
<td>216(^2)</td>
<td>91(^2)</td>
<td>315</td>
</tr>
<tr>
<td>8</td>
<td>0.572</td>
<td>506(^2)</td>
<td>286(^2)</td>
<td>1304</td>
</tr>
<tr>
<td>9</td>
<td>0.077</td>
<td>100(^2)</td>
<td>53(^2)</td>
<td>279</td>
</tr>
<tr>
<td>10</td>
<td>0.087</td>
<td>132(^2)</td>
<td>74(^2)</td>
<td>286</td>
</tr>
</tbody>
</table>

Reported Standard Error of Regression %

\(^{1}\) HEC-HMS  
\(^{2}\) FLO-2D

**Table 4.5 – Comparison of Peak Discharge Values to TSMS**

<table>
<thead>
<tr>
<th>TSMS Node</th>
<th>100-Year Discharge (cfs)</th>
<th>Verified (Year) / Draft</th>
<th>Calculated Discharge (cfs)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>CL-N0121</td>
<td>186</td>
<td>Verified (n/a)</td>
<td>225</td>
<td>CP-7</td>
</tr>
<tr>
<td>CL-N0122</td>
<td>62</td>
<td>Verified (n/a)</td>
<td>31</td>
<td>29th St./I-10</td>
</tr>
<tr>
<td>CC-N0040</td>
<td>1128</td>
<td>Draft</td>
<td>541</td>
<td>CP-8, Watershed impacted by regional detention basin</td>
</tr>
<tr>
<td>CC-N0060</td>
<td>95</td>
<td>Verified (03/2006)</td>
<td>103</td>
<td>37th St./10th Ave.</td>
</tr>
<tr>
<td>CC-N0030</td>
<td>523</td>
<td>Draft</td>
<td>236</td>
<td>6th Ave Between 34th and 35th St., Watershed impacted by regional detention basin</td>
</tr>
<tr>
<td>CL-N0070</td>
<td>723</td>
<td>Draft</td>
<td>600 (281)</td>
<td>CP-2, Watershed impacted by regional retention basin and Railroad</td>
</tr>
<tr>
<td>CL-N0090</td>
<td>246</td>
<td>Draft</td>
<td>401 (221)</td>
<td>CP-1, Impacted by Railroad</td>
</tr>
</tbody>
</table>

() Indicates discharge as a result of Railroad
Section 5: Hydraulics

5.1 Method Description
Subcritical two dimensional analysis with FLO-2D was performed to establish a 100-year floodplain of the City of South Tucson. Parameters for the hydraulic analysis were selected following the County’s Technical Policy 33-Criteria for Two-Dimensional Modeling (TECH-033). The physical attributes of the wash were digitized in AutoCAD Civil 3D 2018 and exported to FLO-2D to create geospatially referenced geometric data (Surface). Other parameters for the analysis, such as Manning’s n-values, width reduction factors, and other control parameters were manually input into FLO-2D. Refer to the Summary of Hydrologic and Hydraulic Modeling Parameters Technical Memorandum included as Appendix B.

To reduce computation times and model manageability, two FLO-2D models were established, an east model and a west model. The results of the east (upstream) model were input in the west (downstream) model, maintaining the proper modeling time for hydrographs and rainfall. The hydraulic data obtained from FLO-2D was imported into ArcMap to illustrate the 100-yr flood boundaries for the City of South Tucson.

5.2 Work Study Maps
Work study maps include Exhibits 1 and 2. This study mapped the 100-yr and 10-yr floodplain for the City of South Tucson.

5.3 Parameter Estimation

5.3.1 Roughness Coefficients
FLO-2D roughness coefficients were determined in accordance with TECH-033, Table 1 of the Technical Guidance. The majority of the watershed includes streets (coefficient of 0.020), residential (0.065) and open space (0.045).

In accordance with the County’s FLO-2D Technical Guidance, the Manning’s Coefficient Increment (AMANN) and the shallow Manning’s Coefficient (SHALLOWN) were disabled, and the Froude Number was limited to 0.95.

5.3.2 Expansion and Contraction Coefficients
FLO-2D does not specifically use expansion and contraction coefficients, but does apply area and width reduction factors. FLO-2D width reduction factors are applied to each grid element to model the extent that structures (buildings) block flow within each grid element. FLO-2D area reduction factors are applied to each grid element to model the extent that structures block storage volume within each grid element.
5.4 Cross Section Description
Several cross sections were located throughout the onsite model and are referred to as ‘FLO-2D Recording Sections’. These sections were largely selected based on locations of interest including stormdrain inlet locations model inflow/outflow locations, and other areas of concern expressed by The County/City.

5.5 Modeling Considerations

5.5.1 Hydraulic Jump and Drop Analysis
N/A.

5.5.2 Bridges and Culverts
There is an extensive stormdrain network within the study area that includes culverts. The culverts and storm drain networks were included in FLO-2D which utilizes a combination of rating tables in conjunction with stormdrain software (EPA SWMM) and generated water surface elevations to model the flow through these structures, no clogging factors or debris loading was considered in this study. Additionally, features such as property fencing or walls were not included in this study. A general exhibit of the stormdrain is included as Attachment A. Exhibits of results neglecting the stormdrain have also been included, as Attachment B, for informational purposes. The referenced memo prepared by Solis Engineering with detailed information on the stormdrain network of South Tucson is included as Attachment C.

5.5.3 Levees and Dikes
None.

5.5.4 Non-Levee Embankments
None.

5.5.5 Islands and Flow Splits
Given the urban nature of the study area, there are numerous locations of split flow and potential for localized islands.

5.5.6 Ineffective Flow Areas
FLO-2D does not specifically include ineffective flow areas but does indicate areas of ponding with near zero velocities. Additionally the model accounts for reductions in the width and area of elements with area reduction and width reduction factors.

5.5.7 Supercritical Flow
NA

5.6 Floodway Modeling
NA
5.7 Issues Encountered during the Study

5.7.1 Special Problems and Solutions
None

5.7.2 Modeling Warning and Error Messages
No FLO-2D errors occurred, and only minor warnings related to adjustments to ARF.DAT and dry outflow nodes. The ERROR.CHK file is included in Appendix E.

5.8 Calibration

Results of the model were compared with historical flooding accounts and local flooding complaints. These areas were identified in the Memorandum of Findings for Drainage Infrastructure Mapping Within City of South Tucson, Pima County Arizona, dated July 6, 2020. The results of this analysis closely corresponds and supports the findings as illustrated in Exhibit 15-Flood Prone Areas Map of the aforementioned memorandum.

5.9 Final Results

5.9.1 Hydraulic Analysis Results
Selected output from the FLO-2D model is included in Appendix E. This includes the ERROR.CHK and CROSSMAX.OUT files.

5.9.2 Verification of Results
There are no existing floodplain maps within the City of South Tucson. The new map tends to follow the floodplain topography and historic flooding conditions. The results suggest that the mapping is reasonable.

Section 6: Erosion and Sediment Transport
Not available in this study

Section 7: Canyon Wash Determination

The ratio of 100-yr to 25-yr floodplain top width is calculated to determine if the study reach is classified as a “Canyon Wash”. When the average ratio of the top width is less than 1.25 and 100-yr peak discharge is over 2000 cfs, the wash is defined as a “Canyon Wash”. The washes within the City of South Tucson are not considered Canyon Washes.
Appendix A

References


FLO-2D Software, Inc. FLO-2D PRO Build No. 20.07.22


Appendix B
General Documentation and Correspondence
Introduction
This Technical Memorandum has been prepared to summarize the establishment of the hydrologic and hydraulic parameters that will be used in the corresponding models. The hydrologic models selected based on watershed size are HEC-HMS for offsite watersheds and Flo-2D for onsite watersheds. The selected hydraulic model is Flo-2D.

HEC-HMS Parameters
Following is a description of the various HEC-HMS parameters; refer to Table 1 at the end of this section for a summary of these parameters.

Watershed Delineation
The watersheds are delineated from one foot contours within AutoCAD Civil 3D 2018 on a surface generated from 2015 DEM data provided by Pima County. See Exhibit A.

Rainfall
The NOAA 14 Upper 90% rainfall shall be used. Two locations were reviewed, one at the eastern portion of South Tucson and one at the Western portion. The precipitation values did not significantly vary (less than 0.05 in) and the larger depths will be used for this study. See Exhibit A. The NOAA data sheets are attached.

Rainfall Areal Reduction
With watersheds no larger than one square mile, areal reduction factors (ARF) of 1 shall be applied.
Summary of Hydrologic and Hydraulic Modeling Parameters
Technical Memorandum

Rainfall Distribution
The selected rainfall distribution is the SCS Type II 3-hour Storm as the Tc of the watersheds is expected to be less than three hours. The provided worksheet from Pima County will be used to generate the HEC-HMS input for the specified hyetograph.

Rainfall Loss
The SCS Curve Number method is to be used in conjunction with the Pima County Soils Layer (provided by Pima County and imported to AutoCAD Civil 3D 2018), and vegetation cover as described in the PC-Hydro User Guide (Arroyo Engineering, 2007). The vegetative cover is to be Desert Brush at a 20% coverage. The Curve Number shall be selected from Table 1 of the PC-Hydro User Guide (Below). The curve number shall not be adjusted for rainfall intensity or antecedent moisture conditions. Initial Abstraction shall be set to 0 and the CN is to be calculated within the County provided spreadsheet. Impervious is calculated from Pima County’s Land Use layer (provided by Pima County) and approximated to values in Table 3 (Below) of the PC-Hydro User Guide for use in the provided County worksheet. ‘Barren/Bedrock’ class areas are to be considered impervious for this study. Because impervious is accounted for within the County’s worksheet, the HEC-HMS impervious input is 0.

Tables 1 and 3 of the PC-Hydro Users Guide

<table>
<thead>
<tr>
<th>Hydrologic Soil Types</th>
<th>Vegetative Cover Density</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10%</td>
</tr>
<tr>
<td>Types A and B</td>
<td>85</td>
</tr>
<tr>
<td>Type C</td>
<td>85</td>
</tr>
<tr>
<td>Type D</td>
<td>92</td>
</tr>
</tbody>
</table>

Table 1 – Summary of SCS Curve Numbers for Desert Brush

<table>
<thead>
<tr>
<th>Development Type</th>
<th>Impervious Cover Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Minimum</td>
</tr>
<tr>
<td>Rural and Suburban:</td>
<td></td>
</tr>
<tr>
<td>a. Less than 1 house/acre</td>
<td>5 %</td>
</tr>
<tr>
<td>b. 1 house/acre</td>
<td>15 %</td>
</tr>
<tr>
<td>c. 2 houses/acre</td>
<td>25 %</td>
</tr>
<tr>
<td>Light to Moderate Urbanization:</td>
<td></td>
</tr>
<tr>
<td>a. 1 house/acre</td>
<td>30 %</td>
</tr>
<tr>
<td>b. 4 houses/acre (detached)</td>
<td>35 %</td>
</tr>
<tr>
<td>c. 5 houses/acre (detached)</td>
<td>45 %</td>
</tr>
<tr>
<td>Highly Urbanized:</td>
<td></td>
</tr>
<tr>
<td>a. Multiple Dwellings, 4 units/acre or more</td>
<td>50 %</td>
</tr>
<tr>
<td>b. Light Industrial and Commercial</td>
<td>50 %</td>
</tr>
<tr>
<td>c. Heavy Industrial and Commercial</td>
<td>80 %</td>
</tr>
</tbody>
</table>

(PCDOT&FCD, 1979)
Summary of Hydrologic and Hydraulic Modeling Parameters
Technical Memorandum

Time of Concentration
The modified NRCS segmented Time of Concentration calculation will be used. Manning’s roughness for sheet flow will be obtained from Table 3-1 of TR-55 (Right) with a max slope length of 100 feet. The kinematic wave method will be used to estimate travel time. Travel time for shallow concentrated flow will be obtained from Figure 3-1 of TR-55 (Attached) and shall not exceed 2000 feet. The Manning’s roughness coefficient for channel flow will be established from Table 3-1 of the HEC-RAS Hydraulic Reference Manual (Attached). Reach velocity will be established from HEC-RAS based on the 100-year discharge value calculated with the USGS regional regression equation 13. Calculation of Tc is to be conducted within the County provided worksheet.

Transform
The SCS Unit Hydrograph shall be used with a Graph Type of Standard (PRF 484).

Channel Routing
There is no channel routing anticipated for this project. However if channel routing is required, it shall use the Modified-Plus method with no loss/gain and initial set to inflow=outflow. HEC-RAS would be used to develop a stage storage table for use in HEC-HMS. The initial discharge to estimate the HEC-RAS velocity for channel flow would be determined with the USGS Regression Equation 13.

Discharge Comparison
Discharges are to be compared the Urban Equation developed by Eychaner with the appropriate Basin Development Factors.

<table>
<thead>
<tr>
<th>Watershed</th>
<th>Area (sq.mi.)</th>
<th>Vegetative Cover (%)</th>
<th>Impervious (%)</th>
<th>Hydrologic Soils Type</th>
<th>CN</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>0.138</td>
<td>20</td>
<td>65</td>
<td>100%D</td>
<td>96.20</td>
</tr>
<tr>
<td>B</td>
<td>0.189</td>
<td>20</td>
<td>65</td>
<td>0.26%C 99.7%D</td>
<td>96.20</td>
</tr>
<tr>
<td>C</td>
<td>0.100</td>
<td>20</td>
<td>65</td>
<td>63.1%C 36.9%D</td>
<td>95.54</td>
</tr>
<tr>
<td>D</td>
<td>0.071</td>
<td>20</td>
<td>10</td>
<td>38.5%C 61.5%D</td>
<td>90.76</td>
</tr>
</tbody>
</table>

(Continued on next page)
Summary of Hydrologic and Hydraulic Modeling Parameters
Technical Memorandum

Table 1-Summary of Initial Hydrologic Parameters
(Continued from previous page)

<table>
<thead>
<tr>
<th>Concentration Point (CP-)</th>
<th>Contributory Watersheds (WS-)</th>
<th>Area (sq.mi.)</th>
<th>ARF</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A</td>
<td>0.138</td>
<td>1.000</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>0.189</td>
<td>1.000</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>0.100</td>
<td>1.000</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>0.071</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Flo-2D Parameters
Parameterization for the Flo-2D Model shall be in accordance with TECH-33 and the *Flo-2D (V. 2009, Pro) Technical Guidance for Hydrologic and Hydraulic modeling in Unincorporated Pima County, Arizona*. Following is a description of some of the various Flo-2D parameters.

**Grid Element Size**
The grid element size is a function of DTM point spacing, desired precision, and overall project size. The surface model for this project is to be generated from County DTM models which are collected at an average density of 2 points per square meter. In order to capture street flow and other features, the desired element size is 10 feet. Due to the overall project size, multiple Flo-2D models will likely be used to keep the data processing burden to manageable levels.

**Multiple Models**
The overall project is anticipated to be divided into several modeling areas, arranged from east to west, to capture the overall flow patterns at this level of detail. The results (outflow hydrographs) in the upstream model will be exported to the downstream model (as inflow hydrographs). It is important that these models are set to the same initial/start time so that they properly account for the accumulation of rain as well as the conveyance of peak flows.

**Precipitation**
The total rainfall depth will be established in accordance with TECH-10, the NOAA 14 Upper 90% rainfall shall be used. Two locations were reviewed, one in the eastern portion of South Tucson and one in the Western portion. The precipitation values did not significantly vary (less than 0.05 in) and the larger depths will be used for this study. See Exhibit A. The NOAA data sheets are attached.

The distribution shall be established in accordance with TECH-18, the selected rainfall distribution is the SCS Type II 3-hour Storm as the Tc of the watersheds is expected to be less than three hours. The provided worksheet from Pima County will be used to generate the Flo-2D precipitation input.
Rainfall Loss
Rainfall losses shall be established consistent with TECH-18. The SCS Curve Number method is to be used in conjunction with the Pima County Soils Layer (provided by Pima County and imported to AutoCAD Civil 3D 2018), and vegetation cover as described in the PC-Hydro User Guide (Arroyo Engineering, 2007). The vegetative cover is to be Desert Brush at a 20% coverage. The Curve Number shall be selected from Table 1 of the PC-Hydro User Guide (Page 2). The curve number shall not be adjusted for rainfall intensity or antecedent moisture conditions. Initial Abstraction shall be set to 0 and the CN is to be calculated within the County provided spreadsheet. Impervious is calculated from Pima County’s Land Use layer (provided by Pima County) and approximated to values in Table 3 of the PC-Hydro User Guide (Page 2) for use in the provided County worksheet.

Area/Width Reduction
Area Reduction Factors are used to model surfaces that do not provide flood storage (building roofs) and shall be consistent with Table 3 from the County’s PC-Hydro User Guide (Page 2). Due to the urban nature of the study area and large influence of buildings on the flood wave progression and area of inundation, the use of Width Reduction Factors is recommended.

Roughness Coefficient
Manning’s Roughness Coefficient shall be spatially variable to match the surface roughness conditions specific to the individual grid cells and shall be selected from Table 1 of the Flo-2D (V. 2009, Pro) Technical Guidance for Hydrologic and Hydraulic modeling in Unincorporated Pima County, Arizona (Right), Table 3 of the Flo-2D Reference Manual (Next Page), and Table 8.1 of the Standards Manual for Drainage Design and Floodplain Management (Next Page). The majority of the grid cells are anticipated to be; streets (0.020), residential (0.065), and open space (0.045).

<table>
<thead>
<tr>
<th>n</th>
<th>Land Use</th>
<th>n</th>
<th>Land Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.020</td>
<td>Streets, Concrete Channels</td>
<td>0.055</td>
<td>Retail, Warehousing</td>
</tr>
<tr>
<td>0.025</td>
<td>Open Space, Lawn</td>
<td>0.055</td>
<td>Natural Vegetated Channels</td>
</tr>
<tr>
<td>0.030</td>
<td>Right of way (clear area beside</td>
<td>0.065</td>
<td>Manufacture, Salvage</td>
</tr>
<tr>
<td></td>
<td>pavement)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.035</td>
<td>Commercial</td>
<td>0.065</td>
<td>Open Space, dense and Densely</td>
</tr>
<tr>
<td>0.035</td>
<td>Earth channels, constructed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.035</td>
<td>Roadside swale</td>
<td>0.070</td>
<td>Industrial</td>
</tr>
<tr>
<td>0.040</td>
<td>Office, Retail</td>
<td>0.100</td>
<td>Agriculture</td>
</tr>
<tr>
<td>0.045</td>
<td>Open Space, Light to Medium Brush</td>
<td>0.100</td>
<td>Detention Basin</td>
</tr>
</tbody>
</table>
Table 8.1 of the Standards Manual

<table>
<thead>
<tr>
<th>CHANNEL MATERIAL</th>
<th>ROUGHNESS COEFFICIENT (n)</th>
<th>Minimum</th>
<th>Normal</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrugated metal</td>
<td></td>
<td>0.021</td>
<td>0.025</td>
<td>0.030</td>
</tr>
<tr>
<td>Concrete</td>
<td></td>
<td>0.011</td>
<td>0.013</td>
<td>0.015</td>
</tr>
<tr>
<td>1) Trowel finish</td>
<td></td>
<td>0.013</td>
<td>0.015</td>
<td>0.016</td>
</tr>
<tr>
<td>2) Float finish</td>
<td></td>
<td>0.014</td>
<td>0.017</td>
<td>0.020</td>
</tr>
<tr>
<td>3) Unfinished</td>
<td></td>
<td>0.016</td>
<td>0.019</td>
<td>0.023</td>
</tr>
<tr>
<td>4) Shotcrete, good section</td>
<td></td>
<td>0.018</td>
<td>0.022</td>
<td>0.025</td>
</tr>
<tr>
<td>5) Shotcrete, wavy section</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asphalt (use maximum value when cars are present)</td>
<td>0.013</td>
<td>0.016</td>
<td>0.020</td>
<td></td>
</tr>
<tr>
<td>Soil Cement</td>
<td></td>
<td>0.018</td>
<td>0.020</td>
<td>0.025</td>
</tr>
<tr>
<td>Riprap (bottom and sides)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>n = 0.047</strong></td>
<td></td>
<td>0.018</td>
<td>0.020</td>
<td>0.025</td>
</tr>
<tr>
<td>Constructed channels with earth or sand bottom, sides of</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1) Clean earth; straight</td>
<td></td>
<td>0.018</td>
<td>0.022</td>
<td>0.025</td>
</tr>
<tr>
<td>2) Earth with grass and weeds</td>
<td></td>
<td>0.020</td>
<td>0.025</td>
<td>0.030</td>
</tr>
<tr>
<td>3) Earth with trees and shrubs</td>
<td></td>
<td>0.024</td>
<td>0.032</td>
<td>0.040</td>
</tr>
<tr>
<td>4) Shotcrete</td>
<td></td>
<td>0.018</td>
<td>0.022</td>
<td>0.025</td>
</tr>
<tr>
<td>5) Soil cement</td>
<td></td>
<td>0.022</td>
<td>0.025</td>
<td>0.028</td>
</tr>
<tr>
<td>6) Concrete</td>
<td></td>
<td>0.017</td>
<td>0.020</td>
<td>0.024</td>
</tr>
<tr>
<td>7) Dry rubble or riprap</td>
<td></td>
<td>0.023</td>
<td>0.033</td>
<td>0.036</td>
</tr>
<tr>
<td>Natural channels with sand bottom, sides of</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1) Trees and shrubs</td>
<td></td>
<td>0.025</td>
<td>0.035</td>
<td>0.045</td>
</tr>
<tr>
<td>2) Rock</td>
<td></td>
<td>0.024</td>
<td>0.032</td>
<td>0.040</td>
</tr>
<tr>
<td>Natural channel with rock bottom</td>
<td></td>
<td>0.040</td>
<td>0.060</td>
<td>0.090</td>
</tr>
<tr>
<td>Overbank Floodplains</td>
<td></td>
<td>0.040</td>
<td>0.060</td>
<td>0.080</td>
</tr>
<tr>
<td>1) Desert brush, normal density</td>
<td></td>
<td>0.070</td>
<td>0.100</td>
<td>0.160</td>
</tr>
</tbody>
</table>

*Adapted from Chow (1959) and Aldridge and Garrett (1973).

**D_{so} in feet.

Table 3 of the Flo-2D Reference Manual

<table>
<thead>
<tr>
<th>Surface</th>
<th>n-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dense turf</td>
<td>0.17 - 0.80</td>
</tr>
<tr>
<td>Bermuda and dense grass, dense vegetation</td>
<td>0.17 - 0.48</td>
</tr>
<tr>
<td>Shrubs and forest litter, pasture</td>
<td>0.30 - 0.40</td>
</tr>
<tr>
<td>Average grass cover</td>
<td>0.20 - 0.40</td>
</tr>
<tr>
<td>Poor grass cover on rough surface</td>
<td>0.20 - 0.80</td>
</tr>
<tr>
<td>Short prairie grass</td>
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ATTACHMENTS
Point precipitation frequency estimates (inches)
NOAA Atlas 14 Volume 1 Version 5
Data type: Precipitation depth
Time series type: Partial duration
Project area: Southwest
Location name (ESRI Maps): Tucson Arizona USA
Station Name: -
Latitude: 32.1971°
Longitude: -110.9570°
Elevation (USGS): 2451.39 ft

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pyRunTime: 0.0254969596863
Point precipitation frequency estimates (inches)
NOAA Atlas 14 Volume 1 Version 5
Data type: Precipitation depth
Time series type: Partial duration
Project area: Southwest
Location name (ESRI Maps): Tucson Arizona USA
Station Name: -
Latitude: 32.1975°
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Elevation (USGS): 2420.44 ft

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Date/time (GMT): Mon Mar 30 23:30:20 2020
pyRunTime: 0.0242359638214
Appendix C
Field Review Photos and Survey Field Notes

Refer to Appendix 1 thru 4 of the referenced document:
## HEC-HMS Parameters Summary

**Project:** South Tucson  
**Job No.:** 20014.01

### Basin Model

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### HEC-HMS Output Summary

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**Point precipitation frequency estimates (inches)**

**NOAA Atlas 14 Volume 1 Version 5**

Data type: Precipitation depth

Time series type: Partial duration

Project area: Southwest

Location n: Arizona USA

Station Name: -

Latitude: 32.1971°

Longitude: -110.9570°

Elevation (USGS): 2451.39 ft

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### PRECIPITATION FREQUENCY ESTIMATES AT UPPER BOUND OF 90% CONFIDENCE INTERVAL

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Date/time (GMT): Mon Mar 30 23:32:33 2020

pyRunTime: 0.0254969596863
Appendix E
Hydraulic Analysis, Supporting Documents
NEGATIVE VOLUME CONSERVATION (ACRE FEET) INDICATES EXCESS VOLUME (OUTFLOW + STORAGE > INFLOW)

<table>
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<th>SIMULATION TIME (HOURS)</th>
<th>AVERAGE TIMESTEP (SECONDS)</th>
<th>VOLUME CONSERVATION (ACRE FEET)</th>
<th>PERCENT OF INFLOW</th>
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MASS BALANCE  INFLOW - OUTFLOW VOLUME

====================================================================================================

*** INFLOW (ACRE-FEET) ***

TOTAL POINT RAINFALL: 3.1700 INCHES

WATER

RAINFALL VOLUME 150.478

SURFACE WATER INFLOW HYDROGRAPH 70.444

-----

INFLOW HYDROGRAPHS + RAINFALL 220.921

====================================================================================================

*** SURFACE OUTFLOW (ACRE-FT) ***
OVERLAND INFILTRATED AND INTERCEPTED WATER

OVERLAND FLOW

WATER LOST TO INFILTRATION & INTERCEPTION

FLOODPLAIN STORAGE

FLOODPLAIN OUTFLOW HYDROGRAPH

FLOODPLAIN OUTFLOW, INFILTRATION & STORAGE

TOL FLOODPLAIN STORAGE

CHANNEL OUTFLOW AND STORAGE

=====================================================================================================

======================================

*** FLO-2D STORM DRAIN EXCHANGE VOLUME (ACRE-FT) ***

Storm Drain Inflow

SURFACE TO STORM DRAIN SYSTEM THROUGH INLETS

SURFACE TO STORM DRAIN THROUGH OUTFALLS

DIRECT INFLOW RECEIVED AT INLETS

TOTAL INFLOW (compare w/SWMM.rpt Wet Weather Inflow)

Storm Drain Outflow from Outfalls

STORM DRAIN TO SURFACE THROUGH OUTFALLS

STORM DRAIN OUTFALL (OFF SYSTEM)

TOTAL OUTFLOW (compare w/SWMM.rpt External Outflow)

Storm Drain Return Flow to Surface

STORM DRAIN RETURN FLOW TO SURFACE THROUGH INLETS

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<th>Description</th>
<th>Value</th>
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Extracted from Storm Drain File (swmm.rpt)

WET WEATHER INFLOW                                                      90.427858
EXTERNAL INFLOW                                                           0.095
EXTERNAL OUTFLOW                                                         82.438692
Return Flow to Surface                                                   6.900181
Total Storm Drain Storage (nodes+links)                                  0.307531
Continuity Error (%)                                                     0.969

==========================================================================

*** TOTALS ***

TOTAL OUTFLOW FROM GRID SYSTEM                                           169.037
TOTAL VOLUME OF OUTFLOW AND STORAGE                                     220.921

SURFACE AREA OF INUNDATION REGARDLESS OF THE TIME OF OCCURRENCE:
(FOR FLOW DEPTHS GREATER THAN THE "TOL" VALUE TYPICALLY 0.1 FT OR 0.03 M)

THE MAXIMUM INUNDATED AREA IS:                                          479.274 ACRES
THE MAXIMUM INUNDATED AREA (DEPTH > 0.5 FT) IS:                         77.457 ACRES

==========================================================================

*** OUTFLOW TO DOWNSTREAM GRID SYSTEMS INCLUDED IN FLOODPLAIN OUTFLOW HYDROGRAPH VOLUME ABOVE (ACRE-FT) ***
OUTFLOW VOLUME TO DOWNSTREAM GRID SYSTEM No. 1  121.537

GRID ELEMENT SIZE:  10.0 FT
TOTAL NUMBER OF GRID ELEMENTS:  249550
GRID SYSTEM AREA:  572.89 ACRES  0.8949 SQ. MI.
TOTAL FLOODPLAIN LOOP COMPUTATIONS:  23495536569.

COMPUTER RUN TIME IS :  0.97412 HRS

THIS OUTPUT FILE WAS TERMINATED ON:  6/17/2021 AT:  18:47:35

SIMULATION SUMMARY

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<tr>
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East Model 100-yr w/SD
CROSSMAX.OUT

THE MAXIMUM DISCHARGE FROM CROSS SECTION 1 IS: 111.31 CFS AT TIME: 1.79 HOURS

THE MAXIMUM DISCHARGE FROM NODE 42020 IS: 0.01 CFS AT TIME 1.43 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.02 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 41698 IS: 0.01 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 41376 IS: 0.98 CFS AT TIME 1.80 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.18 FEET AND A MAXIMUM VOLUME OF: 0.04 AF

THE MAXIMUM DISCHARGE FROM NODE 41054 IS: 17.66 CFS AT TIME 1.79 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.65 FEET AND A MAXIMUM VOLUME OF: 1.62 AF

THE MAXIMUM DISCHARGE FROM NODE 40732 IS: 31.19 CFS AT TIME 1.79 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.81 FEET AND A MAXIMUM VOLUME OF: 3.39 AF

THE MAXIMUM DISCHARGE FROM NODE 40410 IS: 40.16 CFS AT TIME 1.79 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 1.00 FEET AND A MAXIMUM VOLUME OF: 4.79 AF

THE MAXIMUM DISCHARGE FROM NODE 40088 IS: 18.34 CFS AT TIME 1.79 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.61 FEET AND A MAXIMUM VOLUME OF: 1.50 AF

THE MAXIMUM DISCHARGE FROM NODE 39766 IS: 2.96 CFS AT TIME 1.80 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.40 FEET AND A MAXIMUM VOLUME OF: 0.19 AF

THE MAXIMUM DISCHARGE FROM NODE 39444 IS: 0.01 CFS AT TIME 1.30 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.09 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION 2 IS: 40.46 CFS AT TIME: 1.84 HOURS

THE MAXIMUM DISCHARGE FROM NODE 35533 IS: 0.02 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.03 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 35211 IS: 0.03 CFS AT TIME 1.50 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.04 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 34889 IS: 33.24 CFS AT TIME 1.86 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 1.03 FEET AND A MAXIMUM VOLUME OF: 5.01 AF

THE MAXIMUM DISCHARGE FROM NODE 34567 IS: 6.83 CFS AT TIME 1.85 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.48 FEET AND A MAXIMUM VOLUME OF: 0.90 AF

THE MAXIMUM DISCHARGE FROM NODE 34245 IS: 0.42 CFS AT TIME 1.88 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.14 FEET AND A MAXIMUM VOLUME OF: 0.03 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION 3 IS: 52.34 CFS AT TIME: 1.89
CROSSMAX.OUT

HOURS

THE MAXIMUM DISCHARGE FROM NODE  30023 IS:  0.00 CFS AT TIME  1.73 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF:  0.02 FEET AND A MAXIMUM VOLUME OF:  0.00 AF

THE MAXIMUM DISCHARGE FROM NODE  29791 IS:  0.69 CFS AT TIME  1.89 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF:  0.15 FEET AND A MAXIMUM VOLUME OF:  0.03 AF

THE MAXIMUM DISCHARGE FROM NODE  29379 IS:  4.56 CFS AT TIME  1.89 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF:  0.37 FEET AND A MAXIMUM VOLUME OF:  0.28 AF

THE MAXIMUM DISCHARGE FROM NODE  29057 IS:  11.01 CFS AT TIME  1.89 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF:  0.47 FEET AND A MAXIMUM VOLUME OF:  0.72 AF

THE MAXIMUM DISCHARGE FROM NODE  28735 IS:  16.64 CFS AT TIME  1.89 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF:  0.56 FEET AND A MAXIMUM VOLUME OF:  1.30 AF

THE MAXIMUM DISCHARGE FROM NODE  28413 IS:  12.31 CFS AT TIME  1.87 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF:  0.57 FEET AND A MAXIMUM VOLUME OF:  1.06 AF

THE MAXIMUM DISCHARGE FROM NODE  28091 IS:  4.45 CFS AT TIME  1.90 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF:  0.30 FEET AND A MAXIMUM VOLUME OF:  0.26 AF

THE MAXIMUM DISCHARGE FROM NODE  27769 IS:  2.44 CFS AT TIME  1.89 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF:  0.25 FEET AND A MAXIMUM VOLUME OF:  0.13 AF

THE MAXIMUM DISCHARGE FROM NODE  27447 IS:  0.25 CFS AT TIME  1.90 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF:  0.06 FEET AND A MAXIMUM VOLUME OF:  0.01 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION  4 IS:  27.49 CFS AT TIME:  1.50 HOURS

THE MAXIMUM DISCHARGE FROM NODE  66151 IS:  0.14 CFS AT TIME  1.42 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF:  0.09 FEET AND A MAXIMUM VOLUME OF:  0.01 AF

THE MAXIMUM DISCHARGE FROM NODE  65829 IS:  0.14 CFS AT TIME  1.42 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF:  0.07 FEET AND A MAXIMUM VOLUME OF:  0.00 AF

THE MAXIMUM DISCHARGE FROM NODE  65507 IS:  3.69 CFS AT TIME  1.50 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF:  0.33 FEET AND A MAXIMUM VOLUME OF:  0.21 AF

THE MAXIMUM DISCHARGE FROM NODE  65185 IS:  13.16 CFS AT TIME  1.50 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF:  0.49 FEET AND A MAXIMUM VOLUME OF:  0.99 AF

THE MAXIMUM DISCHARGE FROM NODE  64863 IS:  8.39 CFS AT TIME  1.50 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF:  0.38 FEET AND A MAXIMUM VOLUME OF:  0.52 AF

THE MAXIMUM DISCHARGE FROM NODE  64541 IS:  1.90 CFS AT TIME  1.50 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF:  0.22 FEET AND A MAXIMUM VOLUME OF:  0.08 AF

THE MAXIMUM DISCHARGE FROM NODE  64219 IS:  0.13 CFS AT TIME  1.50 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF:  0.06 FEET AND A MAXIMUM VOLUME OF:  0.00 AF
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THE MAXIMUM DISCHARGE FROM CROSS SECTION  5 IS:   117.18 CFS AT TIME:   1.97 HOURS

THE MAXIMUM DISCHARGE FROM NODE  69019 IS:   1.32 CFS AT TIME     2.02 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF:   0.20 FEET AND A MAXIMUM VOLUME OF:   0.01 AF

THE MAXIMUM DISCHARGE FROM NODE  69018 IS:   6.25 CFS AT TIME     2.04 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF:   0.71 FEET AND A MAXIMUM VOLUME OF:   0.12 AF

THE MAXIMUM DISCHARGE FROM NODE  69017 IS:   12.14 CFS AT TIME     1.97 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF:   1.11 FEET AND A MAXIMUM VOLUME OF:   0.87 AF

THE MAXIMUM DISCHARGE FROM NODE  69016 IS:   29.74 CFS AT TIME     1.97 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF:   1.48 FEET AND A MAXIMUM VOLUME OF:   3.28 AF

THE MAXIMUM DISCHARGE FROM NODE  69015 IS:   35.76 CFS AT TIME     1.97 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF:   1.46 FEET AND A MAXIMUM VOLUME OF:   4.24 AF

THE MAXIMUM DISCHARGE FROM NODE  69014 IS:   29.91 CFS AT TIME     1.94 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF:   1.63 FEET AND A MAXIMUM VOLUME OF:   3.59 AF

THE MAXIMUM DISCHARGE FROM NODE  69013 IS:   6.74 CFS AT TIME     1.97 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF:   0.83 FEET AND A MAXIMUM VOLUME OF:   0.38 AF

THE MAXIMUM DISCHARGE FROM NODE  69012 IS:   3.18 CFS AT TIME     2.04 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF:   0.73 FEET AND A MAXIMUM VOLUME OF:   0.11 AF

THE MAXIMUM DISCHARGE FROM NODE  69011 IS:   0.01 CFS AT TIME     1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF:   0.02 FEET AND A MAXIMUM VOLUME OF:   0.00 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION  6 IS:   147.80 CFS AT TIME:   2.01 HOURS

THE MAXIMUM DISCHARGE FROM NODE  66422 IS:   3.34 CFS AT TIME     1.84 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF:   0.68 FEET AND A MAXIMUM VOLUME OF:   0.18 AF

THE MAXIMUM DISCHARGE FROM NODE  66100 IS:   10.42 CFS AT TIME     2.02 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF:   0.70 FEET AND A MAXIMUM VOLUME OF:   0.53 AF

THE MAXIMUM DISCHARGE FROM NODE  65778 IS:   26.98 CFS AT TIME     2.01 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF:   1.23 FEET AND A MAXIMUM VOLUME OF:   2.38 AF

THE MAXIMUM DISCHARGE FROM NODE  65456 IS:   37.97 CFS AT TIME     2.01 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF:   1.30 FEET AND A MAXIMUM VOLUME OF:   3.70 AF

THE MAXIMUM DISCHARGE FROM NODE  65134 IS:   33.61 CFS AT TIME     2.01 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF:   1.25 FEET AND A MAXIMUM VOLUME OF:   2.94 AF

THE MAXIMUM DISCHARGE FROM NODE  64812 IS:   25.28 CFS AT TIME     2.01 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF:   1.10 FEET AND A MAXIMUM VOLUME OF:   1.81 AF
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The maximum discharge from node 64490 is: 9.25 CFS at time 2.01 hours with a maximum floodplain depth of: 0.71 FEET and a maximum volume of: 0.44 AF

The maximum discharge from node 64168 is: 3.54 CFS at time 2.01 hours with a maximum floodplain depth of: 0.59 FEET and a maximum volume of: 0.14 AF

The maximum discharge from cross section 7 is: 162.75 CFS at time: 2.02 hours

The maximum discharge from node 66723 is: 0.02 CFS at time 1.42 hours with a maximum floodplain depth of: 0.01 FEET and a maximum volume of: 0.00 AF

The maximum discharge from node 66401 is: 0.01 CFS at time 1.42 hours with a maximum floodplain depth of: 0.01 FEET and a maximum volume of: 0.00 AF

The maximum discharge from node 66079 is: 16.31 CFS at time 2.02 hours with a maximum floodplain depth of: 0.88 FEET and a maximum volume of: 1.07 AF

The maximum discharge from node 65757 is: 29.32 CFS at time 2.02 hours with a maximum floodplain depth of: 1.08 FEET and a maximum volume of: 2.24 AF

The maximum discharge from node 65435 is: 32.84 CFS at time 2.01 hours with a maximum floodplain depth of: 1.14 FEET and a maximum volume of: 2.73 AF

The maximum discharge from node 65113 is: 35.47 CFS at time 2.01 hours with a maximum floodplain depth of: 1.19 FEET and a maximum volume of: 3.15 AF

The maximum discharge from node 64791 is: 38.88 CFS at time 2.04 hours with a maximum floodplain depth of: 1.46 FEET and a maximum volume of: 4.04 AF

The maximum discharge from node 64469 is: 11.21 CFS at time 1.97 hours with a maximum floodplain depth of: 0.95 FEET and a maximum volume of: 0.76 AF

The maximum discharge from node 64147 is: 0.60 CFS at time 2.01 hours with a maximum floodplain depth of: 0.30 FEET and a maximum volume of: 0.02 AF

The maximum discharge from cross section 8 is: 187.02 CFS at time: 1.78 hours

The maximum discharge from node 101308 is: 0.07 CFS at time 1.79 hours with a maximum floodplain depth of: 0.03 FEET and a maximum volume of: 0.00 AF

The maximum discharge from node 100986 is: 0.32 CFS at time 1.79 hours with a maximum floodplain depth of: 0.06 FEET and a maximum volume of: 0.01 AF

The maximum discharge from node 100664 is: 7.28 CFS at time 1.79 hours with a maximum floodplain depth of: 0.31 FEET and a maximum volume of: 0.30 AF

The maximum discharge from node 100342 is: 40.75 CFS at time 1.77 hours with a maximum floodplain depth of: 0.78 FEET and a maximum volume of: 4.46 AF

Page 4
CROSSMAX.OUT

THE MAXIMUM DISCHARGE FROM NODE 100020 IS: 54.63 CFS AT TIME: 1.77 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.85 FEET AND A MAXIMUM VOLUME OF: 6.91 AF

THE MAXIMUM DISCHARGE FROM NODE 99698 IS: 49.86 CFS AT TIME: 1.77 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.84 FEET AND A MAXIMUM VOLUME OF: 5.94 AF

THE MAXIMUM DISCHARGE FROM NODE 99376 IS: 23.97 CFS AT TIME: 1.77 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.65 FEET AND A MAXIMUM VOLUME OF: 2.23 AF

THE MAXIMUM DISCHARGE FROM NODE 99054 IS: 6.74 CFS AT TIME: 1.79 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.31 FEET AND A MAXIMUM VOLUME OF: 0.32 AF

THE MAXIMUM DISCHARGE FROM NODE 98732 IS: 4.18 CFS AT TIME: 1.79 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.34 FEET AND A MAXIMUM VOLUME OF: 0.21 AF

THE MAXIMUM DISCHARGE FROM NODE 98410 IS: 0.04 CFS AT TIME: 1.79 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.02 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION 9 IS: 122.86 CFS AT TIME: 1.80 HOURS

THE MAXIMUM DISCHARGE FROM NODE 100962 IS: 2.25 CFS AT TIME: 1.80 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.20 FEET AND A MAXIMUM VOLUME OF: 0.04 AF

THE MAXIMUM DISCHARGE FROM NODE 100640 IS: 17.63 CFS AT TIME: 1.80 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.76 FEET AND A MAXIMUM VOLUME OF: 1.32 AF

THE MAXIMUM DISCHARGE FROM NODE 100318 IS: 36.26 CFS AT TIME: 1.80 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.83 FEET AND A MAXIMUM VOLUME OF: 3.17 AF

THE MAXIMUM DISCHARGE FROM NODE 99996 IS: 32.08 CFS AT TIME: 1.80 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.76 FEET AND A MAXIMUM VOLUME OF: 2.86 AF

THE MAXIMUM DISCHARGE FROM NODE 99674 IS: 28.84 CFS AT TIME: 1.80 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.95 FEET AND A MAXIMUM VOLUME OF: 3.15 AF

THE MAXIMUM DISCHARGE FROM NODE 99352 IS: 5.90 CFS AT TIME: 1.80 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.48 FEET AND A MAXIMUM VOLUME OF: 0.32 AF

THE MAXIMUM DISCHARGE FROM NODE 99030 IS: 0.01 CFS AT TIME: 1.82 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 98708 IS: 0.00 CFS AT TIME: 1.42 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION 10 IS: 29.89 CFS AT TIME: 1.50 HOURS

THE MAXIMUM DISCHARGE FROM NODE 113414 IS: 2.04 CFS AT TIME: 1.50 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.32 FEET AND A MAXIMUM VOLUME OF: 0.09 AF
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THE MAXIMUM DISCHARGE FROM NODE 113092 IS: 8.57 CFS AT TIME 1.51 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.61 FEET AND A MAXIMUM VOLUME OF: 0.50 AF

THE MAXIMUM DISCHARGE FROM NODE 112770 IS: 6.53 CFS AT TIME 1.56 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.45 FEET AND A MAXIMUM VOLUME OF: 0.30 AF

THE MAXIMUM DISCHARGE FROM NODE 112448 IS: 5.77 CFS AT TIME 1.53 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.46 FEET AND A MAXIMUM VOLUME OF: 0.27 AF

THE MAXIMUM DISCHARGE FROM NODE 112126 IS: 6.83 CFS AT TIME 1.50 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.69 FEET AND A MAXIMUM VOLUME OF: 0.43 AF

THE MAXIMUM DISCHARGE FROM NODE 111804 IS: 1.05 CFS AT TIME 1.54 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.31 FEET AND A MAXIMUM VOLUME OF: 0.04 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION 11 IS: 71.93 CFS AT TIME: 1.63 HOURS

THE MAXIMUM DISCHARGE FROM NODE 125972 IS: 1.48 CFS AT TIME 1.67 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.56 FEET AND A MAXIMUM VOLUME OF: 0.09 AF

THE MAXIMUM DISCHARGE FROM NODE 125650 IS: 2.79 CFS AT TIME 2.09 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.72 FEET AND A MAXIMUM VOLUME OF: 0.22 AF

THE MAXIMUM DISCHARGE FROM NODE 125328 IS: 8.19 CFS AT TIME 1.67 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 1.04 FEET AND A MAXIMUM VOLUME OF: 0.86 AF

THE MAXIMUM DISCHARGE FROM NODE 125006 IS: 18.50 CFS AT TIME 1.61 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 1.17 FEET AND A MAXIMUM VOLUME OF: 1.89 AF

THE MAXIMUM DISCHARGE FROM NODE 124684 IS: 18.57 CFS AT TIME 1.63 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 1.08 FEET AND A MAXIMUM VOLUME OF: 1.76 AF

THE MAXIMUM DISCHARGE FROM NODE 124362 IS: 14.82 CFS AT TIME 1.63 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 1.12 FEET AND A MAXIMUM VOLUME OF: 1.51 AF

THE MAXIMUM DISCHARGE FROM NODE 124040 IS: 6.92 CFS AT TIME 1.63 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.93 FEET AND A MAXIMUM VOLUME OF: 0.62 AF

THE MAXIMUM DISCHARGE FROM NODE 123718 IS: 1.47 CFS AT TIME 2.09 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.58 FEET AND A MAXIMUM VOLUME OF: 0.07 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION 12 IS: 110.85 CFS AT TIME: 1.91 HOURS

THE MAXIMUM DISCHARGE FROM NODE 137920 IS: 0.01 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.02 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 137598 IS: 0.00 CFS AT TIME 0.54 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF
CROSSMAX.OUT

THE MAXIMUM DISCHARGE FROM NODE 137276 IS: 5.10 CFS AT TIME 1.91 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.53 FEET AND A MAXIMUM VOLUME OF: 0.25 AF

THE MAXIMUM DISCHARGE FROM NODE 136954 IS: 26.99 CFS AT TIME 1.91 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 1.08 FEET AND A MAXIMUM VOLUME OF: 2.29 AF

THE MAXIMUM DISCHARGE FROM NODE 136632 IS: 33.70 CFS AT TIME 1.91 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 1.14 FEET AND A MAXIMUM VOLUME OF: 3.20 AF

THE MAXIMUM DISCHARGE FROM NODE 136310 IS: 26.52 CFS AT TIME 1.90 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 1.06 FEET AND A MAXIMUM VOLUME OF: 2.18 AF

THE MAXIMUM DISCHARGE FROM NODE 135988 IS: 14.39 CFS AT TIME 1.91 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.61 FEET AND A MAXIMUM VOLUME OF: 0.74 AF

THE MAXIMUM DISCHARGE FROM NODE 135666 IS: 4.35 CFS AT TIME 1.91 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.53 FEET AND A MAXIMUM VOLUME OF: 0.21 AF

THE MAXIMUM DISCHARGE FROM NODE 135344 IS: 0.00 CFS AT TIME 0.00 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.02 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION 13 IS: 255.45 CFS AT TIME: 1.81 HOURS

THE MAXIMUM DISCHARGE FROM NODE 150254 IS: 0.19 CFS AT TIME 1.42 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.05 FEET AND A MAXIMUM VOLUME OF: 0.01 AF

THE MAXIMUM DISCHARGE FROM NODE 149932 IS: 0.01 CFS AT TIME 1.42 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.03 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 149610 IS: 4.06 CFS AT TIME 1.82 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.50 FEET AND A MAXIMUM VOLUME OF: 0.15 AF

THE MAXIMUM DISCHARGE FROM NODE 149288 IS: 20.32 CFS AT TIME 1.81 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.67 FEET AND A MAXIMUM VOLUME OF: 1.01 AF

THE MAXIMUM DISCHARGE FROM NODE 148966 IS: 46.59 CFS AT TIME 1.81 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.98 FEET AND A MAXIMUM VOLUME OF: 3.58 AF

THE MAXIMUM DISCHARGE FROM NODE 148644 IS: 49.30 CFS AT TIME 1.82 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.95 FEET AND A MAXIMUM VOLUME OF: 3.85 AF

THE MAXIMUM DISCHARGE FROM NODE 148322 IS: 56.09 CFS AT TIME 1.81 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 1.03 FEET AND A MAXIMUM VOLUME OF: 4.81 AF

THE MAXIMUM DISCHARGE FROM NODE 148000 IS: 54.17 CFS AT TIME 1.81 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 1.06 FEET AND A MAXIMUM VOLUME OF: 4.75 AF

THE MAXIMUM DISCHARGE FROM NODE 147678 IS: 23.81 CFS AT TIME 1.81 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.96 FEET AND A MAXIMUM VOLUME OF: 1.57 AF
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THE MAXIMUM DISCHARGE FROM NODE 147356 IS: 1.21 CFS AT TIME 1.81 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.21 FEET AND A MAXIMUM VOLUME OF: 0.02 AF

THE MAXIMUM DISCHARGE FROM NODE 147034 IS: 0.02 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.02 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION 14 IS: 74.18 CFS AT TIME: 1.81 HOURS

THE MAXIMUM DISCHARGE FROM NODE 149574 IS: 0.04 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.03 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 149252 IS: 2.30 CFS AT TIME 1.82 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.28 FEET AND A MAXIMUM VOLUME OF: 0.06 AF

THE MAXIMUM DISCHARGE FROM NODE 148930 IS: 9.01 CFS AT TIME 1.80 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.48 FEET AND A MAXIMUM VOLUME OF: 0.38 AF

THE MAXIMUM DISCHARGE FROM NODE 148608 IS: 18.42 CFS AT TIME 1.80 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.57 FEET AND A MAXIMUM VOLUME OF: 0.90 AF

THE MAXIMUM DISCHARGE FROM NODE 148286 IS: 25.34 CFS AT TIME 1.81 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.70 FEET AND A MAXIMUM VOLUME OF: 1.63 AF

THE MAXIMUM DISCHARGE FROM NODE 147964 IS: 16.02 CFS AT TIME 1.81 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.72 FEET AND A MAXIMUM VOLUME OF: 1.13 AF

THE MAXIMUM DISCHARGE FROM NODE 147642 IS: 3.16 CFS AT TIME 1.81 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.34 FEET AND A MAXIMUM VOLUME OF: 0.10 AF

THE MAXIMUM DISCHARGE FROM NODE 147320 IS: 0.01 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION 15 IS: 19.58 CFS AT TIME: 1.50 HOURS

THE MAXIMUM DISCHARGE FROM NODE 151180 IS: 0.53 CFS AT TIME 1.50 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.08 FEET AND A MAXIMUM VOLUME OF: 0.01 AF

THE MAXIMUM DISCHARGE FROM NODE 151179 IS: 9.68 CFS AT TIME 1.50 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.48 FEET AND A MAXIMUM VOLUME OF: 0.73 AF

THE MAXIMUM DISCHARGE FROM NODE 151178 IS: 6.54 CFS AT TIME 1.50 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.32 FEET AND A MAXIMUM VOLUME OF: 0.36 AF

THE MAXIMUM DISCHARGE FROM NODE 151177 IS: 2.85 CFS AT TIME 1.50 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.20 FEET AND A MAXIMUM VOLUME OF: 0.10 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION 16 IS: 20.52 CFS AT TIME: 1.50 HOURS

Page 8
THE MAXIMUM DISCHARGE FROM NODE 151499 IS: 2.07 CFS AT TIME 1.50 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.16 FEET AND A MAXIMUM VOLUME OF: 0.06 AF

THE MAXIMUM DISCHARGE FROM NODE 151498 IS: 3.71 CFS AT TIME 1.50 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.22 FEET AND A MAXIMUM VOLUME OF: 0.11 AF

THE MAXIMUM DISCHARGE FROM NODE 151497 IS: 9.84 CFS AT TIME 1.50 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.38 FEET AND A MAXIMUM VOLUME OF: 0.41 AF

THE MAXIMUM DISCHARGE FROM NODE 151496 IS: 4.88 CFS AT TIME 1.50 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.29 FEET AND A MAXIMUM VOLUME OF: 0.17 AF

THE MAXIMUM DISCHARGE FROM NODE 151495 IS: 0.03 CFS AT TIME 1.50 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.02 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION 17 IS: 25.33 CFS AT TIME: 1.50 HOURS

THE MAXIMUM DISCHARGE FROM NODE 149485 IS: 0.20 CFS AT TIME 1.50 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.07 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 149163 IS: 4.46 CFS AT TIME 1.50 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.44 FEET AND A MAXIMUM VOLUME OF: 0.20 AF

THE MAXIMUM DISCHARGE FROM NODE 148841 IS: 5.23 CFS AT TIME 1.50 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.34 FEET AND A MAXIMUM VOLUME OF: 0.21 AF

THE MAXIMUM DISCHARGE FROM NODE 148519 IS: 6.28 CFS AT TIME 1.50 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.38 FEET AND A MAXIMUM VOLUME OF: 0.29 AF

THE MAXIMUM DISCHARGE FROM NODE 148197 IS: 7.37 CFS AT TIME 1.50 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.49 FEET AND A MAXIMUM VOLUME OF: 0.51 AF

THE MAXIMUM DISCHARGE FROM NODE 147875 IS: 1.80 CFS AT TIME 1.50 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.21 FEET AND A MAXIMUM VOLUME OF: 0.04 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION 18 IS: 18.08 CFS AT TIME: 1.50 HOURS

THE MAXIMUM DISCHARGE FROM NODE 159472 IS: 2.40 CFS AT TIME 1.50 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.38 FEET AND A MAXIMUM VOLUME OF: 0.10 AF

THE MAXIMUM DISCHARGE FROM NODE 159150 IS: 8.09 CFS AT TIME 1.50 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.49 FEET AND A MAXIMUM VOLUME OF: 0.44 AF

THE MAXIMUM DISCHARGE FROM NODE 158828 IS: 3.38 CFS AT TIME 1.50 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.33 FEET AND A MAXIMUM VOLUME OF: 0.13 AF

THE MAXIMUM DISCHARGE FROM NODE 158506 IS: 1.27 CFS AT TIME 1.50 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.22 FEET AND A MAXIMUM VOLUME OF: 0.04 AF
CROSSMAX.OUT

THE MAXIMUM DISCHARGE FROM NODE 158184 IS: 1.18 CFS AT TIME 1.50 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.28 FEET AND A MAXIMUM VOLUME OF: 0.05 AF

THE MAXIMUM DISCHARGE FROM NODE 157862 IS: 1.39 CFS AT TIME 1.50 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.38 FEET AND A MAXIMUM VOLUME OF: 0.07 AF

THE MAXIMUM DISCHARGE FROM NODE 157540 IS: 0.39 CFS AT TIME 1.50 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.13 FEET AND A MAXIMUM VOLUME OF: 0.02 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION 19 IS: 43.54 CFS AT TIME: 1.90 HOURS

THE MAXIMUM DISCHARGE FROM NODE 168153 IS: 0.05 CFS AT TIME 1.64 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.13 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 168152 IS: 4.95 CFS AT TIME 1.90 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.36 FEET AND A MAXIMUM VOLUME OF: 0.46 AF

THE MAXIMUM DISCHARGE FROM NODE 168151 IS: 22.88 CFS AT TIME 1.90 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.73 FEET AND A MAXIMUM VOLUME OF: 3.01 AF

THE MAXIMUM DISCHARGE FROM NODE 168150 IS: 13.59 CFS AT TIME 1.90 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.52 FEET AND A MAXIMUM VOLUME OF: 1.48 AF

THE MAXIMUM DISCHARGE FROM NODE 168149 IS: 1.36 CFS AT TIME 1.90 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.16 FEET AND A MAXIMUM VOLUME OF: 0.11 AF

THE MAXIMUM DISCHARGE FROM NODE 168148 IS: 0.71 CFS AT TIME 1.91 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.13 FEET AND A MAXIMUM VOLUME OF: 0.06 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION 20 IS: 127.45 CFS AT TIME: 1.90 HOURS

THE MAXIMUM DISCHARGE FROM NODE 171702 IS: 0.43 CFS AT TIME 1.90 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.83 FEET AND A MAXIMUM VOLUME OF: 0.04 AF

THE MAXIMUM DISCHARGE FROM NODE 172024 IS: 20.31 CFS AT TIME 1.91 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 1.18 FEET AND A MAXIMUM VOLUME OF: 2.81 AF

THE MAXIMUM DISCHARGE FROM NODE 172346 IS: 32.88 CFS AT TIME 1.91 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 1.13 FEET AND A MAXIMUM VOLUME OF: 4.43 AF

THE MAXIMUM DISCHARGE FROM NODE 172668 IS: 30.32 CFS AT TIME 1.90 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 1.08 FEET AND A MAXIMUM VOLUME OF: 3.87 AF

THE MAXIMUM DISCHARGE FROM NODE 172990 IS: 25.25 CFS AT TIME 1.90 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 1.03 FEET AND A MAXIMUM VOLUME OF: 2.94 AF

THE MAXIMUM DISCHARGE FROM NODE 173312 IS: 11.97 CFS AT TIME 1.86 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.83 FEET AND A MAXIMUM VOLUME OF: 1.07 AF
CROSSMAX.OUT

THE MAXIMUM DISCHARGE FROM NODE 173634 IS: 6.44 CFS AT TIME 1.90 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.62 FEET AND A MAXIMUM VOLUME OF: 0.49 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION 21 IS: 25.02 CFS AT TIME: 1.55 HOURS

THE MAXIMUM DISCHARGE FROM NODE 184907 IS: 2.26 CFS AT TIME 1.53 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.52 FEET AND A MAXIMUM VOLUME OF: 0.21 AF

THE MAXIMUM DISCHARGE FROM NODE 184585 IS: 4.88 CFS AT TIME 1.55 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.59 FEET AND A MAXIMUM VOLUME OF: 0.50 AF

THE MAXIMUM DISCHARGE FROM NODE 184263 IS: 6.79 CFS AT TIME 1.57 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.70 FEET AND A MAXIMUM VOLUME OF: 0.81 AF

THE MAXIMUM DISCHARGE FROM NODE 183941 IS: 7.72 CFS AT TIME 1.55 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.73 FEET AND A MAXIMUM VOLUME OF: 0.90 AF

THE MAXIMUM DISCHARGE FROM NODE 183619 IS: 2.64 CFS AT TIME 1.54 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.59 FEET AND A MAXIMUM VOLUME OF: 0.26 AF

THE MAXIMUM DISCHARGE FROM NODE 183297 IS: 0.77 CFS AT TIME 1.53 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.33 FEET AND A MAXIMUM VOLUME OF: 0.05 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION 22 IS: 211.12 CFS AT TIME: 1.71 HOURS

THE MAXIMUM DISCHARGE FROM NODE 22790 IS: 5.60 CFS AT TIME 1.70 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.32 FEET AND A MAXIMUM VOLUME OF: 0.15 AF

THE MAXIMUM DISCHARGE FROM NODE 22789 IS: 20.69 CFS AT TIME 1.70 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.55 FEET AND A MAXIMUM VOLUME OF: 0.91 AF

THE MAXIMUM DISCHARGE FROM NODE 22788 IS: 27.69 CFS AT TIME 1.70 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.62 FEET AND A MAXIMUM VOLUME OF: 1.50 AF

THE MAXIMUM DISCHARGE FROM NODE 22787 IS: 37.26 CFS AT TIME 1.71 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.73 FEET AND A MAXIMUM VOLUME OF: 2.40 AF

THE MAXIMUM DISCHARGE FROM NODE 22786 IS: 46.55 CFS AT TIME 1.71 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.85 FEET AND A MAXIMUM VOLUME OF: 3.77 AF

THE MAXIMUM DISCHARGE FROM NODE 22785 IS: 35.12 CFS AT TIME 1.71 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.68 FEET AND A MAXIMUM VOLUME OF: 2.50 AF

THE MAXIMUM DISCHARGE FROM NODE 22784 IS: 28.08 CFS AT TIME 1.71 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.70 FEET AND A MAXIMUM VOLUME OF: 2.21 AF

THE MAXIMUM DISCHARGE FROM NODE 22783 IS: 10.11 CFS AT TIME 1.71 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.37 FEET AND A MAXIMUM VOLUME OF: 0.50 AF

Page 11
CROSSMAX.OUT

THE MAXIMUM DISCHARGE FROM NODE 22782 IS: 0.08 CFS AT TIME 1.71 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.02 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION 23 IS: 131.66 CFS AT TIME: 1.87 HOURS

THE MAXIMUM DISCHARGE FROM NODE 22971 IS: 0.03 CFS AT TIME 1.42 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.02 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 22970 IS: 0.18 CFS AT TIME 1.87 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.08 FEET AND A MAXIMUM VOLUME OF: 0.01 AF

THE MAXIMUM DISCHARGE FROM NODE 22969 IS: 17.34 CFS AT TIME 1.85 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.74 FEET AND A MAXIMUM VOLUME OF: 1.97 AF

THE MAXIMUM DISCHARGE FROM NODE 22968 IS: 30.64 CFS AT TIME 1.85 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.69 FEET AND A MAXIMUM VOLUME OF: 3.37 AF

THE MAXIMUM DISCHARGE FROM NODE 22967 IS: 28.21 CFS AT TIME 1.87 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.61 FEET AND A MAXIMUM VOLUME OF: 3.00 AF

THE MAXIMUM DISCHARGE FROM NODE 22966 IS: 29.64 CFS AT TIME 1.85 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.64 FEET AND A MAXIMUM VOLUME OF: 3.37 AF

THE MAXIMUM DISCHARGE FROM NODE 22965 IS: 22.82 CFS AT TIME 1.85 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.77 FEET AND A MAXIMUM VOLUME OF: 2.69 AF

THE MAXIMUM DISCHARGE FROM NODE 22964 IS: 1.81 CFS AT TIME 1.87 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.19 FEET AND A MAXIMUM VOLUME OF: 0.08 AF

THE MAXIMUM DISCHARGE FROM NODE 22963 IS: 1.15 CFS AT TIME 1.87 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.18 FEET AND A MAXIMUM VOLUME OF: 0.06 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION 24 IS: 236.21 CFS AT TIME: 1.68 HOURS

THE MAXIMUM DISCHARGE FROM NODE 35996 IS: 0.01 CFS AT TIME 1.42 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.04 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 35995 IS: 0.02 CFS AT TIME 1.39 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.11 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 35994 IS: 0.01 CFS AT TIME 1.33 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.02 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 35993 IS: 6.60 CFS AT TIME 1.68 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.53 FEET AND A MAXIMUM VOLUME OF: 0.17 AF

THE MAXIMUM DISCHARGE FROM NODE 35992 IS: 24.33 CFS AT TIME 1.67 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 1.00 FEET AND A MAXIMUM VOLUME OF: 1.42 AF
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THE MAXIMUM DISCHARGE FROM NODE 35991 IS: 25.25 CFS AT TIME 1.68 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.70 FEET AND A MAXIMUM VOLUME OF: 0.94 AF

THE MAXIMUM DISCHARGE FROM NODE 35990 IS: 33.93 CFS AT TIME 1.67 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.85 FEET AND A MAXIMUM VOLUME OF: 1.50 AF

THE MAXIMUM DISCHARGE FROM NODE 35989 IS: 49.53 CFS AT TIME 1.65 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 1.22 FEET AND A MAXIMUM VOLUME OF: 3.54 AF

THE MAXIMUM DISCHARGE FROM NODE 35988 IS: 50.69 CFS AT TIME 1.68 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 1.22 FEET AND A MAXIMUM VOLUME OF: 4.10 AF

THE MAXIMUM DISCHARGE FROM NODE 35987 IS: 32.62 CFS AT TIME 1.67 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 1.05 FEET AND A MAXIMUM VOLUME OF: 2.00 AF

THE MAXIMUM DISCHARGE FROM NODE 35986 IS: 12.82 CFS AT TIME 1.68 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.68 FEET AND A MAXIMUM VOLUME OF: 0.42 AF

THE MAXIMUM DISCHARGE FROM NODE 35985 IS: 0.92 CFS AT TIME 1.69 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.19 FEET AND A MAXIMUM VOLUME OF: 0.01 AF

THE MAXIMUM DISCHARGE FROM NODE 35984 IS: 0.04 CFS AT TIME 1.70 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.05 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 35983 IS: 0.01 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.02 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION 25 IS: 268.75 CFS AT TIME: 1.65
HOURS

THE MAXIMUM DISCHARGE FROM NODE 38574 IS: 0.39 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.11 FEET AND A MAXIMUM VOLUME OF: 0.01 AF

THE MAXIMUM DISCHARGE FROM NODE 38896 IS: 0.01 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.03 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 39218 IS: 0.02 CFS AT TIME 1.50 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.10 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 39540 IS: 14.98 CFS AT TIME 1.65 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.73 FEET AND A MAXIMUM VOLUME OF: 0.30 AF

THE MAXIMUM DISCHARGE FROM NODE 39862 IS: 54.94 CFS AT TIME 1.65 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 1.41 FEET AND A MAXIMUM VOLUME OF: 2.11 AF

THE MAXIMUM DISCHARGE FROM NODE 40184 IS: 71.58 CFS AT TIME 1.65 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 1.49 FEET AND A MAXIMUM VOLUME OF: 3.14 AF

THE MAXIMUM DISCHARGE FROM NODE 40506 IS: 70.72 CFS AT TIME 1.65 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 1.49 FEET AND A MAXIMUM VOLUME OF: 2.94 AF
THE MAXIMUM DISCHARGE FROM NODE 40828 IS: 48.99 CFS AT TIME 1.66 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 1.29 FEET AND A MAXIMUM VOLUME OF: 1.64 AF

THE MAXIMUM DISCHARGE FROM NODE 41150 IS: 6.03 CFS AT TIME 1.66 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.62 FEET AND A MAXIMUM VOLUME OF: 0.14 AF

THE MAXIMUM DISCHARGE FROM NODE 41472 IS: 0.09 CFS AT TIME 1.68 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.03 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 41794 IS: 1.39 CFS AT TIME 1.67 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.19 FEET AND A MAXIMUM VOLUME OF: 0.06 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION 26 IS: 108.55 CFS AT TIME: 1.66 HOURS

THE MAXIMUM DISCHARGE FROM NODE 45335 IS: 0.08 CFS AT TIME 1.42 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.08 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 45657 IS: 0.14 CFS AT TIME 1.50 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.17 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 45979 IS: 0.32 CFS AT TIME 1.46 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.23 FEET AND A MAXIMUM VOLUME OF: 0.01 AF

THE MAXIMUM DISCHARGE FROM NODE 46301 IS: 43.40 CFS AT TIME 1.65 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 1.17 FEET AND A MAXIMUM VOLUME OF: 6.43 AF

THE MAXIMUM DISCHARGE FROM NODE 46623 IS: 32.65 CFS AT TIME 1.66 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.90 FEET AND A MAXIMUM VOLUME OF: 3.98 AF

THE MAXIMUM DISCHARGE FROM NODE 46945 IS: 3.27 CFS AT TIME 1.62 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.20 FEET AND A MAXIMUM VOLUME OF: 0.19 AF

THE MAXIMUM DISCHARGE FROM NODE 47267 IS: 2.60 CFS AT TIME 1.66 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.21 FEET AND A MAXIMUM VOLUME OF: 0.13 AF

THE MAXIMUM DISCHARGE FROM NODE 47589 IS: 4.53 CFS AT TIME 1.65 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.35 FEET AND A MAXIMUM VOLUME OF: 0.29 AF

THE MAXIMUM DISCHARGE FROM NODE 47911 IS: 12.50 CFS AT TIME 1.66 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.44 FEET AND A MAXIMUM VOLUME OF: 0.77 AF

THE MAXIMUM DISCHARGE FROM NODE 48233 IS: 8.31 CFS AT TIME 1.66 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.39 FEET AND A MAXIMUM VOLUME OF: 0.49 AF

THE MAXIMUM DISCHARGE FROM NODE 48555 IS: 1.22 CFS AT TIME 1.66 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.15 FEET AND A MAXIMUM VOLUME OF: 0.05 AF

THE MAXIMUM DISCHARGE FROM NODE 48877 IS: 0.01 CFS AT TIME 1.42 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF
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THE MAXIMUM DISCHARGE FROM CROSS SECTION 27 IS: 66.86 CFS AT TIME: 1.70 HOURS

THE MAXIMUM DISCHARGE FROM NODE 47238 IS: 0.05 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.02 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 46916 IS: 0.02 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 46594 IS: 7.74 CFS AT TIME 1.70 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.67 FEET AND A MAXIMUM VOLUME OF: 0.35 AF

THE MAXIMUM DISCHARGE FROM NODE 46272 IS: 34.34 CFS AT TIME 1.70 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 1.81 FEET AND A MAXIMUM VOLUME OF: 3.95 AF

THE MAXIMUM DISCHARGE FROM NODE 45950 IS: 23.29 CFS AT TIME 1.70 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 1.34 FEET AND A MAXIMUM VOLUME OF: 2.17 AF

THE MAXIMUM DISCHARGE FROM NODE 45628 IS: 1.35 CFS AT TIME 1.70 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.25 FEET AND A MAXIMUM VOLUME OF: 0.02 AF

THE MAXIMUM DISCHARGE FROM NODE 45306 IS: 0.13 CFS AT TIME 1.71 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.07 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION 28 IS: 76.96 CFS AT TIME: 1.72 HOURS

THE MAXIMUM DISCHARGE FROM NODE 53673 IS: 0.00 CFS AT TIME 1.92 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.02 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 53351 IS: 0.20 CFS AT TIME 1.72 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.07 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 53029 IS: 9.90 CFS AT TIME 1.72 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.57 FEET AND A MAXIMUM VOLUME OF: 0.37 AF

THE MAXIMUM DISCHARGE FROM NODE 52787 IS: 28.37 CFS AT TIME 1.72 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.78 FEET AND A MAXIMUM VOLUME OF: 1.49 AF

THE MAXIMUM DISCHARGE FROM NODE 52385 IS: 28.49 CFS AT TIME 1.72 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.78 FEET AND A MAXIMUM VOLUME OF: 1.69 AF

THE MAXIMUM DISCHARGE FROM NODE 52063 IS: 9.73 CFS AT TIME 1.72 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.62 FEET AND A MAXIMUM VOLUME OF: 0.48 AF

THE MAXIMUM DISCHARGE FROM NODE 51741 IS: 0.25 CFS AT TIME 1.73 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.10 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 51419 IS: 0.03 CFS AT TIME 1.73 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.04 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 51097 IS: 0.01 CFS AT TIME 1.42 HOURS WITH A
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MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION 29 IS: 73.61 CFS AT TIME: 1.92 HOURS

THE MAXIMUM DISCHARGE FROM NODE 60420 IS: 0.01 CFS AT TIME 1.42 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.02 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 60419 IS: 0.20 CFS AT TIME 1.92 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.14 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 60418 IS: 3.33 CFS AT TIME 1.92 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.50 FEET AND A MAXIMUM VOLUME OF: 0.11 AF

THE MAXIMUM DISCHARGE FROM NODE 60417 IS: 14.47 CFS AT TIME 1.92 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.69 FEET AND A MAXIMUM VOLUME OF: 0.63 AF

THE MAXIMUM DISCHARGE FROM NODE 60416 IS: 28.49 CFS AT TIME 1.92 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.98 FEET AND A MAXIMUM VOLUME OF: 1.91 AF

THE MAXIMUM DISCHARGE FROM NODE 60415 IS: 22.11 CFS AT TIME 1.92 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.86 FEET AND A MAXIMUM VOLUME OF: 1.18 AF

THE MAXIMUM DISCHARGE FROM NODE 60414 IS: 4.90 CFS AT TIME 1.92 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.42 FEET AND A MAXIMUM VOLUME OF: 0.12 AF

THE MAXIMUM DISCHARGE FROM NODE 60413 IS: 0.80 CFS AT TIME 1.93 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.04 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 60412 IS: 0.16 CFS AT TIME 1.42 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.10 FEET AND A MAXIMUM VOLUME OF: 0.01 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION 30 IS: 120.75 CFS AT TIME: 1.78 HOURS

THE MAXIMUM DISCHARGE FROM NODE 76901 IS: 0.01 CFS AT TIME 1.42 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 76579 IS: 0.69 CFS AT TIME 1.78 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.14 FEET AND A MAXIMUM VOLUME OF: 0.01 AF

THE MAXIMUM DISCHARGE FROM NODE 76257 IS: 14.81 CFS AT TIME 1.78 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.60 FEET AND A MAXIMUM VOLUME OF: 0.39 AF

THE MAXIMUM DISCHARGE FROM NODE 75935 IS: 41.45 CFS AT TIME 1.77 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.83 FEET AND A MAXIMUM VOLUME OF: 1.60 AF

THE MAXIMUM DISCHARGE FROM NODE 75613 IS: 37.95 CFS AT TIME 1.78 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.74 FEET AND A MAXIMUM VOLUME OF: 1.16 AF

THE MAXIMUM DISCHARGE FROM NODE 75291 IS: 22.37 CFS AT TIME 1.78 HOURS WITH A

Page 16
CROSSMAX.OUT

MAXIMUM FLOODPLAIN DEPTH OF: 0.65 FEET AND A MAXIMUM VOLUME OF: 0.54 AF

THE MAXIMUM DISCHARGE FROM NODE 74969 IS: 3.50 CFS AT TIME 1.78 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.30 FEET AND A MAXIMUM VOLUME OF: 0.05 AF

THE MAXIMUM DISCHARGE FROM NODE 74647 IS: 0.02 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.03 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 74325 IS: 0.04 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.05 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION 31 IS: 62.23 CFS AT TIME: 1.86 HOURS

THE MAXIMUM DISCHARGE FROM NODE 77167 IS: 0.02 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 76845 IS: 0.02 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.02 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 76523 IS: 0.03 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.02 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 76201 IS: 9.65 CFS AT TIME 1.86 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.53 FEET AND A MAXIMUM VOLUME OF: 0.31 AF

THE MAXIMUM DISCHARGE FROM NODE 75879 IS: 20.53 CFS AT TIME 1.86 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.71 FEET AND A MAXIMUM VOLUME OF: 1.00 AF

THE MAXIMUM DISCHARGE FROM NODE 75557 IS: 22.53 CFS AT TIME 1.85 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.79 FEET AND A MAXIMUM VOLUME OF: 1.35 AF

THE MAXIMUM DISCHARGE FROM NODE 75235 IS: 9.50 CFS AT TIME 1.86 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.71 FEET AND A MAXIMUM VOLUME OF: 0.49 AF

THE MAXIMUM DISCHARGE FROM NODE 74913 IS: 0.02 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.02 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 74591 IS: 0.01 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 74269 IS: 0.01 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.05 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION 32 IS: 78.06 CFS AT TIME: 1.75 HOURS

THE MAXIMUM DISCHARGE FROM NODE 113876 IS: 0.03 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.06 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 113554 IS: 0.04 CFS AT TIME 1.42 HOURS WITH A
CROSSMAX.OUT

MAXIMUM FLOODPLAIN DEPTH OF: 0.04 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 113232 IS: 0.02 CFS AT TIME 1.42 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 112910 IS: 0.01 CFS AT TIME 1.42 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 112588 IS: 2.22 CFS AT TIME 1.75 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.20 FEET AND A MAXIMUM VOLUME OF: 0.04 AF

THE MAXIMUM DISCHARGE FROM NODE 112266 IS: 15.33 CFS AT TIME 1.75 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.52 FEET AND A MAXIMUM VOLUME OF: 0.70 AF

THE MAXIMUM DISCHARGE FROM NODE 111944 IS: 30.33 CFS AT TIME 1.76 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.62 FEET AND A MAXIMUM VOLUME OF: 1.84 AF

THE MAXIMUM DISCHARGE FROM NODE 111622 IS: 24.72 CFS AT TIME 1.75 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.76 FEET AND A MAXIMUM VOLUME OF: 2.07 AF

THE MAXIMUM DISCHARGE FROM NODE 111300 IS: 5.50 CFS AT TIME 1.75 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.42 FEET AND A MAXIMUM VOLUME OF: 0.26 AF

THE MAXIMUM DISCHARGE FROM NODE 110978 IS: 0.01 CFS AT TIME 1.42 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 110656 IS: 0.02 CFS AT TIME 1.42 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.02 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 110334 IS: 0.01 CFS AT TIME 1.42 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION 33 IS: 69.27 CFS AT TIME: 2.09 HOURS

THE MAXIMUM DISCHARGE FROM NODE 54775 IS: 0.05 CFS AT TIME 2.10 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.03 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 54453 IS: 0.33 CFS AT TIME 2.09 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.07 FEET AND A MAXIMUM VOLUME OF: 0.01 AF

THE MAXIMUM DISCHARGE FROM NODE 54131 IS: 1.85 CFS AT TIME 2.08 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.22 FEET AND A MAXIMUM VOLUME OF: 0.06 AF

THE MAXIMUM DISCHARGE FROM NODE 53889 IS: 15.82 CFS AT TIME 2.08 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.57 FEET AND A MAXIMUM VOLUME OF: 0.79 AF

THE MAXIMUM DISCHARGE FROM NODE 53487 IS: 14.22 CFS AT TIME 2.08 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.44 FEET AND A MAXIMUM VOLUME OF: 0.59 AF

THE MAXIMUM DISCHARGE FROM NODE 53165 IS: 17.26 CFS AT TIME 2.06 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.50 FEET AND A MAXIMUM VOLUME OF: 0.78 AF
THE MAXIMUM DISCHARGE FROM NODE 52843 IS: 16.92 CFS AT TIME 2.08 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.55 FEET AND A MAXIMUM VOLUME OF: 0.83 AF

THE MAXIMUM DISCHARGE FROM NODE 52521 IS: 3.23 CFS AT TIME 2.09 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.25 FEET AND A MAXIMUM VOLUME OF: 0.11 AF

THE MAXIMUM DISCHARGE FROM NODE 52199 IS: 0.05 CFS AT TIME 2.09 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.02 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 51877 IS: 0.06 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.05 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION 34 IS: 51.04 CFS AT TIME: 2.07 HOURS

THE MAXIMUM DISCHARGE FROM NODE 66998 IS: 0.00 CFS AT TIME 1.66 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 66676 IS: 0.00 CFS AT TIME 1.52 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.02 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 66354 IS: 0.70 CFS AT TIME 2.07 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.12 FEET AND A MAXIMUM VOLUME OF: 0.02 AF

THE MAXIMUM DISCHARGE FROM NODE 66032 IS: 8.10 CFS AT TIME 2.07 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.43 FEET AND A MAXIMUM VOLUME OF: 0.44 AF

THE MAXIMUM DISCHARGE FROM NODE 65710 IS: 11.88 CFS AT TIME 2.07 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.43 FEET AND A MAXIMUM VOLUME OF: 0.66 AF

THE MAXIMUM DISCHARGE FROM NODE 65388 IS: 10.62 CFS AT TIME 2.07 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.39 FEET AND A MAXIMUM VOLUME OF: 0.56 AF

THE MAXIMUM DISCHARGE FROM NODE 65066 IS: 11.55 CFS AT TIME 2.07 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.41 FEET AND A MAXIMUM VOLUME OF: 0.64 AF

THE MAXIMUM DISCHARGE FROM NODE 64744 IS: 8.31 CFS AT TIME 2.07 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.45 FEET AND A MAXIMUM VOLUME OF: 0.45 AF

THE MAXIMUM DISCHARGE FROM NODE 64422 IS: 0.02 CFS AT TIME 2.08 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 64100 IS: 0.01 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.00 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION 35 IS: 28.18 CFS AT TIME: 1.50 HOURS

THE MAXIMUM DISCHARGE FROM NODE 78585 IS: 0.32 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.10 FEET AND A MAXIMUM VOLUME OF: 0.02 AF
CROSSMAX.OUT

THE MAXIMUM DISCHARGE FROM NODE 78584 IS: 0.11 CFS AT TIME 1.42 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.05 FEET AND A MAXIMUM VOLUME OF: 0.01 AF

THE MAXIMUM DISCHARGE FROM NODE 78583 IS: 0.10 CFS AT TIME 1.47 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.05 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 78582 IS: 1.93 CFS AT TIME 1.50 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.23 FEET AND A MAXIMUM VOLUME OF: 0.57 AF

THE MAXIMUM DISCHARGE FROM NODE 78581 IS: 6.52 CFS AT TIME 1.50 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.36 FEET AND A MAXIMUM VOLUME OF: 0.24 AF

THE MAXIMUM DISCHARGE FROM NODE 78580 IS: 12.77 CFS AT TIME 1.50 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.45 FEET AND A MAXIMUM VOLUME OF: 0.57 AF

THE MAXIMUM DISCHARGE FROM NODE 78579 IS: 5.77 CFS AT TIME 1.50 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.36 FEET AND A MAXIMUM VOLUME OF: 0.19 AF

THE MAXIMUM DISCHARGE FROM NODE 78578 IS: 0.61 CFS AT TIME 1.50 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.14 FEET AND A MAXIMUM VOLUME OF: 0.01 AF

THE MAXIMUM DISCHARGE FROM NODE 78577 IS: 0.03 CFS AT TIME 1.42 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.03 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 78576 IS: 0.06 CFS AT TIME 1.42 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.04 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION 36 IS: 12.11 CFS AT TIME: 1.46 HOURS

THE MAXIMUM DISCHARGE FROM NODE 102420 IS: 0.00 CFS AT TIME 1.35 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 102098 IS: 0.10 CFS AT TIME 1.43 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.05 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 101776 IS: 0.01 CFS AT TIME 1.55 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 101454 IS: 0.02 CFS AT TIME 1.51 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.02 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 101132 IS: 3.36 CFS AT TIME 1.45 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.38 FEET AND A MAXIMUM VOLUME OF: 0.18 AF

THE MAXIMUM DISCHARGE FROM NODE 100810 IS: 2.61 CFS AT TIME 1.46 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.32 FEET AND A MAXIMUM VOLUME OF: 0.10 AF

THE MAXIMUM DISCHARGE FROM NODE 100488 IS: 3.31 CFS AT TIME 1.46 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.36 FEET AND A MAXIMUM VOLUME OF: 0.13 AF

Page 20
CROSSMAX.OUT

THE MAXIMUM DISCHARGE FROM NODE 100166 IS: 2.81 CFS AT TIME 1.46 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.40 FEET AND A MAXIMUM VOLUME OF: 0.13 AF

THE MAXIMUM DISCHARGE FROM NODE 99844 IS: 0.11 CFS AT TIME 1.47 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.04 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 99522 IS: 0.02 CFS AT TIME 1.48 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.07 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 99200 IS: 0.02 CFS AT TIME 1.35 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.03 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 98878 IS: 0.01 CFS AT TIME 1.35 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.03 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION 37 IS: 20.48 CFS AT TIME: 1.50 HOURS

THE MAXIMUM DISCHARGE FROM NODE 125435 IS: 0.19 CFS AT TIME 1.50 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.05 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 125113 IS: 1.02 CFS AT TIME 1.49 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.14 FEET AND A MAXIMUM VOLUME OF: 0.02 AF

THE MAXIMUM DISCHARGE FROM NODE 124791 IS: 4.92 CFS AT TIME 1.49 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.32 FEET AND A MAXIMUM VOLUME OF: 0.22 AF

THE MAXIMUM DISCHARGE FROM NODE 124469 IS: 5.47 CFS AT TIME 1.49 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.36 FEET AND A MAXIMUM VOLUME OF: 0.28 AF

THE MAXIMUM DISCHARGE FROM NODE 124147 IS: 3.16 CFS AT TIME 1.49 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.26 FEET AND A MAXIMUM VOLUME OF: 0.14 AF

THE MAXIMUM DISCHARGE FROM NODE 123825 IS: 4.31 CFS AT TIME 1.50 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.37 FEET AND A MAXIMUM VOLUME OF: 0.24 AF

THE MAXIMUM DISCHARGE FROM NODE 123583 IS: 1.04 CFS AT TIME 1.50 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.17 FEET AND A MAXIMUM VOLUME OF: 0.04 AF

THE MAXIMUM DISCHARGE FROM NODE 123181 IS: 0.24 CFS AT TIME 1.43 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.08 FEET AND A MAXIMUM VOLUME OF: 0.01 AF

THE MAXIMUM DISCHARGE FROM NODE 122859 IS: 0.18 CFS AT TIME 1.43 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.14 FEET AND A MAXIMUM VOLUME OF: 0.01 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION 38 IS: 102.67 CFS AT TIME: 1.96 HOURS

THE MAXIMUM DISCHARGE FROM NODE 151682 IS: 0.01 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF
CROSSMAX.OUT

THE MAXIMUM DISCHARGE FROM NODE 151681 IS: 0.01 CFS AT TIME 1.42 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 151680 IS: 5.86 CFS AT TIME 1.97 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.38 FEET AND A MAXIMUM VOLUME OF: 0.38 AF

THE MAXIMUM DISCHARGE FROM NODE 151679 IS: 31.36 CFS AT TIME 1.99 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.79 FEET AND A MAXIMUM VOLUME OF: 4.02 AF

THE MAXIMUM DISCHARGE FROM NODE 151678 IS: 34.60 CFS AT TIME 1.96 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.76 FEET AND A MAXIMUM VOLUME OF: 4.92 AF

THE MAXIMUM DISCHARGE FROM NODE 151677 IS: 27.96 CFS AT TIME 1.96 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.24 FEET AND A MAXIMUM VOLUME OF: 3.61 AF

THE MAXIMUM DISCHARGE FROM NODE 151676 IS: 2.99 CFS AT TIME 1.96 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.24 FEET AND A MAXIMUM VOLUME OF: 0.17 AF

THE MAXIMUM DISCHARGE FROM NODE 151675 IS: 0.01 CFS AT TIME 1.41 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 151674 IS: 0.01 CFS AT TIME 1.42 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 151673 IS: 0.03 CFS AT TIME 1.42 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION 39 IS: 127.45 CFS AT TIME: 1.93 HOURS

THE MAXIMUM DISCHARGE FROM NODE 162319 IS: 0.03 CFS AT TIME 1.42 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.09 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 161997 IS: 0.02 CFS AT TIME 1.42 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 161675 IS: 0.01 CFS AT TIME 1.42 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 161353 IS: 15.61 CFS AT TIME 1.93 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.82 FEET AND A MAXIMUM VOLUME OF: 2.02 AF

THE MAXIMUM DISCHARGE FROM NODE 161031 IS: 32.61 CFS AT TIME 1.93 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.94 FEET AND A MAXIMUM VOLUME OF: 4.93 AF

THE MAXIMUM DISCHARGE FROM NODE 160709 IS: 38.44 CFS AT TIME 1.93 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 1.01 FEET AND A MAXIMUM VOLUME OF: 6.09 AF

THE MAXIMUM DISCHARGE FROM NODE 160387 IS: 27.61 CFS AT TIME 1.93 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.92 FEET AND A MAXIMUM VOLUME OF: 3.72 AF

THE MAXIMUM DISCHARGE FROM NODE 160065 IS: 8.67 CFS AT TIME 1.93 HOURS WITH A
CROSSMAX.OUT
MAXIMUM FLOODPLAIN DEPTH OF: 0.46 FEET AND A MAXIMUM VOLUME OF: 0.70 AF

THE MAXIMUM DISCHARGE FROM NODE 159743 IS: 2.55 CFS AT TIME 1.93 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.25 FEET AND A MAXIMUM VOLUME OF: 0.17 AF

THE MAXIMUM DISCHARGE FROM NODE 159421 IS: 2.04 CFS AT TIME 1.93 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.23 FEET AND A MAXIMUM VOLUME OF: 0.13 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION 40 IS: 165.37 CFS AT TIME: 1.82 HOURS

THE MAXIMUM DISCHARGE FROM NODE 193017 IS: 0.06 CFS AT TIME 1.44 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.05 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 192695 IS: 0.05 CFS AT TIME 1.49 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.03 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 192373 IS: 8.90 CFS AT TIME 1.82 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.59 FEET AND A MAXIMUM VOLUME OF: 4.77 AF

THE MAXIMUM DISCHARGE FROM NODE 192051 IS: 49.62 CFS AT TIME 1.82 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 1.39 FEET AND A MAXIMUM VOLUME OF: 7.46 AF

THE MAXIMUM DISCHARGE FROM NODE 191729 IS: 66.59 CFS AT TIME 1.83 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 1.54 FEET AND A MAXIMUM VOLUME OF: 11.74 AF

THE MAXIMUM DISCHARGE FROM NODE 191407 IS: 40.30 CFS AT TIME 1.82 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 1.42 FEET AND A MAXIMUM VOLUME OF: 4.15 AF

THE MAXIMUM DISCHARGE FROM NODE 191085 IS: 0.01 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 190763 IS: 0.01 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 190441 IS: 0.01 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 190119 IS: 0.00 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION 41 IS: 152.14 CFS AT TIME: 1.72 HOURS

THE MAXIMUM DISCHARGE FROM NODE 199531 IS: 0.03 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 199209 IS: 0.01 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 198887 IS: 0.06 CFS AT TIME 1.42 HOURS WITH A
CROSSMAX.OUT

MAXIMUM FLOODPLAIN DEPTH OF: 0.03 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 198565 IS: 0.77 CFS AT TIME 1.72 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.37 FEET AND A MAXIMUM VOLUME OF: 0.03 AF

THE MAXIMUM DISCHARGE FROM NODE 198243 IS: 3.34 CFS AT TIME 1.74 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.56 FEET AND A MAXIMUM VOLUME OF: 0.16 AF

THE MAXIMUM DISCHARGE FROM NODE 197921 IS: 4.07 CFS AT TIME 1.74 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.49 FEET AND A MAXIMUM VOLUME OF: 0.18 AF

THE MAXIMUM DISCHARGE FROM NODE 197599 IS: 4.06 CFS AT TIME 1.74 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.55 FEET AND A MAXIMUM VOLUME OF: 0.19 AF

THE MAXIMUM DISCHARGE FROM NODE 197277 IS: 9.91 CFS AT TIME 1.74 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.83 FEET AND A MAXIMUM VOLUME OF: 0.63 AF

THE MAXIMUM DISCHARGE FROM NODE 196955 IS: 22.87 CFS AT TIME 1.73 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.97 FEET AND A MAXIMUM VOLUME OF: 1.77 AF

THE MAXIMUM DISCHARGE FROM NODE 196633 IS: 41.22 CFS AT TIME 1.71 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 1.31 FEET AND A MAXIMUM VOLUME OF: 4.17 AF

THE MAXIMUM DISCHARGE FROM NODE 196311 IS: 40.76 CFS AT TIME 1.73 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 1.19 FEET AND A MAXIMUM VOLUME OF: 4.12 AF

THE MAXIMUM DISCHARGE FROM NODE 195989 IS: 25.68 CFS AT TIME 1.74 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 1.16 FEET AND A MAXIMUM VOLUME OF: 2.38 AF

THE MAXIMUM DISCHARGE FROM NODE 195667 IS: 0.04 CFS AT TIME 1.54 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.33 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 195345 IS: 0.01 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.03 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 195023 IS: 0.03 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.06 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION 42 IS: 222.02 CFS AT TIME: 1.63 HOURS

THE MAXIMUM DISCHARGE FROM NODE 45376 IS: 0.13 CFS AT TIME 1.63 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.02 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 45698 IS: 0.22 CFS AT TIME 1.63 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.03 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 46020 IS: 0.97 CFS AT TIME 1.63 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.06 FEET AND A MAXIMUM VOLUME OF: 0.01 AF

THE MAXIMUM DISCHARGE FROM NODE 46342 IS: 219.68 CFS AT TIME 1.63 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 4.91 FEET AND A MAXIMUM VOLUME OF: 18.14 AF
### CROSSMAX.OUT

The maximum discharge from node 46664 is: 1.00 CFS at time 1.63 hours with a maximum floodplain depth of: 0.06 feet and a maximum volume of: 0.01 AF.

The maximum discharge from node 46986 is: 0.01 CFS at time 1.35 hours with a maximum floodplain depth of: 0.00 feet and a maximum volume of: 0.00 AF.

The maximum discharge from node 47308 is: 0.01 CFS at time 1.63 hours with a maximum floodplain depth of: 0.00 feet and a maximum volume of: 0.00 AF.

The maximum discharge from cross section 43 is: 280.95 CFS at time: 1.67 hours.

The maximum discharge from node 106231 is: 1.92 CFS at time 1.66 hours with a maximum floodplain depth of: 0.08 feet and a maximum volume of: 0.03 AF.

The maximum discharge from node 106553 is: 0.77 CFS at time 1.68 hours with a maximum floodplain depth of: 0.05 feet and a maximum volume of: 0.01 AF.

The maximum discharge from node 106875 is: 2.76 CFS at time 1.68 hours with a maximum floodplain depth of: 0.09 feet and a maximum volume of: 0.05 AF.

The maximum discharge from node 107197 is: 92.60 CFS at time 1.67 hours with a maximum floodplain depth of: 1.35 feet and a maximum volume of: 5.55 AF.

The maximum discharge from node 107519 is: 179.84 CFS at time 1.67 hours with a maximum floodplain depth of: 2.87 feet and a maximum volume of: 19.32 AF.

The maximum discharge from node 107841 is: 0.62 CFS at time 1.68 hours with a maximum floodplain depth of: 0.04 feet and a maximum volume of: 0.01 AF.

The maximum discharge from node 108163 is: 1.54 CFS at time 1.67 hours with a maximum floodplain depth of: 0.07 feet and a maximum volume of: 0.02 AF.

The maximum discharge from node 108485 is: 0.97 CFS at time 1.68 hours with a maximum floodplain depth of: 0.06 feet and a maximum volume of: 0.01 AF.

The maximum discharge from cross section 44 is: 235.72 CFS at time: 1.87 hours.

The maximum discharge from node 130127 is: 4.40 CFS at time 1.93 hours with a maximum floodplain depth of: 0.70 feet and a maximum volume of: 0.19 AF.

The maximum discharge from node 130449 is: 8.96 CFS at time 1.93 hours with a maximum floodplain depth of: 0.80 feet and a maximum volume of: 0.46 AF.

The maximum discharge from node 130771 is: 21.65 CFS at time 1.89 hours with a maximum floodplain depth of: 1.22 feet and a maximum volume of: 1.43 AF.

The maximum discharge from node 131093 is: 75.67 CFS at time 1.87 hours with a maximum floodplain depth of: 3.17 feet and a maximum volume of: 7.90 AF.
CROSSMAX.OUT

THE MAXIMUM DISCHARGE FROM NODE 131415 IS: 113.12 CFS AT TIME 1.87 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 4.42 FEET AND A MAXIMUM VOLUME OF: 16.61 AF

THE MAXIMUM DISCHARGE FROM NODE 131737 IS: 12.53 CFS AT TIME 1.89 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 1.29 FEET AND A MAXIMUM VOLUME OF: 0.76 AF

THE MAXIMUM DISCHARGE FROM NODE 132059 IS: 0.01 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 132381 IS: 0.00 CFS AT TIME 1.40 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 132703 IS: 0.00 CFS AT TIME 1.41 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.03 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION 45 IS: 198.80 CFS AT TIME: 1.74 HOURS

THE MAXIMUM DISCHARGE FROM NODE 152584 IS: 0.02 CFS AT TIME 1.74 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 152906 IS: 23.56 CFS AT TIME 1.75 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.41 FEET AND A MAXIMUM VOLUME OF: 0.67 AF

THE MAXIMUM DISCHARGE FROM NODE 153228 IS: 174.48 CFS AT TIME 1.74 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 3.93 FEET AND A MAXIMUM VOLUME OF: 15.47 AF

THE MAXIMUM DISCHARGE FROM NODE 153550 IS: 0.78 CFS AT TIME 1.74 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.05 FEET AND A MAXIMUM VOLUME OF: 0.01 AF

THE MAXIMUM DISCHARGE FROM NODE 153872 IS: 0.04 CFS AT TIME 1.75 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 154194 IS: 0.01 CFS AT TIME 1.36 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.00 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION 46 IS: 118.44 CFS AT TIME: 1.67 HOURS

THE MAXIMUM DISCHARGE FROM NODE 203140 IS: 0.01 CFS AT TIME 1.38 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.00 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 203462 IS: 0.01 CFS AT TIME 1.38 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.00 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 203784 IS: 0.02 CFS AT TIME 0.68 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.00 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 204106 IS: 0.02 CFS AT TIME 0.82 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.00 FEET AND A MAXIMUM VOLUME OF: 0.00 AF
THE MAXIMUM DISCHARGE FROM NODE 204428 IS: 118.52 CFS AT TIME 1.67 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 2.66 FEET AND A MAXIMUM VOLUME OF: 9.65 AF

THE MAXIMUM DISCHARGE FROM NODE 204750 IS: 0.02 CFS AT TIME 0.89 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.00 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 205072 IS: 0.02 CFS AT TIME 1.37 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.00 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 205394 IS: 0.02 CFS AT TIME 1.38 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.00 FEET AND A MAXIMUM VOLUME OF: 0.00 AF
East Model 100-yr w/SD

ERROR.CHK

*** THIS FILE CONTAINS DATA ERROR MESSAGES TO HELP YOU DEBUG YOUR DATA FILES

THE FOLLOWING POTENTIAL ERRORS WERE ENCOUNTERED... ***

CHECK THE BACKUP FILES (*.BAC) TO BE SURE THAT THE DATA IS READ CORRECTLY

*** THERE ARE POTENTIAL DATA ERROR(S) IN FILE ARF.DAT ***

GRID ELEMENT ARF VALUES WERE ADJUSTED TO 1.0 TO ELIMINATE THE POTENTIAL FOR INSTABILITY RELATED TO SMALL SURFACE AREA.

THESE ARE REPORTED TO THE ARF_ADJUSTMENT.CHK FILE.

NO DATA INPUT ERRORS WERE ENCOUNTERED, BUT REVIEW ANY WARNING MESSAGES LISTED ABOVE

*** THERE ARE DRY OUTFLOW NODES FOR THE FOLLOWING DOWNSTREAM GRID SYSTEM: 1*** GRID CELL: 7085 ***

*** THERE ARE DRY OUTFLOW NODES FOR THE FOLLOWING DOWNSTREAM GRID SYSTEM: 1*** GRID CELL: 7407 ***

*** THERE ARE DRY OUTFLOW NODES FOR THE FOLLOWING DOWNSTREAM GRID SYSTEM: 1*** GRID CELL: 7729 ***

*** THERE ARE DRY OUTFLOW NODES FOR THE FOLLOWING DOWNSTREAM GRID SYSTEM: 1*** GRID CELL: 15779 ***

*** THERE ARE DRY OUTFLOW NODES FOR THE FOLLOWING DOWNSTREAM GRID SYSTEM: 1*** GRID CELL: 24473 ***

*** THERE ARE DRY OUTFLOW NODES FOR THE FOLLOWING DOWNSTREAM GRID SYSTEM: 1*** GRID CELL: 27049 ***

*** THERE ARE DRY OUTFLOW NODES FOR THE FOLLOWING DOWNSTREAM GRID SYSTEM: 1*** GRID CELL: 27371 ***

*** THERE ARE DRY OUTFLOW NODES FOR THE FOLLOWING DOWNSTREAM GRID SYSTEM: 1*** GRID CELL: 81467 ***

*** THERE ARE DRY OUTFLOW NODES FOR THE FOLLOWING DOWNSTREAM GRID SYSTEM: 1*** GRID CELL: 94025 ***

*** THERE ARE DRY OUTFLOW NODES FOR THE FOLLOWING DOWNSTREAM GRID SYSTEM: 1*** GRID CELL: 107549 ***
*** THERE ARE DRY OUTFLOW NODES FOR THE FOLLOWING DOWNSTREAM GRID SYSTEM: 1*** GRID CELL: 109481 ***

*** THERE ARE DRY OUTFLOW NODES FOR THE FOLLOWING DOWNSTREAM GRID SYSTEM: 1*** GRID CELL: 128801 ***

*** THERE ARE DRY OUTFLOW NODES FOR THE FOLLOWING DOWNSTREAM GRID SYSTEM: 1*** GRID CELL: 129123 ***

*** THERE ARE DRY OUTFLOW NODES FOR THE FOLLOWING DOWNSTREAM GRID SYSTEM: 1*** GRID CELL: 133953 ***

*** THERE ARE DRY OUTFLOW NODES FOR THE FOLLOWING DOWNSTREAM GRID SYSTEM: 1*** GRID CELL: 134275 ***

*** THERE ARE DRY OUTFLOW NODES FOR THE FOLLOWING DOWNSTREAM GRID SYSTEM: 1*** GRID CELL: 134597 ***

*** THERE ARE DRY OUTFLOW NODES FOR THE FOLLOWING DOWNSTREAM GRID SYSTEM: 1*** GRID CELL: 152629 ***

*** THERE ARE DRY OUTFLOW NODES FOR THE FOLLOWING DOWNSTREAM GRID SYSTEM: 1*** GRID CELL: 249229 ***

REVIEW THE EVACUATEDFP.OUT FILE FOR COMPLETE EVACUATION OF VOLUME IN THE LISTED GRID ELEMENTS - IMPROVE ROUTING STABILITY BY REDUCING THE OUTFLOW FROM THE ELEMENT
NEGATIVE VOLUME CONSERVATION (ACRE FEET) INDICATES EXCESS VOLUME (OUTFLOW + STORAGE > INFLOW)

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TOTAL POINT RAINFALL: 3.1700 INCHES

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WATER

RAINFALL VOLUME 144.839

SURFACE WATER INFLOW HYDROGRAPH 121.505

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INFLOW HYDROGRAPHS + RAINFALL 266.344

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SURFACE OUTFLOW (ACRE-FT)
SUMMARY.OUT

OVERLAND INFILTRATED AND INTERCEPTED WATER 0.427 INCHES

OVERLAND FLOW WATER

WATER LOST TO INFILTRATION & INTERCEPTION 22.542
FLOODPLAIN STORAGE 32.627
FLOODPLAIN OUTFLOW HYDROGRAPH 214.367
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FLOODPLAIN OUTFLOW, INFILTRATION & STORAGE 269.537

TOL FLOODPLAIN STORAGE 1.907
CHANNEL OUTFLOW AND STORAGE 269.537

============================================================================================
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*** FLO-2D STORM DRAIN EXCHANGE VOLUME (ACRE-FT) ***

Storm Drain Inflow

SURFACE TO STORM DRAIN SYSTEM THROUGH INLETS 104.086072
SURFACE TO STORM DRAIN THROUGH OUTFALLS 3.782568
DIRECT INFLOW RECEIVED AT INLETS 0.000
---------
TOTAL INFLOW (compare w/SWMM.rpt Wet Weather Inflow) 107.869

Storm Drain Outflow from Outfalls

STORM DRAIN TO SURFACE THROUGH OUTFALLS 107.277883
STORM DRAIN OUTFALL (OFF SYSTEM) 0.000
---------
TOTAL OUTFLOW (compare w/SWMM.rpt External Outflow) 107.278

Storm Drain Return Flow to Surface

STORM DRAIN RETURN FLOW TO SURFACE THROUGH INLETS 3.784
---------

Page 3
TOTAL STORM DRAIN RETURN FLOW + OUTFLOW 111.062

STORM DRAIN SYSTEM STORAGE (FROM swmm.rpt) 0.785

STORM DRAIN RETURN FLOW + OUTFLOW + STORAGE 111.847

STORM DRAIN MASS BALANCE (INFLOW - OUTFLOW + STORAGE) -3.979

Extracted from Storm Drain File (swmm.rpt)

WET WEATHER INFLOW 104.084703
EXTERNAL INFLOW 10.261
EXTERNAL OUTFLOW 107.765205

Return Flow to Surface 3.784146
Total Storm Drain Storage (nodes+links) 0.785207

Continuity Error (%) 1.759

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*** TOTALS ***

TOTAL OUTFLOW FROM GRID SYSTEM 214.367

TOTAL VOLUME OF OUTFLOW AND STORAGE 269.537

SURFACE AREA OF INUNDATION REGARDLESS OF THE TIME OF OCCURRENCE: (FOR FLOW DEPTHS GREATER THAN THE "TOL" VALUE TYPICALLY 0.1 FT OR 0.03 M)

THE MAXIMUM INUNDEATED AREA IS: 480.939 ACRES
THE MAXIMUM INUNDEATED AREA (DEPTH > 0.5 FT) IS: 52.140 ACRES

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GRID ELEMENT SIZE: 10.0 FT
SUMMARY.OUT

TOTAL NUMBER OF GRID ELEMENTS:  240250
GRID SYSTEM AREA:         551.54 ACRES     0.8615 SQ. MI.

TOTAL FLOODPLAIN LOOP COMPUTATIONS:    22534936816.

COMPUTER RUN TIME IS:  1.10059 HRS

THIS OUTPUT FILE WAS TERMINATED ON:   7/16/2021 AT:   8:34:38

<table>
<thead>
<tr>
<th>SIMULATION SUMMARY</th>
<th>ACTION</th>
<th>STATUS</th>
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<tbody>
<tr>
<td>Overall volume conservation</td>
<td>No action necessary</td>
<td>Excellent</td>
</tr>
<tr>
<td>Timestep decreases - numerical stability</td>
<td>No action necessary</td>
<td>Good</td>
</tr>
<tr>
<td>Maximum floodplain velocities</td>
<td>Maximum velocity maybe high &gt; 10 fps</td>
<td>Review maximum velocity plots and VELTIMEFP.OUT</td>
</tr>
<tr>
<td>Variation in n-values</td>
<td>No action necessary</td>
<td>Reasonable n-value adjustment</td>
</tr>
</tbody>
</table>

Page 5
West model 100-yr
w/SD CROSSMAX.OUT

THE MAXIMUM DISCHARGE FROM CROSS SECTION  1 IS:  73.09 CFS AT TIME:  1.50 HOURS

THE MAXIMUM DISCHARGE FROM NODE  30046 IS:  0.13 CFS AT TIME  1.46 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF:  0.04 FEET AND A MAXIMUM VOLUME OF:  0.00 AF

THE MAXIMUM DISCHARGE FROM NODE  29736 IS:  0.70 CFS AT TIME  1.50 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF:  0.13 FEET AND A MAXIMUM VOLUME OF:  0.04 AF

THE MAXIMUM DISCHARGE FROM NODE  29426 IS:  4.37 CFS AT TIME  1.50 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF:  0.32 FEET AND A MAXIMUM VOLUME OF:  0.40 AF

THE MAXIMUM DISCHARGE FROM NODE  29116 IS:  17.43 CFS AT TIME  1.50 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF:  0.61 FEET AND A MAXIMUM VOLUME OF:  2.39 AF

THE MAXIMUM DISCHARGE FROM NODE  28806 IS:  18.00 CFS AT TIME  1.50 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF:  0.50 FEET AND A MAXIMUM VOLUME OF:  1.82 AF

THE MAXIMUM DISCHARGE FROM NODE  28496 IS:  12.78 CFS AT TIME  1.50 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF:  0.43 FEET AND A MAXIMUM VOLUME OF:  1.26 AF

THE MAXIMUM DISCHARGE FROM NODE  28186 IS:  13.84 CFS AT TIME  1.50 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF:  0.49 FEET AND A MAXIMUM VOLUME OF:  1.37 AF

THE MAXIMUM DISCHARGE FROM NODE  27876 IS:  5.86 CFS AT TIME  1.50 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF:  0.36 FEET AND A MAXIMUM VOLUME OF:  0.54 AF

THE MAXIMUM DISCHARGE FROM NODE  27566 IS:  0.02 CFS AT TIME  1.42 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF:  0.02 FEET AND A MAXIMUM VOLUME OF:  0.00 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION  2 IS:  204.42 CFS AT TIME:  2.24 HOURS

THE MAXIMUM DISCHARGE FROM NODE  24422 IS:  0.01 CFS AT TIME  1.37 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF:  0.02 FEET AND A MAXIMUM VOLUME OF:  0.00 AF

THE MAXIMUM DISCHARGE FROM NODE  24113 IS:  9.61 CFS AT TIME  2.24 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF:  0.71 FEET AND A MAXIMUM VOLUME OF:  0.78 AF

THE MAXIMUM DISCHARGE FROM NODE  23804 IS:  181.20 CFS AT TIME  2.24 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF:  5.71 FEET AND A MAXIMUM VOLUME OF:  31.53 AF

THE MAXIMUM DISCHARGE FROM NODE  23495 IS:  13.78 CFS AT TIME  2.24 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF:  0.45 FEET AND A MAXIMUM VOLUME OF:  1.43 AF

THE MAXIMUM DISCHARGE FROM NODE  23186 IS:  1.04 CFS AT TIME  1.42 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF:  0.10 FEET AND A MAXIMUM VOLUME OF:  0.06 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION  3 IS:  186.76 CFS AT TIME:  2.15 HOURS
CROSSMAX.OUT

HOURS

THE MAXIMUM DISCHARGE FROM NODE 34065 IS: 0.01 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 34064 IS: 0.20 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.06 FEET AND A MAXIMUM VOLUME OF: 0.01 AF

THE MAXIMUM DISCHARGE FROM NODE 34063 IS: 5.43 CFS AT TIME 2.17 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.42 FEET AND A MAXIMUM VOLUME OF: 0.40 AF

THE MAXIMUM DISCHARGE FROM NODE 34062 IS: 26.46 CFS AT TIME 2.15 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.92 FEET AND A MAXIMUM VOLUME OF: 3.59 AF

THE MAXIMUM DISCHARGE FROM NODE 34061 IS: 52.28 CFS AT TIME 2.14 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 1.11 FEET AND A MAXIMUM VOLUME OF: 8.13 AF

THE MAXIMUM DISCHARGE FROM NODE 34060 IS: 51.93 CFS AT TIME 2.15 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 1.08 FEET AND A MAXIMUM VOLUME OF: 8.21 AF

THE MAXIMUM DISCHARGE FROM NODE 34059 IS: 39.77 CFS AT TIME 2.13 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 1.03 FEET AND A MAXIMUM VOLUME OF: 5.63 AF

THE MAXIMUM DISCHARGE FROM NODE 34058 IS: 11.20 CFS AT TIME 2.15 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.56 FEET AND A MAXIMUM VOLUME OF: 0.95 AF

THE MAXIMUM DISCHARGE FROM NODE 34057 IS: 0.03 CFS AT TIME 2.18 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.02 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION 4 IS: 122.71 CFS AT TIME: 2.23
HOURS

THE MAXIMUM DISCHARGE FROM NODE 23477 IS: 0.02 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 23476 IS: 0.03 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.02 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 23475 IS: 0.37 CFS AT TIME 2.26 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.40 FEET AND A MAXIMUM VOLUME OF: 0.02 AF

THE MAXIMUM DISCHARGE FROM NODE 23474 IS: 10.25 CFS AT TIME 2.27 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 1.08 FEET AND A MAXIMUM VOLUME OF: 1.12 AF

THE MAXIMUM DISCHARGE FROM NODE 23473 IS: 29.89 CFS AT TIME 2.33 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 1.25 FEET AND A MAXIMUM VOLUME OF: 4.09 AF

THE MAXIMUM DISCHARGE FROM NODE 23472 IS: 32.35 CFS AT TIME 2.21 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 1.10 FEET AND A MAXIMUM VOLUME OF: 4.51 AF

THE MAXIMUM DISCHARGE FROM NODE 23471 IS: 35.09 CFS AT TIME 2.21 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 1.10 FEET AND A MAXIMUM VOLUME OF: 5.05 AF
CROSSMAX.OUT

THE MAXIMUM DISCHARGE FROM NODE 23470 IS:  10.84 CFS AT TIME 2.27 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF:  0.65 FEET AND A MAXIMUM VOLUME OF:  1.17 AF

THE MAXIMUM DISCHARGE FROM NODE 23469 IS:  5.83 CFS AT TIME 2.26 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF:  0.48 FEET AND A MAXIMUM VOLUME OF:  0.53 AF

THE MAXIMUM DISCHARGE FROM NODE 23468 IS:  1.16 CFS AT TIME 2.25 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF:  0.17 FEET AND A MAXIMUM VOLUME OF:  0.07 AF

THE MAXIMUM DISCHARGE FROM NODE 23467 IS:  0.01 CFS AT TIME 1.26 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF:  0.00 FEET AND A MAXIMUM VOLUME OF:  0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 23466 IS:  0.11 CFS AT TIME 1.42 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF:  0.07 FEET AND A MAXIMUM VOLUME OF:  0.01 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION  5 IS:  95.79 CFS AT TIME:  2.17 HOURS

THE MAXIMUM DISCHARGE FROM NODE 30606 IS:  0.02 CFS AT TIME 1.42 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF:  0.01 FEET AND A MAXIMUM VOLUME OF:  0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 30605 IS:  0.03 CFS AT TIME 1.50 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF:  0.02 FEET AND A MAXIMUM VOLUME OF:  0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 30604 IS:  13.77 CFS AT TIME 2.17 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF:  0.53 FEET AND A MAXIMUM VOLUME OF:  1.82 AF

THE MAXIMUM DISCHARGE FROM NODE 30603 IS:  27.54 CFS AT TIME 2.17 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF:  0.65 FEET AND A MAXIMUM VOLUME OF:  4.24 AF

THE MAXIMUM DISCHARGE FROM NODE 30602 IS:  34.79 CFS AT TIME 2.17 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF:  0.87 FEET AND A MAXIMUM VOLUME OF:  5.91 AF

THE MAXIMUM DISCHARGE FROM NODE 30601 IS:  18.94 CFS AT TIME 2.17 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF:  0.64 FEET AND A MAXIMUM VOLUME OF:  2.77 AF

THE MAXIMUM DISCHARGE FROM NODE 30600 IS:  0.72 CFS AT TIME 2.17 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF:  0.13 FEET AND A MAXIMUM VOLUME OF:  0.06 AF

THE MAXIMUM DISCHARGE FROM NODE 30599 IS:  0.01 CFS AT TIME 1.42 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF:  0.01 FEET AND A MAXIMUM VOLUME OF:  0.00 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION  6 IS:  172.76 CFS AT TIME:  2.12 HOURS

THE MAXIMUM DISCHARGE FROM NODE 43674 IS:  0.01 CFS AT TIME 1.42 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF:  0.01 FEET AND A MAXIMUM VOLUME OF:  0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 43673 IS:  0.98 CFS AT TIME 2.12 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF:  0.12 FEET AND A MAXIMUM VOLUME OF:  0.05 AF
CROSSMAX.OUT

THE MAXIMUM DISCHARGE FROM NODE 43672 IS: 33.10 CFS AT TIME 2.12 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.67 FEET AND A MAXIMUM VOLUME OF: 4.46 AF

THE MAXIMUM DISCHARGE FROM NODE 43671 IS: 54.88 CFS AT TIME 2.12 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.77 FEET AND A MAXIMUM VOLUME OF: 8.42 AF

THE MAXIMUM DISCHARGE FROM NODE 43670 IS: 54.40 CFS AT TIME 2.12 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.79 FEET AND A MAXIMUM VOLUME OF: 8.26 AF

THE MAXIMUM DISCHARGE FROM NODE 43669 IS: 28.55 CFS AT TIME 2.12 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.65 FEET AND A MAXIMUM VOLUME OF: 3.44 AF

THE MAXIMUM DISCHARGE FROM NODE 43668 IS: 0.86 CFS AT TIME 2.12 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.11 FEET AND A MAXIMUM VOLUME OF: 0.05 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION 7 IS: 102.01 CFS AT TIME: 2.15 HOURS

THE MAXIMUM DISCHARGE FROM NODE 44247 IS: 0.04 CFS AT TIME 1.46 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.04 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 44246 IS: 0.15 CFS AT TIME 1.45 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.05 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 44245 IS: 8.14 CFS AT TIME 2.14 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.53 FEET AND A MAXIMUM VOLUME OF: 0.94 AF

THE MAXIMUM DISCHARGE FROM NODE 44244 IS: 27.80 CFS AT TIME 2.15 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.81 FEET AND A MAXIMUM VOLUME OF: 4.00 AF

THE MAXIMUM DISCHARGE FROM NODE 44243 IS: 33.24 CFS AT TIME 2.15 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.84 FEET AND A MAXIMUM VOLUME OF: 5.28 AF

THE MAXIMUM DISCHARGE FROM NODE 44242 IS: 27.24 CFS AT TIME 2.15 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.88 FEET AND A MAXIMUM VOLUME OF: 4.06 AF

THE MAXIMUM DISCHARGE FROM NODE 44241 IS: 5.61 CFS AT TIME 2.15 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.46 FEET AND A MAXIMUM VOLUME OF: 0.55 AF

THE MAXIMUM DISCHARGE FROM NODE 44240 IS: 0.04 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.02 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 44239 IS: 0.05 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.04 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 44238 IS: 0.00 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.10 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION 8 IS: 317.20 CFS AT TIME: 2.10 HOURS
CROSSMAX.OUT

THE MAXIMUM DISCHARGE FROM NODE 52981 IS: 0.01 CFS AT TIME 1.42 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 52671 IS: 9.56 CFS AT TIME 2.11 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.57 FEET AND A MAXIMUM VOLUME OF: 0.60 AF

THE MAXIMUM DISCHARGE FROM NODE 52361 IS: 53.57 CFS AT TIME 2.10 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 1.41 FEET AND A MAXIMUM VOLUME OF: 6.32 AF

THE MAXIMUM DISCHARGE FROM NODE 52051 IS: 81.19 CFS AT TIME 2.11 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 1.63 FEET AND A MAXIMUM VOLUME OF: 11.26 AF

THE MAXIMUM DISCHARGE FROM NODE 51741 IS: 88.35 CFS AT TIME 2.10 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 1.76 FEET AND A MAXIMUM VOLUME OF: 13.18 AF

THE MAXIMUM DISCHARGE FROM NODE 51431 IS: 67.95 CFS AT TIME 2.10 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 1.59 FEET AND A MAXIMUM VOLUME OF: 8.83 AF

THE MAXIMUM DISCHARGE FROM NODE 51121 IS: 16.79 CFS AT TIME 2.11 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.92 FEET AND A MAXIMUM VOLUME OF: 1.54 AF

THE MAXIMUM DISCHARGE FROM NODE 50811 IS: 0.02 CFS AT TIME 1.42 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.02 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 50501 IS: 0.00 CFS AT TIME 1.42 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION 9 IS: 111.72 CFS AT TIME: 1.52 HOURS

THE MAXIMUM DISCHARGE FROM NODE 57220 IS: 0.01 CFS AT TIME 1.50 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 57219 IS: 1.66 CFS AT TIME 1.53 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.27 FEET AND A MAXIMUM VOLUME OF: 0.03 AF

THE MAXIMUM DISCHARGE FROM NODE 57218 IS: 15.03 CFS AT TIME 1.52 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.72 FEET AND A MAXIMUM VOLUME OF: 0.90 AF

THE MAXIMUM DISCHARGE FROM NODE 57217 IS: 21.71 CFS AT TIME 1.52 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.65 FEET AND A MAXIMUM VOLUME OF: 1.01 AF

THE MAXIMUM DISCHARGE FROM NODE 57216 IS: 20.74 CFS AT TIME 1.52 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.61 FEET AND A MAXIMUM VOLUME OF: 0.81 AF

THE MAXIMUM DISCHARGE FROM NODE 57215 IS: 27.14 CFS AT TIME 1.52 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.80 FEET AND A MAXIMUM VOLUME OF: 1.71 AF

THE MAXIMUM DISCHARGE FROM NODE 57214 IS: 23.76 CFS AT TIME 1.52 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.88 FEET AND A MAXIMUM VOLUME OF: 1.90 AF
CROSSMAX.OUT

THE MAXIMUM DISCHARGE FROM NODE 57213 IS: 1.95 CFS AT TIME 1.53 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.22 FEET AND A MAXIMUM VOLUME OF: 0.03 AF

THE MAXIMUM DISCHARGE FROM NODE 57212 IS: 0.01 CFS AT TIME 1.50 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 57211 IS: 0.25 CFS AT TIME 1.54 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.09 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION 10 IS: 224.81 CFS AT TIME: 1.65 HOURS

THE MAXIMUM DISCHARGE FROM NODE 50318 IS: 0.06 CFS AT TIME 1.36 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.12 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 50008 IS: 6.70 CFS AT TIME 1.66 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.68 FEET AND A MAXIMUM VOLUME OF: 0.33 AF

THE MAXIMUM DISCHARGE FROM NODE 49698 IS: 19.15 CFS AT TIME 1.65 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 1.03 FEET AND A MAXIMUM VOLUME OF: 1.31 AF

THE MAXIMUM DISCHARGE FROM NODE 49388 IS: 38.64 CFS AT TIME 1.65 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 1.48 FEET AND A MAXIMUM VOLUME OF: 3.69 AF

THE MAXIMUM DISCHARGE FROM NODE 49078 IS: 49.12 CFS AT TIME 1.65 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 1.62 FEET AND A MAXIMUM VOLUME OF: 5.28 AF

THE MAXIMUM DISCHARGE FROM NODE 48768 IS: 47.56 CFS AT TIME 1.65 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 1.97 FEET AND A MAXIMUM VOLUME OF: 5.50 AF

THE MAXIMUM DISCHARGE FROM NODE 48458 IS: 19.03 CFS AT TIME 1.65 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 1.07 FEET AND A MAXIMUM VOLUME OF: 1.31 AF

THE MAXIMUM DISCHARGE FROM NODE 48148 IS: 9.02 CFS AT TIME 1.65 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.55 FEET AND A MAXIMUM VOLUME OF: 0.32 AF

THE MAXIMUM DISCHARGE FROM NODE 47838 IS: 20.04 CFS AT TIME 1.65 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.96 FEET AND A MAXIMUM VOLUME OF: 1.07 AF

THE MAXIMUM DISCHARGE FROM NODE 47528 IS: 15.50 CFS AT TIME 1.65 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.77 FEET AND A MAXIMUM VOLUME OF: 0.76 AF

THE MAXIMUM DISCHARGE FROM NODE 47218 IS: 0.02 CFS AT TIME 1.50 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.02 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 46908 IS: 0.05 CFS AT TIME 1.50 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.04 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION 11 IS: 97.90 CFS AT TIME: 1.51 HOURS
CROSSMAX.OUT

THE MAXIMUM DISCHARGE FROM NODE 71529 IS: 0.07 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.05 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 71528 IS: 0.05 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.02 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 71527 IS: 2.31 CFS AT TIME 1.53 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.25 FEET AND A MAXIMUM VOLUME OF: 0.03 AF

THE MAXIMUM DISCHARGE FROM NODE 71526 IS: 18.92 CFS AT TIME 1.51 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.77 FEET AND A MAXIMUM VOLUME OF: 0.94 AF

THE MAXIMUM DISCHARGE FROM NODE 71525 IS: 22.71 CFS AT TIME 1.51 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.71 FEET AND A MAXIMUM VOLUME OF: 1.04 AF

THE MAXIMUM DISCHARGE FROM NODE 71524 IS: 25.33 CFS AT TIME 1.51 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.82 FEET AND A MAXIMUM VOLUME OF: 1.50 AF

THE MAXIMUM DISCHARGE FROM NODE 71523 IS: 22.45 CFS AT TIME 1.51 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.95 FEET AND A MAXIMUM VOLUME OF: 1.30 AF

THE MAXIMUM DISCHARGE FROM NODE 71522 IS: 6.00 CFS AT TIME 1.51 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.63 FEET AND A MAXIMUM VOLUME OF: 0.23 AF

THE MAXIMUM DISCHARGE FROM NODE 71521 IS: 0.15 CFS AT TIME 1.52 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.11 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 71520 IS: 0.01 CFS AT TIME 1.35 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 71519 IS: 0.02 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.02 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION 12 IS: 4.29 CFS AT TIME: 1.31
HOURS

THE MAXIMUM DISCHARGE FROM NODE 75747 IS: 0.01 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 75437 IS: 1.46 CFS AT TIME 1.45 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 1.06 FEET AND A MAXIMUM VOLUME OF: 0.16 AF

THE MAXIMUM DISCHARGE FROM NODE 75127 IS: 3.42 CFS AT TIME 1.53 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 1.37 FEET AND A MAXIMUM VOLUME OF: 0.18 AF

THE MAXIMUM DISCHARGE FROM NODE 74817 IS: 4.57 CFS AT TIME 1.44 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 1.43 FEET AND A MAXIMUM VOLUME OF: 0.17 AF

THE MAXIMUM DISCHARGE FROM NODE 74507 IS: 3.65 CFS AT TIME 1.50 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 1.28 FEET AND A MAXIMUM VOLUME OF: 0.32 AF

THE MAXIMUM DISCHARGE FROM NODE 74197 IS: 1.76 CFS AT TIME 1.47 HOURS WITH A
CROSSMAX.OUT
MAXIMUM FLOODPLAIN DEPTH OF: 0.85 FEET AND A MAXIMUM VOLUME OF: 0.05 AF

THE MAXIMUM DISCHARGE FROM NODE 73887 IS: 0.37 CFS AT TIME 1.50 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.20 FEET AND A MAXIMUM VOLUME OF: 0.01 AF

THE MAXIMUM DISCHARGE FROM NODE 73577 IS: 1.12 CFS AT TIME 1.50 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.19 FEET AND A MAXIMUM VOLUME OF: 0.03 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION 13 IS: 541.48 CFS AT TIME: 2.16 HOURS

THE MAXIMUM DISCHARGE FROM NODE 91549 IS: 0.01 CFS AT TIME 1.35 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.02 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 91240 IS: 12.99 CFS AT TIME 2.16 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 1.14 FEET AND A MAXIMUM VOLUME OF: 0.57 AF

THE MAXIMUM DISCHARGE FROM NODE 90931 IS: 131.54 CFS AT TIME 2.16 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 4.55 FEET AND A MAXIMUM VOLUME OF: 14.94 AF

THE MAXIMUM DISCHARGE FROM NODE 90622 IS: 214.37 CFS AT TIME 2.16 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 6.84 FEET AND A MAXIMUM VOLUME OF: 35.86 AF

THE MAXIMUM DISCHARGE FROM NODE 90313 IS: 181.40 CFS AT TIME 2.16 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 4.03 FEET AND A MAXIMUM VOLUME OF: 22.82 AF

THE MAXIMUM DISCHARGE FROM NODE 90004 IS: 1.32 CFS AT TIME 2.16 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.06 FEET AND A MAXIMUM VOLUME OF: 0.04 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION 14 IS: 124.91 CFS AT TIME: 1.92 HOURS

THE MAXIMUM DISCHARGE FROM NODE 127392 IS: 0.11 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.02 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 127082 IS: 0.06 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 126772 IS: 10.81 CFS AT TIME 1.93 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.77 FEET AND A MAXIMUM VOLUME OF: 0.89 AF

THE MAXIMUM DISCHARGE FROM NODE 126462 IS: 108.83 CFS AT TIME 1.92 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 3.37 FEET AND A MAXIMUM VOLUME OF: 17.82 AF

THE MAXIMUM DISCHARGE FROM NODE 126152 IS: 5.26 CFS AT TIME 1.93 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.44 FEET AND A MAXIMUM VOLUME OF: 0.33 AF

THE MAXIMUM DISCHARGE FROM NODE 125842 IS: 0.01 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 125532 IS: 0.01 CFS AT TIME 1.42 HOURS WITH A

Page 8
CROSSMAX.OUT
MAXIMUM FLOODPLAIN DEPTH OF:  0.00 FEET AND A MAXIMUM VOLUME OF:  0.00 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION 15 IS:  155.47 CFS AT TIME:  1.85 HOURS

THE MAXIMUM DISCHARGE FROM NODE 122434 IS:  0.03 CFS AT TIME 1.42 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF:  0.04 FEET AND A MAXIMUM VOLUME OF:  0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 122124 IS:  3.97 CFS AT TIME 1.85 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF:  0.39 FEET AND A MAXIMUM VOLUME OF:  0.28 AF

THE MAXIMUM DISCHARGE FROM NODE 121814 IS:  5.53 CFS AT TIME 1.85 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF:  0.37 FEET AND A MAXIMUM VOLUME OF:  0.38 AF

THE MAXIMUM DISCHARGE FROM NODE 121504 IS:  4.93 CFS AT TIME 1.86 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF:  0.30 FEET AND A MAXIMUM VOLUME OF:  0.31 AF

THE MAXIMUM DISCHARGE FROM NODE 121194 IS:  24.09 CFS AT TIME 1.85 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF:  0.68 FEET AND A MAXIMUM VOLUME OF:  2.40 AF

THE MAXIMUM DISCHARGE FROM NODE 120884 IS:  33.90 CFS AT TIME 1.85 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF:  0.63 FEET AND A MAXIMUM VOLUME OF:  3.24 AF

THE MAXIMUM DISCHARGE FROM NODE 120574 IS:  32.43 CFS AT TIME 1.85 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF:  0.60 FEET AND A MAXIMUM VOLUME OF:  2.89 AF

THE MAXIMUM DISCHARGE FROM NODE 120264 IS:  35.88 CFS AT TIME 1.85 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF:  0.73 FEET AND A MAXIMUM VOLUME OF:  3.46 AF

THE MAXIMUM DISCHARGE FROM NODE 119954 IS:  11.03 CFS AT TIME 1.85 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF:  0.46 FEET AND A MAXIMUM VOLUME OF:  0.80 AF

THE MAXIMUM DISCHARGE FROM NODE 119644 IS:  2.84 CFS AT TIME 1.83 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF:  0.25 FEET AND A MAXIMUM VOLUME OF:  0.19 AF

THE MAXIMUM DISCHARGE FROM NODE 119334 IS:  0.94 CFS AT TIME 1.80 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF:  0.15 FEET AND A MAXIMUM VOLUME OF:  0.07 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION 16 IS:  106.78 CFS AT TIME:  2.01 HOURS

THE MAXIMUM DISCHARGE FROM NODE 145065 IS:  0.19 CFS AT TIME 2.05 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF:  0.18 FEET AND A MAXIMUM VOLUME OF:  0.02 AF

THE MAXIMUM DISCHARGE FROM NODE 144755 IS:  0.28 CFS AT TIME 2.01 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF:  0.13 FEET AND A MAXIMUM VOLUME OF:  0.01 AF

THE MAXIMUM DISCHARGE FROM NODE 144445 IS:  3.66 CFS AT TIME 2.01 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF:  0.34 FEET AND A MAXIMUM VOLUME OF:  0.28 AF

THE MAXIMUM DISCHARGE FROM NODE 144135 IS:  25.05 CFS AT TIME 2.01 HOURS WITH A
### Crossmax.out

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CROSSMAX.OUT

HOURS

THE MAXIMUM DISCHARGE FROM NODE 145013 IS: 0.00 CFS AT TIME 1.08 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 144793 IS: 8.47 CFS AT TIME 2.04 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.60 FEET AND A MAXIMUM VOLUME OF: 0.95 AF

THE MAXIMUM DISCHARGE FROM NODE 144393 IS: 26.80 CFS AT TIME 1.99 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 1.04 FEET AND A MAXIMUM VOLUME OF: 4.27 AF

THE MAXIMUM DISCHARGE FROM NODE 144083 IS: 37.12 CFS AT TIME 2.03 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 1.18 FEET AND A MAXIMUM VOLUME OF: 6.45 AF

THE MAXIMUM DISCHARGE FROM NODE 143773 IS: 32.87 CFS AT TIME 2.03 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 1.17 FEET AND A MAXIMUM VOLUME OF: 5.62 AF

THE MAXIMUM DISCHARGE FROM NODE 143463 IS: 10.34 CFS AT TIME 2.03 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.81 FEET AND A MAXIMUM VOLUME OF: 1.44 AF

THE MAXIMUM DISCHARGE FROM NODE 143153 IS: 0.00 CFS AT TIME 1.43 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 142843 IS: 0.00 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.00 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION 19 IS: 100.20 CFS AT TIME: 2.12
HOURS

THE MAXIMUM DISCHARGE FROM NODE 127938 IS: 0.05 CFS AT TIME 1.41 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.26 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 127628 IS: 0.11 CFS AT TIME 2.99 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.17 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 127318 IS: 7.43 CFS AT TIME 2.10 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.57 FEET AND A MAXIMUM VOLUME OF: 0.45 AF

THE MAXIMUM DISCHARGE FROM NODE 127008 IS: 28.97 CFS AT TIME 2.13 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 1.13 FEET AND A MAXIMUM VOLUME OF: 2.86 AF

THE MAXIMUM DISCHARGE FROM NODE 126698 IS: 49.97 CFS AT TIME 2.11 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 2.44 FEET AND A MAXIMUM VOLUME OF: 6.80 AF

THE MAXIMUM DISCHARGE FROM NODE 126388 IS: 13.76 CFS AT TIME 2.15 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 1.08 FEET AND A MAXIMUM VOLUME OF: 1.13 AF

THE MAXIMUM DISCHARGE FROM NODE 126078 IS: 0.24 CFS AT TIME 2.16 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.11 FEET AND A MAXIMUM VOLUME OF: 0.01 AF

THE MAXIMUM DISCHARGE FROM NODE 125768 IS: 0.04 CFS AT TIME 2.16 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.09 FEET AND A MAXIMUM VOLUME OF: 0.00 AF
CROSSMAX.OUT

THE MAXIMUM DISCHARGE FROM CROSS SECTION 20 IS: 95.48 CFS AT TIME: 2.16 HOURS

THE MAXIMUM DISCHARGE FROM NODE 122665 IS: 0.00 CFS AT TIME 0.92 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 122356 IS: 11.96 CFS AT TIME 2.17 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 1.05 FEET AND A MAXIMUM VOLUME OF: 1.20 AF

THE MAXIMUM DISCHARGE FROM NODE 122047 IS: 80.05 CFS AT TIME 2.14 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 2.57 FEET AND A MAXIMUM VOLUME OF: 14.75 AF

THE MAXIMUM DISCHARGE FROM NODE 121738 IS: 3.49 CFS AT TIME 2.16 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.00 FEET AND A MAXIMUM VOLUME OF: 0.19 AF

THE MAXIMUM DISCHARGE FROM NODE 121429 IS: 0.01 CFS AT TIME 1.42 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION 21 IS: 358.82 CFS AT TIME: 1.95 HOURS

THE MAXIMUM DISCHARGE FROM NODE 120184 IS: 0.01 CFS AT TIME 1.42 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 119875 IS: 0.02 CFS AT TIME 1.44 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 119566 IS: 44.45 CFS AT TIME 1.95 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 2.33 FEET AND A MAXIMUM VOLUME OF: 4.01 AF

THE MAXIMUM DISCHARGE FROM NODE 119257 IS: 62.47 CFS AT TIME 1.95 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 2.58 FEET AND A MAXIMUM VOLUME OF: 6.28 AF

THE MAXIMUM DISCHARGE FROM NODE 118948 IS: 122.17 CFS AT TIME 1.92 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 5.12 FEET AND A MAXIMUM VOLUME OF: 18.50 AF

THE MAXIMUM DISCHARGE FROM NODE 118639 IS: 70.86 CFS AT TIME 1.95 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 2.52 FEET AND A MAXIMUM VOLUME OF: 7.70 AF

THE MAXIMUM DISCHARGE FROM NODE 118330 IS: 34.29 CFS AT TIME 1.95 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 1.70 FEET AND A MAXIMUM VOLUME OF: 2.67 AF

THE MAXIMUM DISCHARGE FROM NODE 118021 IS: 18.82 CFS AT TIME 1.98 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 1.35 FEET AND A MAXIMUM VOLUME OF: 1.27 AF

THE MAXIMUM DISCHARGE FROM NODE 117712 IS: 6.01 CFS AT TIME 1.98 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.82 FEET AND A MAXIMUM VOLUME OF: 0.31 AF

THE MAXIMUM DISCHARGE FROM NODE 117403 IS: 0.03 CFS AT TIME 1.42 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF
CROSSMAX.OUT

THE MAXIMUM DISCHARGE FROM CROSS SECTION 22 IS: 18.30 CFS AT TIME: 2.14 HOURS

THE MAXIMUM DISCHARGE FROM NODE 127905 IS: 0.14 CFS AT TIME 1.79 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.97 FEET AND A MAXIMUM VOLUME OF: 0.01 AF

THE MAXIMUM DISCHARGE FROM NODE 127904 IS: 0.00 CFS AT TIME 1.49 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.02 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 127903 IS: 0.01 CFS AT TIME 1.42 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.05 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 127902 IS: 2.13 CFS AT TIME 2.14 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.46 FEET AND A MAXIMUM VOLUME OF: 0.27 AF

THE MAXIMUM DISCHARGE FROM NODE 127901 IS: 6.52 CFS AT TIME 2.10 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.62 FEET AND A MAXIMUM VOLUME OF: 0.80 AF

THE MAXIMUM DISCHARGE FROM NODE 127900 IS: 1.97 CFS AT TIME 1.45 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.44 FEET AND A MAXIMUM VOLUME OF: 0.15 AF

THE MAXIMUM DISCHARGE FROM NODE 127899 IS: 3.88 CFS AT TIME 2.14 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.44 FEET AND A MAXIMUM VOLUME OF: 0.41 AF

THE MAXIMUM DISCHARGE FROM NODE 127898 IS: 5.36 CFS AT TIME 2.03 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.63 FEET AND A MAXIMUM VOLUME OF: 0.69 AF

THE MAXIMUM DISCHARGE FROM NODE 127897 IS: 0.07 CFS AT TIME 2.16 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.09 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION 23 IS: 80.04 CFS AT TIME: 1.96 HOURS

THE MAXIMUM DISCHARGE FROM NODE 156226 IS: 0.00 CFS AT TIME 0.71 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 155916 IS: 0.55 CFS AT TIME 1.96 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.16 FEET AND A MAXIMUM VOLUME OF: 0.03 AF

THE MAXIMUM DISCHARGE FROM NODE 155606 IS: 18.63 CFS AT TIME 1.95 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.89 FEET AND A MAXIMUM VOLUME OF: 2.50 AF

THE MAXIMUM DISCHARGE FROM NODE 155296 IS: 26.17 CFS AT TIME 1.97 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.83 FEET AND A MAXIMUM VOLUME OF: 3.56 AF

THE MAXIMUM DISCHARGE FROM NODE 154986 IS: 21.87 CFS AT TIME 1.96 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.76 FEET AND A MAXIMUM VOLUME OF: 2.53 AF

THE MAXIMUM DISCHARGE FROM NODE 154676 IS: 10.78 CFS AT TIME 1.96 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.60 FEET AND A MAXIMUM VOLUME OF: 1.02 AF
CROSSMAX.OUT

THE MAXIMUM DISCHARGE FROM NODE 154366 IS: 2.09 CFS AT TIME 1.98 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.33 FEET AND A MAXIMUM VOLUME OF: 0.13 AF

THE MAXIMUM DISCHARGE FROM NODE 154056 IS: 0.00 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.00 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION 24 IS: 75.24 CFS AT TIME: 1.97 HOURS

THE MAXIMUM DISCHARGE FROM NODE 149699 IS: 0.04 CFS AT TIME 1.99 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 149698 IS: 1.35 CFS AT TIME 1.99 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.18 FEET AND A MAXIMUM VOLUME OF: 0.12 AF

THE MAXIMUM DISCHARGE FROM NODE 149697 IS: 18.68 CFS AT TIME 1.96 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.54 FEET AND A MAXIMUM VOLUME OF: 2.30 AF

THE MAXIMUM DISCHARGE FROM NODE 149696 IS: 31.86 CFS AT TIME 1.98 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.65 FEET AND A MAXIMUM VOLUME OF: 4.57 AF

THE MAXIMUM DISCHARGE FROM NODE 149695 IS: 19.69 CFS AT TIME 1.97 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.54 FEET AND A MAXIMUM VOLUME OF: 2.46 AF

THE MAXIMUM DISCHARGE FROM NODE 149694 IS: 3.68 CFS AT TIME 1.97 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.26 FEET AND A MAXIMUM VOLUME OF: 0.35 AF

THE MAXIMUM DISCHARGE FROM NODE 149693 IS: 0.01 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 149692 IS: 0.02 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION 25 IS: 103.17 CFS AT TIME: 1.52 HOURS

THE MAXIMUM DISCHARGE FROM NODE 157654 IS: 0.02 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.02 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 157344 IS: 0.01 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 157034 IS: 0.97 CFS AT TIME 1.52 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.26 FEET AND A MAXIMUM VOLUME OF: 0.01 AF

THE MAXIMUM DISCHARGE FROM NODE 156724 IS: 2.15 CFS AT TIME 1.52 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.39 FEET AND A MAXIMUM VOLUME OF: 0.03 AF

THE MAXIMUM DISCHARGE FROM NODE 156414 IS: 10.48 CFS AT TIME 1.52 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.79 FEET AND A MAXIMUM VOLUME OF: 0.27 AF
CROSSMAX.OUT

THE MAXIMUM DISCHARGE FROM NODE 156104 IS: 22.34 CFS AT TIME 1.50 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 1.45 FEET AND A MAXIMUM VOLUME OF: 1.36 AF

THE MAXIMUM DISCHARGE FROM NODE 155794 IS: 27.81 CFS AT TIME 1.50 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 1.63 FEET AND A MAXIMUM VOLUME OF: 2.43 AF

THE MAXIMUM DISCHARGE FROM NODE 155484 IS: 24.99 CFS AT TIME 1.52 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 1.55 FEET AND A MAXIMUM VOLUME OF: 1.80 AF

THE MAXIMUM DISCHARGE FROM NODE 155174 IS: 14.24 CFS AT TIME 1.51 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 1.29 FEET AND A MAXIMUM VOLUME OF: 0.66 AF

THE MAXIMUM DISCHARGE FROM NODE 154864 IS: 0.87 CFS AT TIME 1.53 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.22 FEET AND A MAXIMUM VOLUME OF: 0.01 AF

THE MAXIMUM DISCHARGE FROM NODE 154554 IS: 0.01 CFS AT TIME 1.52 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION 26 IS: 101.66 CFS AT TIME: 1.51 HOURS

THE MAXIMUM DISCHARGE FROM NODE 168532 IS: 0.00 CFS AT TIME 1.27 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 168222 IS: 0.01 CFS AT TIME 1.50 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 167912 IS: 0.02 CFS AT TIME 1.42 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.02 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 167602 IS: 12.09 CFS AT TIME 1.50 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.65 FEET AND A MAXIMUM VOLUME OF: 0.69 AF

THE MAXIMUM DISCHARGE FROM NODE 167292 IS: 27.73 CFS AT TIME 1.50 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.80 FEET AND A MAXIMUM VOLUME OF: 1.96 AF

THE MAXIMUM DISCHARGE FROM NODE 166982 IS: 21.78 CFS AT TIME 1.51 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.56 FEET AND A MAXIMUM VOLUME OF: 0.96 AF

THE MAXIMUM DISCHARGE FROM NODE 166672 IS: 25.30 CFS AT TIME 1.51 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.68 FEET AND A MAXIMUM VOLUME OF: 1.44 AF

THE MAXIMUM DISCHARGE FROM NODE 166362 IS: 14.27 CFS AT TIME 1.51 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.79 FEET AND A MAXIMUM VOLUME OF: 1.21 AF

THE MAXIMUM DISCHARGE FROM NODE 166052 IS: 0.48 CFS AT TIME 1.51 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.15 FEET AND A MAXIMUM VOLUME OF: 0.01 AF

THE MAXIMUM DISCHARGE FROM NODE 165742 IS: 0.01 CFS AT TIME 1.42 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF
The maximum discharge from cross section 27 is: 24.83 CFS at time: 1.53 hours

The maximum discharge from node 165368 is: 0.00 CFS at time 1.42 hours with a maximum floodplain depth of: 0.00 feet and a maximum volume of: 0.00 AF

The maximum discharge from node 165367 is: 0.01 CFS at time 0.81 hours with a maximum floodplain depth of: 0.01 feet and a maximum volume of: 0.00 AF

The maximum discharge from node 165366 is: 3.20 CFS at time 1.78 hours with a maximum floodplain depth of: 2.36 feet and a maximum volume of: 0.22 AF

The maximum discharge from node 165365 is: 8.89 CFS at time 1.41 hours with a maximum floodplain depth of: 2.89 feet and a maximum volume of: 0.90 AF

The maximum discharge from node 165364 is: 8.46 CFS at time 1.50 hours with a maximum floodplain depth of: 3.09 feet and a maximum volume of: 0.43 AF

The maximum discharge from node 165363 is: 15.39 CFS at time 1.42 hours with a maximum floodplain depth of: 2.99 feet and a maximum volume of: 1.16 AF

The maximum discharge from node 165362 is: 2.85 CFS at time 1.43 hours with a maximum floodplain depth of: 2.58 feet and a maximum volume of: 0.23 AF

The maximum discharge from node 165361 is: 0.01 CFS at time 0.76 hours with a maximum floodplain depth of: 0.00 feet and a maximum volume of: 0.00 AF

The maximum discharge from node 165360 is: 0.09 CFS at time 1.50 hours with a maximum floodplain depth of: 0.29 feet and a maximum volume of: 0.00 AF

The maximum discharge from node 165359 is: 0.25 CFS at time 1.42 hours with a maximum floodplain depth of: 0.58 feet and a maximum volume of: 0.01 AF

The maximum discharge from node 165358 is: 0.01 CFS at time 1.51 hours with a maximum floodplain depth of: 0.01 feet and a maximum volume of: 0.00 AF

The maximum discharge from node 165357 is: 0.01 CFS at time 1.42 hours with a maximum floodplain depth of: 0.01 feet and a maximum volume of: 0.00 AF

The maximum discharge from node 165356 is: 0.11 CFS at time 1.42 hours with a maximum floodplain depth of: 0.18 feet and a maximum volume of: 0.00 AF

The maximum discharge from cross section 28 is: 243.01 CFS at time: 2.25 hours

The maximum discharge from node 18826 is: 0.01 CFS at time 1.42 hours with a maximum floodplain depth of: 0.01 feet and a maximum volume of: 0.00 AF

The maximum discharge from node 18825 is: 0.17 CFS at time 2.25 hours with a maximum floodplain depth of: 0.05 feet and a maximum volume of: 0.01 AF
CROSSMAX.OUT

THE MAXIMUM DISCHARGE FROM NODE 18824 IS: 9.59 CFS AT TIME 2.25 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.61 FEET AND A MAXIMUM VOLUME OF: 1.17 AF

THE MAXIMUM DISCHARGE FROM NODE 18823 IS: 41.81 CFS AT TIME 2.25 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.99 FEET AND A MAXIMUM VOLUME OF: 7.03 AF

THE MAXIMUM DISCHARGE FROM NODE 18822 IS: 56.08 CFS AT TIME 2.25 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.99 FEET AND A MAXIMUM VOLUME OF: 9.94 AF

THE MAXIMUM DISCHARGE FROM NODE 18821 IS: 62.66 CFS AT TIME 2.25 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 1.05 FEET AND A MAXIMUM VOLUME OF: 11.44 AF

THE MAXIMUM DISCHARGE FROM NODE 18820 IS: 42.45 CFS AT TIME 2.25 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.90 FEET AND A MAXIMUM VOLUME OF: 6.68 AF

THE MAXIMUM DISCHARGE FROM NODE 18819 IS: 20.46 CFS AT TIME 2.25 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.46 FEET AND A MAXIMUM VOLUME OF: 2.23 AF

THE MAXIMUM DISCHARGE FROM NODE 18818 IS: 8.08 CFS AT TIME 2.25 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.26 FEET AND A MAXIMUM VOLUME OF: 0.72 AF

THE MAXIMUM DISCHARGE FROM NODE 18817 IS: 1.74 CFS AT TIME 2.25 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.11 FEET AND A MAXIMUM VOLUME OF: 0.13 AF

THE MAXIMUM DISCHARGE FROM NODE 18816 IS: 0.03 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION 29 IS: 34.36 CFS AT TIME: 1.50 HOURS

THE MAXIMUM DISCHARGE FROM NODE 24360 IS: 0.14 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.06 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 24359 IS: 0.01 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 24358 IS: 0.01 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.02 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 24357 IS: 3.14 CFS AT TIME 1.50 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.34 FEET AND A MAXIMUM VOLUME OF: 0.32 AF

THE MAXIMUM DISCHARGE FROM NODE 24356 IS: 9.17 CFS AT TIME 1.50 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.52 FEET AND A MAXIMUM VOLUME OF: 1.04 AF

THE MAXIMUM DISCHARGE FROM NODE 24355 IS: 7.34 CFS AT TIME 1.50 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.48 FEET AND A MAXIMUM VOLUME OF: 0.83 AF

THE MAXIMUM DISCHARGE FROM NODE 24354 IS: 6.71 CFS AT TIME 1.50 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.42 FEET AND A MAXIMUM VOLUME OF: 0.72 AF

THE MAXIMUM DISCHARGE FROM NODE 24353 IS: 6.94 CFS AT TIME 1.50 HOURS WITH A
CROSSMAX.OUT

MAXIMUM FLOODPLAIN DEPTH OF: 0.46 FEET AND A MAXIMUM VOLUME OF: 0.70 AF

THE MAXIMUM DISCHARGE FROM NODE 24352 IS: 0.92 CFS AT TIME 1.50 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.16 FEET AND A MAXIMUM VOLUME OF: 0.06 AF

THE MAXIMUM DISCHARGE FROM NODE 24351 IS: 0.01 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.00 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 24350 IS: 0.01 CFS AT TIME 1.37 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.03 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 24349 IS: 0.02 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.02 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION 30 IS: 174.64 CFS AT TIME: 2.13
HOURS

THE MAXIMUM DISCHARGE FROM NODE 53549 IS: 0.05 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.02 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 53239 IS: 0.03 CFS AT TIME 1.40 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.02 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 52929 IS: 0.33 CFS AT TIME 2.13 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.06 FEET AND A MAXIMUM VOLUME OF: 0.01 AF

THE MAXIMUM DISCHARGE FROM NODE 52619 IS: 24.09 CFS AT TIME 2.10 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.67 FEET AND A MAXIMUM VOLUME OF: 2.53 AF

THE MAXIMUM DISCHARGE FROM NODE 52309 IS: 48.32 CFS AT TIME 2.13 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.83 FEET AND A MAXIMUM VOLUME OF: 6.11 AF

THE MAXIMUM DISCHARGE FROM NODE 51999 IS: 59.29 CFS AT TIME 2.13 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.99 FEET AND A MAXIMUM VOLUME OF: 8.12 AF

THE MAXIMUM DISCHARGE FROM NODE 51689 IS: 35.73 CFS AT TIME 2.13 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.82 FEET AND A MAXIMUM VOLUME OF: 4.09 AF

THE MAXIMUM DISCHARGE FROM NODE 51379 IS: 6.91 CFS AT TIME 2.13 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.40 FEET AND A MAXIMUM VOLUME OF: 0.51 AF

THE MAXIMUM DISCHARGE FROM NODE 51069 IS: 0.02 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 50759 IS: 0.00 CFS AT TIME 1.50 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION 31 IS: 34.04 CFS AT TIME: 1.50
HOURS

THE MAXIMUM DISCHARGE FROM NODE 75302 IS: 0.01 CFS AT TIME 1.42 HOURS WITH A
CROSSMAX.OUT

MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 74992 IS: 0.01 CFS AT TIME 2.13 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.02 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 74682 IS: 3.63 CFS AT TIME 1.50 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.24 FEET AND A MAXIMUM VOLUME OF: 0.10 AF

THE MAXIMUM DISCHARGE FROM NODE 74372 IS: 6.71 CFS AT TIME 1.50 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.31 FEET AND A MAXIMUM VOLUME OF: 0.24 AF

THE MAXIMUM DISCHARGE FROM NODE 74062 IS: 11.05 CFS AT TIME 1.50 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.39 FEET AND A MAXIMUM VOLUME OF: 0.50 AF

THE MAXIMUM DISCHARGE FROM NODE 73752 IS: 11.68 CFS AT TIME 1.50 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.46 FEET AND A MAXIMUM VOLUME OF: 0.63 AF

THE MAXIMUM DISCHARGE FROM NODE 73442 IS: 0.98 CFS AT TIME 1.50 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.15 FEET AND A MAXIMUM VOLUME OF: 0.02 AF

THE MAXIMUM DISCHARGE FROM NODE 73132 IS: 0.00 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION 32 IS: 26.96 CFS AT TIME: 1.46 HOURS

THE MAXIMUM DISCHARGE FROM NODE 99073 IS: 0.02 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 98763 IS: 0.01 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 98453 IS: 1.99 CFS AT TIME 1.46 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.19 FEET AND A MAXIMUM VOLUME OF: 0.05 AF

THE MAXIMUM DISCHARGE FROM NODE 98143 IS: 12.82 CFS AT TIME 1.46 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.47 FEET AND A MAXIMUM VOLUME OF: 0.64 AF

THE MAXIMUM DISCHARGE FROM NODE 97833 IS: 7.11 CFS AT TIME 1.46 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.33 FEET AND A MAXIMUM VOLUME OF: 0.28 AF

THE MAXIMUM DISCHARGE FROM NODE 97523 IS: 4.83 CFS AT TIME 1.46 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.34 FEET AND A MAXIMUM VOLUME OF: 0.18 AF

THE MAXIMUM DISCHARGE FROM NODE 97213 IS: 0.19 CFS AT TIME 1.45 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.04 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 96993 IS: 0.01 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 96593 IS: 0.01 CFS AT TIME 1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF
CROSSMAX.OUT

THE MAXIMUM DISCHARGE FROM CROSS SECTION  33  IS:  118.54 CFS  AT  TIME:  2.06 HOURS

THE MAXIMUM DISCHARGE FROM NODE  134772 IS:  0.02 CFS AT TIME  1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF:  0.03 FEET AND A MAXIMUM VOLUME OF:  0.00 AF

THE MAXIMUM DISCHARGE FROM NODE  134771 IS:  0.00 CFS AT TIME  1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF:  0.01 FEET AND A MAXIMUM VOLUME OF:  0.00 AF

THE MAXIMUM DISCHARGE FROM NODE  134770 IS:  1.96 CFS AT TIME  2.05 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF:  0.22 FEET AND A MAXIMUM VOLUME OF:  0.14 AF

THE MAXIMUM DISCHARGE FROM NODE  134769 IS:  20.91 CFS AT TIME  2.05 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF:  0.90 FEET AND A MAXIMUM VOLUME OF:  3.31 AF

THE MAXIMUM DISCHARGE FROM NODE  134768 IS:  42.60 CFS AT TIME  1.98 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF:  1.05 FEET AND A MAXIMUM VOLUME OF:  7.66 AF

THE MAXIMUM DISCHARGE FROM NODE  134767 IS:  37.27 CFS AT TIME  2.06 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF:  0.93 FEET AND A MAXIMUM VOLUME OF:  6.14 AF

THE MAXIMUM DISCHARGE FROM NODE  134766 IS:  16.06 CFS AT TIME  2.07 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF:  0.71 FEET AND A MAXIMUM VOLUME OF:  2.16 AF

THE MAXIMUM DISCHARGE FROM NODE  134765 IS:  0.01 CFS AT TIME  1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF:  0.01 FEET AND A MAXIMUM VOLUME OF:  0.00 AF

THE MAXIMUM DISCHARGE FROM NODE  134764 IS:  0.01 CFS AT TIME  1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF:  0.01 FEET AND A MAXIMUM VOLUME OF:  0.00 AF

THE MAXIMUM DISCHARGE FROM NODE  134763 IS:  0.01 CFS AT TIME  1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF:  0.01 FEET AND A MAXIMUM VOLUME OF:  0.00 AF

THE MAXIMUM DISCHARGE FROM CROSS SECTION  34  IS:  31.08 CFS  AT  TIME:  1.51 HOURS

THE MAXIMUM DISCHARGE FROM NODE  63025 IS:  0.01 CFS AT TIME  1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF:  0.00 FEET AND A MAXIMUM VOLUME OF:  0.00 AF

THE MAXIMUM DISCHARGE FROM NODE  63335 IS:  0.01 CFS AT TIME  1.42 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF:  0.01 FEET AND A MAXIMUM VOLUME OF:  0.00 AF

THE MAXIMUM DISCHARGE FROM NODE  63645 IS:  4.27 CFS AT TIME  1.51 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF:  0.40 FEET AND A MAXIMUM VOLUME OF:  0.17 AF

THE MAXIMUM DISCHARGE FROM NODE  63955 IS:  4.99 CFS AT TIME  1.51 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF:  0.32 FEET AND A MAXIMUM VOLUME OF:  0.18 AF

THE MAXIMUM DISCHARGE FROM NODE  64265 IS:  3.78 CFS AT TIME  1.51 HOURS WITH A
MAXIMUM FLOODPLAIN DEPTH OF:  0.27 FEET AND A MAXIMUM VOLUME OF:  0.12 AF

Page 20
THE MAXIMUM DISCHARGE FROM NODE 64575 IS: 9.62 CFS AT TIME 1.51 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.40 FEET AND A MAXIMUM VOLUME OF: 0.45 AF

THE MAXIMUM DISCHARGE FROM NODE 64885 IS: 8.39 CFS AT TIME 1.50 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.51 FEET AND A MAXIMUM VOLUME OF: 0.59 AF

THE MAXIMUM DISCHARGE FROM NODE 65195 IS: 0.02 CFS AT TIME 1.42 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF

THE MAXIMUM DISCHARGE FROM NODE 65505 IS: 0.01 CFS AT TIME 1.42 HOURS WITH A MAXIMUM FLOODPLAIN DEPTH OF: 0.01 FEET AND A MAXIMUM VOLUME OF: 0.00 AF
West model 100- yr w/SD

ERROR.CHK

*** THIS FILE CONTAINS DATA ERROR MESSAGES TO HELP YOU DEBUG YOUR DATA FILES

CHECK THE BACKUP FILES (*.BAC) TO BE SURE THAT THE DATA IS READ CORRECTLY

THE FOLLOWING POTENTIAL ERRORS WERE ENCOUNTERED...

*** THERE ARE POTENTIAL DATA ERROR(S) IN FILE INFLOW.DAT ***

*** THERE ARE POTENTIAL DATA ERROR(S) IN FILE ARF.DAT ***

GRID ELEMENT ARF VALUES WERE ADJUSTED TO 1.0 TO ELIMINATE THE POTENTIAL FOR INSTABILITY RELATED TO SMALL SURFACE AREA.

THESE ARE REPORTED TO THE ARF_ADJUSTMENT.CHK FILE.

NO DATA INPUT ERRORS WERE ENCOUNTERED, BUT REVIEW ANY WARNING MESSAGES LISTED ABOVE
Exhibits
Attachment A
Attachment B
Attachment C
Attachment E