# FLOOD INSURANCE STUDY

## VOLUME 1 of 4

# FRANKLIN COUNTY, OHIO
## AND INCORPORATED AREAS

| COMMUNITY NAME | COMMUNITY NUMBER |
|---|---|
| BEXLEY, CITY OF | 390168 |
| BRICE, VILLAGE OF | 390898 |
| CANAL WINCHESTER, VILLAGE OF | 390169 |
| COLUMBUS, CITY OF | 390170 |
| DUBLIN, CITY OF | 390673 |
| FRANKLIN COUNTY (UNINCORPORATED AREAS) | 390167 |
| GAHANNA, CITY OF | 390171 |
| GRANDVIEW HEIGHTS, CITY OF | 390172 |
| GROVE CITY, CITY OF | 390173 |
| GROVEPORT, VILLAGE OF | 390174 |
| HARRISBURG, VILLAGE OF | 390897 |
| HILLIARD, CITY OF | 390175 |
| LOCKBOURNE, VILLAGE OF | 390691 |
| MARBLE CLIFF, VILLAGE OF | 390896 |
| *MINERVA PARK, VILLAGE OF | 390791 |
| NEW ALBANY, VILLAGE OF | 390895 |
| OBETZ, VILLAGE OF | 390176 |
| REYNOLDSBURG, CITY OF | 390177 |
| RIVERLEA, VILLAGE OF | 390692 |
| UPPER ARLINGTON, CITY OF | 390178 |
| URBANCREST, VILLAGE OF | 390893 |
| VALLEYVIEW, VILLAGE OF | 390669 |
| WESTERVILLE, CITY OF | 390179 |
| WHITEHALL, CITY OF | 390180 |
| WORTHINGTON, CITY OF | 390181 |

* NO SPECIAL FLOOD HAZARD AREAS IDENTIFIED WITHIN COMMUNITY

**Franklin County**

**REVISED:**
**June 16 2011**


## Federal Emergency Management Agency

**FLOOD INSURANCE STUDY NUMBER**
**39049CV001D**

## NOTICE TO
## FLOOD INSURANCE STUDY USERS

Communities participating in the National Flood Insurance Program have established repositories of flood hazard data for floodplain management and flood insurance purposes. This Flood Insurance Study (FIS) report may not contain all data available within the Community Map Repository. Please contact the Community Map Repository for any additional data.

The Federal Emergency Management Agency (FEMA) may revise and republish part or all of this FIS report at any time. In addition, FEMA may revise part of this FIS report by the Letter of Map Revision process, which does not involve republication or redistribution of the FIS report. Therefore, users should consult with community officials and check the Community Map Repository to obtain the most current FIS report components.

Effective Date: August 2, 1995

Revised Date(s): July 16, 1997
April 21, 1999
March 16, 2004
September 19, 2007
June 17, 2008
June 16, 2011

# TABLE OF CONTENTS

## Volume 1



## Volume 2

# TABLE OF CONTENTS

## Volume 2 (Continued)

## LIST OF TABLES



## LIST OF FIGURES



## LIST OF EXHIBITS

## TABLE OF CONTENTS

## Volume 2 (Continued)

## LIST OF EXHIBITS



## Volume 3

## LIST OF EXHIBITS

## TABLE OF CONTENTS

## Volume 3 (Continued)

## LIST OF EXHIBITS



## Volume 4

## LIST OF EXHIBITS

## TABLE OF CONTENTS

## Volume 4 (Continued)

## LIST OF EXHIBITS

**Published Separately –**

# FLOOD INSURANCE STUDY

# FRANKLIN COUNTY, OHIO
# AND INCORPORATED AREAS

## 1.0 INTRODUCTION

### 1.1 Purpose of Study

This Flood Insurance Study (FIS) revises and supersedes the previous countywide-format FIS reports, Flood Insurance Rate Maps (FIRMs) and/or Flood Boundary and Floodway Maps (FBFMs) in the geographic area of Franklin County, Ohio, including: the Cities of Bexley, Columbus, Dublin, Gahanna, Grandview Heights, Grove City, Hilliard, Reynoldsburg, Upper Arlington, Westerville, Whitehall, and Worthington; the Villages of Brice, Canal Winchester, Groveport, Harrisburg, Lockbourne, Marble Cliff, New Albany, Obetz, Riverlea, Urbancrest, and Valleyview; and the unincorporated areas of Franklin County (hereinafter referred to collectively as Franklin County). No Special Flood Hazard Areas (SFHA) have been identified in the Village of Minerva Park.

There are several communities in Franklin County that span multiple counties. The Village of Canal Winchester is located in Franklin and Fairfield Counties; the City of Columbus is located in Franklin, Fairfield, and Delaware Counties; the City of Dublin is located in Franklin, Delaware, and Union Counties; the Village of Harrisburg is located in Franklin and Pickaway Counties; and, the City of Westerville is located in Franklin and Delaware Counties. The flood hazard information for all five of these communities is included entirely within the Franklin County FIS report.

The City of Reynoldsburg is located in Franklin, Licking, and Fairfield Counties. Flood hazard information for the portion of the City that is located in Licking County is included in the Licking County FIS report. Flood hazard information for the remaining portions of the City is included in the Franklin County FIS report.

The Village of Lithopolis and the City of Pickerington are both located in Fairfield and Franklin Counties. Flood hazard information for these communities is included in the Fairfield County FIS report.

The Village of New Albany lies in Franklin and Licking Counties. No SFHAs have been identified within the portion of the community that lies within Licking County. Therefore, the flood hazard information for the Village of New Albany is included in its entirety in the Franklin County FIS report.

The FIS report aids in the administration of the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973. This FIS report has developed flood risk data for various areas of the community that will be used to establish actuarial flood insurance rates. This information will also be used by Franklin County to update existing floodplain regulations as part of the Regular Phase of the National Flood Insurance Program (NFIP), and by local and regional

planners to further promote sound land use and floodplain development. Minimum floodplain management requirements for participation in the NFIP are set forth in the Code of Federal Regulations at 44 CFR, 60.3.

In some States or communities, floodplain management criteria or regulations may exist that are more restrictive or comprehensive than the minimum Federal requirements. In such cases, the more restrictive criteria take precedence and the State (or other jurisdictional agency) will be able to explain them.

The Digital Flood Insurance Rate Map (DFIRM) and FIS Report for this countywide study have been produced in digital format. Flood hazard information was converted to meet the FEMA DFIRM database specifications and Geographic Information System (GIS) format requirements. The flood hazard information was created and is provided in a digital format so that it can be incorporated into a local GIS and be accessed more easily by the community.

## 1.2 Authority and Acknowledgements

The sources of authority for this FIS report are the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973.

The August 2, 1995, countywide FIS report was prepared to include incorporated communities within Franklin County in a countywide FIS report. Information on the authority and acknowledgments for each jurisdiction included in this countywide FIS report, as compiled from their previously printed FIS reports, is shown below.

**City of Bexley**

The hydrologic and hydraulic analyses for the FIS report dated May 1978 were prepared by the U.S. Army Corps of Engineers (USACE), Huntington District, for the Federal Insurance Administration (FIA), under Inter-Agency Agreement No. IAA-H-7-76, Project Order No. 7. That work was completed in April 1977.

**Village of Canal Winchester**

The hydrologic and hydraulic analyses for the FIS report dated December 1979, were prepared by Burgess & Niple, Ltd., for the FIA, under Contract No. H-3981. That work was completed in December 1978.

**City of Columbus**

The hydrologic and hydraulic analyses for the FIRM dated July 5, 1983, were prepared by the USACE, Huntington District, for the Federal Emergency Management Agency (FEMA), under Inter-Agency Agreement No. H-7-76, Project Order No. 8; and No. H-1077, Project Order No. 1. The analyses for the Little Walnut Creek basin were performed under Inter-Agency Agreement No. H 18 78, Project Order No. 38. The work for both analyses was completed in November 1980. For the revision dated January 16, 1987, the hydrologic and hydraulic analyses were performed by the U.S. Department of Agriculture, Soil Conservation Service (SCS); the Ohio Department of Natural Resources (ODNR); and Burgess & Niple, Limited.

**City of Dublin**

The hydrologic and hydraulic analyses for the FIS reports dated December 1980 and September 4, 1985, were prepared by the U.S. Geological Survey (USGS), for FEMA, under Inter-Agency Agreement No. IAA-H8-76, Project Order No. 12. That work was originally completed in May 1978 and revised in September 1985. For the revision dated October 17, 1989, the hydraulic analyses were performed by Evans, Mechwart, Hambleton & Tilton, Inc.

**City of Gahanna**

The hydrologic and hydraulic analyses for the FIS report dated February 1, 1983, were prepared by Burgess & Niple, Ltd., for FEMA, under Contract No. H-3981. That work was completed in February 1982.

**City of Grandview Heights**

The hydrologic and hydraulic analyses for the FIS report dated February 1980, were prepared by the USACE, Huntington District, for the FIA, under Inter-Agency Agreement No. IAA-H-10-77, Project Order No. 29. That work was completed in September 1978.

**City of Grove City**

The hydrologic and hydraulic analyses for the FIS report dated November 1, 1983, were performed by Burgess & Niple, Ltd., for FEMA, under Contract No. H-3981. That work was completed in February 1982.

**Village of Groveport**

The hydrologic and hydraulic analyses for the FIRM dated September 1, 1983, were prepared by Burgess & Niple, Ltd., for FEMA, under Contract No. H-3981. That work was completed in December analyses were performed by the SCS.

**City of Hilliard**

The hydrologic and hydraulic analyses for the FIRM dated August 1, 1979, were prepared by the USGS, Water Resources Division, for the FIA, under Inter-Agency Agreement No. IAA completed in December 1977. For the revision dated January 6, 1988, the hydrologic and hydraulic analyses were obtained from the FIS reports for the City of Columbus and the unincorporated areas of Franklin County.

**Village of Lockbourne**

The hydrologic and hydraulic analyses for the FIS report dated November 1979, were prepared by the USACE, Huntington District, for the FIA under Inter-Agency Agreement No. IAA-H-0-77, Project Order No. 29. That work was completed in May 1978.

**Village of Obetz**

The hydrologic and hydraulic analyses for the FIS report dated July 16, 1980, were prepared by the USACE, Huntington District, for the FIA, under Inter-

Agency Agreement No. IAA-H-10-77, Project Order No. 29. That work was completed in February 1979.

**City of Reynoldsburg**

The hydrologic and hydraulic analyses for the FIRM dated September 1, 1978, were prepared by the SCS, for the FIA, under Inter-Agency Agreement No. IAA-H-18-75, Project Order No. 4. That work was completed in May 1976. For the revision dated November 20, 1991, the hydraulic analyses of Blacklick Creek from just upstream of Main Street to approximately 1.2 miles upstream of the confluence of Dysar Ditch were prepared by the USGS as part of the Limited Map Maintenance Program, Task No. 23.

**City of Upper Arlington**

The hydrologic and hydraulic analyses for the FIS report dated October 1979, were prepared by the USACE, Huntington District, for the FIA, under Inter-Agency Agreement No. IAA H-16-75, Project Order No. 17. That work was completed in September 1978.

**Village of Valleyview**

The hydrologic and hydraulic analyses for the FIS report dated December 1978, were prepared by the USGS, Water Resources Division, for the FIA, under Inter-Agency Agreement No. IAA-H-8-76, Project Order No. 12. That work was completed in October 1977.

**City of Westerville**

The hydrologic and hydraulic analyses for Spring Run for the FIS report dated May 17, 1993, were prepared by the USGS, for FEMA, under Inter-Agency Agreement No. EMW-88-E-2738, Project Order No. 1. That work was completed in April 1989. The hydrologic and hydraulic analyses for Alum Creek and Big Walnut Creek were prepared by the USACE, Huntington District, in April 1977.

**City of Whitehall**

The hydrologic and hydraulic analyses for the FIRM dated July 18, 1985, were prepared by Burgess & Niple, Ltd., for FEMA, under Contract No. H-3981. That work was completed in December 1981. For the revision dated January 16, 1987, the hydrologic analyses for Mason Run were performed by the ODNR, and the hydraulic analyses were revised by FEMA.

**City of Worthington**

The hydrologic and hydraulic analyses or the FIS report dated February 1980, were prepared by the USACE, Huntington District, for the FIA, under Inter-Agency Agreement No. IAA H-16-75, Project Order No. 17. That work was completed in September 1978.

**Unincorporated Areas of Franklin County**

The hydrologic and hydraulic analyses for the FIRM dated July 5, 1983, were prepared by the USACE, Huntington District, for FEMA, under Inter-Agency Nos. H-7-76, Project Order No. 8 and H-10-77, Project Order No. 1. The analyses for Little Walnut Creek basin were performed under Inter-Agency Agreement No. H-18-78, Project Order No. 38. The work for both analyses was completed in November 1980. For the revision dated January 16, 1987, the hydrologic and hydraulic analyses were performed by the SCS, the ODNR, URS Dalton, and Woolpert Consultants. Additional data were obtained from the FIS report for the Village of Darbydale.

The hydrologic and hydraulic analyses for the August 2, 1995, countywide FIS report were performed by Water Resources and Coastal Engineering, Inc., for FEMA, under Joint Venture Contract No. EMW-91-C-3360. The joint venture team consisted of Water Resources & Coastal Engineering, Inc., and Geodyssey, Inc. That work was completed in September 1992.

For the July 16, 1997, revision, the hydrologic and hydraulic analyses for Tussing Bachman Ditch, Bush Ditch, and Georges Creek Overland Flow were prepared by the ODNR, Division of Water. These analyses were subsequently modified by Dewberry & Davis under a directive from FEMA. This work was completed in December 1995.

For the April 21, 1999, revision, the hydrologic and hydraulic analyses for the Olentangy River were taken from the Delaware County, Ohio and Incorporated Areas FIS report (Reference 1). The analyses were prepared by Evans, Mechwart, Hambleton, and Tilton, Inc., under Contract No. EMW-94-C-4525, and subsequently modified by Dewberry & Davis under a directive from FEMA.

For the March 2004 FIS revision, the hydrologic and hydraulic analyses for the Scioto River were prepared by the USACE, Huntington District, and were completed in September 2001. The detailed analyses for Indian Run and North Fork Indian Run were prepared by Bauer, Davidson and Merchant, Inc., and were completed in April 2001.

The DFIRM and FIS report for the June 17, 2008 revised countywide study were produced in digital format. Flood hazard information was converted to meet FEMA DFIRM database specifications and GIS format requirements. The flood hazard information was created and provided in a digital format so that it could be incorporated into a local GIS and be accessed more easily by the community.

The 2007 update of Georges Creek and Coble Bowman Ditch was initiated by two Physical Map Revision (PMR) requests submitted to FEMA. The revision along Georges Creek and Georges Creek Overflow was initiated by a PMR request submitted by Evans, Mechwart, Hambleton and Tilton, Inc. (EMH&T), on behalf of Alum Creek, Inc., in March 2001. The revision along Coble-Bowman Ditch was initiated by a PMR request submitted by Evans, Mechwart, Hambleton and Tilton, Inc., in November 2002.

The digital base mapping information was provided by the Franklin County Auditor's Office, GIS Department, 373 South High Street, 21st Floor, Columbus, Ohio, 43215. Further information about the base mapping is available by contacting the Franklin County Auditor. These files were compiled by photogrammetric methods and meet or exceed National Map Accuracy Standards

at the original compilation scale of 1" = 500'. The coordinate system used for the production of the June 17, 2008 FIRM is State Plane Ohio South Zone 3901 (FIPSZONE 3402). The horizontal datum is North American Datum of 1983 (NAD83). Flood elevations are referenced to the North American Vertical Datum of 1988 (NAVD88). Differences in the datum and spheroid used in the production of FIRMs for adjacent counties may result in slight positional differences in map features at the county boundaries. These differences do not affect the accuracy of information shown on this FIRM.

The June 17, 2008 FIS revision included redelineation of the previously effective flood hazard information and conversion of the maps to DFIRMs. This work was completed by Fuller Mossbarger Scott and May Engineers for FEMA under Contract No. HSFE05-05-D-0026, Task No. 10.

This FIS revision was initiated by a Physical Map Revision (PMR) request submitted to FEMA. It included the incorporation of LOMR 09-05-4021P in the City of Columbus and the City of Whitehall along Mason Run and Turkey Run (Near Robinwood Avenue). This PMR work was completed by STARR for FEMA under Contract No. HSFEHQ-09-D00370, Task Order No. 1.

## 1.3 Coordination

The purpose of an initial Consultation Coordination Officer's (CCO) meeting is to discuss the scope of the FIS. A final CCO meeting is held to review the results of the detailed study. The dates of the initial and final CCO meetings held for prior FISs for the incorporated communities within Franklin County are shown in Table 1.

**Table 1. CCO Meeting Dates for Prior FISs**

| Community Name | Initial CCO Date | Final CCO Date |
|---|---|---|
| City of Bexley | * | December 7, 1977 |
| Village of Canal Winchester | March 25, 1975 | April 24, 1979 |
| City of Columbus | November 21, 1974 | January 20, 1982 |
| City of Dublin | October 30, 1975 | April 25, 1979 |
| City of Gahanna | March 22, 1975 | August 10, 1982 |
| City of Grandview Heights | August 25, 1976 | August 15, 1979 |
| City of Grove City | March 23, 1976 | July 20, 1982 |
| Village of Groveport | March 22, 1976 | August 23, 1982 |
| City of Hilliard | October 30, 1975 | September 19, 1978 |
| Village of Lockbourne | August 25, 1976 | April 25, 1979 |
| Village of Obetz | June 9, 1975 | November 28, 1979 |
| City of Reynoldsburg | November 8, 1974 | July 20, 1976 |
| City of Upper Arlington | June 9, 1975 | April 11, 1979 |
| Village of Valleyview | * | June 22, 1978 |
| City of Westerville | August 18, 1987 | April 29, 1992 |
| City of Whitehall | March 23, 1976 | November 22, 1982 |
| City of Worthington | November 13, 1975 | August 16, 1979 |

**Table 1. CCO Meeting Dates for Prior FISs**

| Community Name | Initial CCO Date | Final CCO Date |
|---|---|---|
| Franklin County, Unincorporated Areas | November 21, 1974 | January 20, 1982 |

* Data not available.

For the July 16, 1997 revision, FEMA notified the Village of Canal Winchester that a revision would be prepared using information developed by Dewberry & Davis.

For the April 21, 1999, revision, Franklin County was notified by FEMA in a letter dated March 27, 1997, that its countywide FIS report would be revised using the analyses prepared for Delaware County.

For the March 2004 revision, the results of the study were reviewed at the final CCO meeting held on August 27, 2002, and attended by representatives of FEMA, the ODNR, the USACE, Huntington District and local officials and residents of Marble Cliff, Upper Arlington, Columbus, Grandview Heights, and the Unincorporated Areas of Franklin County.

For the June 17, 2008 FIS report, an initial CCO meeting was held on August 17, 2005. The meeting was attended by representatives from FEMA, Franklin County, communities within Franklin County, and Fuller, Mossbarger, Scott, and May Engineers, Inc. (FMSM). The final CCO meeting was held on January 30, 2007. The meeting was attended by representatives from communities throughout the county as well as representatives from ODNR, FEMA, and the study contractor.

No final CCO meeting was held for this revised countywide FIS report.

## 2.0 AREA STUDIED

### 2.1 Scope of Study

This FIS report covers the geographic area of Franklin County, Ohio.

All or portions of the flooding sources listed in Table 2 were studied by detailed methods. Limits of detailed study are indicated on the Flood Profiles (Exhibit 1) and on the FIRM (Exhibit 2).

**Table 2. Streams Studied by Detailed Methods**

| | | |
|---|---|---|
| Alum Creek | French Run | Plum Run Tributary |
| Barbee Ditch | French Run (Lateral G-A) | Powell Ditch |
| Barnes Ditch | Georges Creek, | Rhodes Ditch |
| Baumgardner Ditch | Georges Creek Overland Flow | Rocky Fork Creek |
| Beem Ditch | Grant Run | Scioto Big Run |
| Big Darby Creek | Grove City Creek 1 | Scioto River |
| Big Run | Grove City Creek 2 | Scioto River Divided Flow Reach |
| Big Walnut Creek | Haines Ditch | Snyder Run |
| Billingsley Ditch | Hamilton Ditch | South Fork Dry Run |
| Bishop Run | Hayden Run | South Fork Georges Creek |
| Blacklick Creek | Hellbranch Run | South Fork Georges Creek |
| Blacklick Creek Lateral D | Indian Run | Spring Run |
| Blacklick Creek Lateral G-B | Lisle Ditch | Sugar Run |
| Blacklick Creek Lateral K | Little Darby Creek | Swisher Creek |
| Blacklick Creek Tributary C | Little Walnut Creek | Sycamore Run |
| Blau Ditch | Marsh Run | Tributary S-4 |
| Brown Run | Martin Grove Ditch | Tri-County Ditch |
| Bush Ditch | Mason Run | Tudor Ditch |
| Clover Groff Ditch | McCoy Ditch | Turkey Run |
| Coble-Bowman Ditch | Molcomb Ditch | Turkey Run (Near Robinwood Avenue) |
| Cosgray Ditch | Mulberry Run | Tussing-Bachman Ditch |
| Cramer Ditch | North Fork Indian Run | Utzinger Ditch |
| Dry Run | Olentangy River | West Water Run |
| Dysar Ditch | Orders & Wallace Ditch | Whims Ditch |
| Early Run | Patzer Ditch | |
| Faust County Ditch | Plum Run | |

As part of the August 2, 1995, countywide FIS report, updated analyses were included for the flooding sources shown in Table 3.

**Table 3. Limits of Detailed Studies**

| Flooding Source | Limits of Detailed Study |
|---|---|
| Barbee Ditch | From its confluence with Barnes Ditch US to Trabue Road. |
| Barnes Ditch | From its confluence with the Scioto River US to Wilson Road. |
| Big Run | From its confluence with Little Walnut Creek to the county boundary. |
| Bishop Run | From its confluence with Little Walnut Creek to the county boundary. |
| Blacklick Creek | From Central College Road to a point approximately 0.69 US of Walnut Street. |
| Blau Ditch | From its confluence with Dry Run to a point approximately 1,200 feet US of Maclam Drive. |
| Clover Groff Ditch | From Interstate Route 70 to Elliott Road (within the unincorporated areas of Franklin County). |
| Cosgray Ditch | From its confluence with the Scioto River to a point approximately 0.42 mile US of Wilcox Road. |

**Table 3. Limits of Detailed Studies**

| Flooding Source | Limits of Detailed Study |
|---|---|
| Cramer Ditch | From its confluence with the Scioto River to a point approximately 0.48 mile US of Wilcox Road. |
| Dry Run | From its confluence with the Scioto River US to the confluence of Blau Ditch. |
| Faust County Ditch | From its confluence with Hayden Run to a point approximately 1.7 miles US of Hayden Run Road. |
| Georges Creek | From its confluence with Little Walnut Creek to approximately 2,200 feet upstream of Long Road/County Highway 220. |
| Molcomb Ditch | From its confluence with Tudor Ditch US to a point approximately 200 feet DS of Lyman Court. |
| Hayden Run | From the US side of the CONRAIL US to the confluence of Faust County Ditch. |
| Lisle Ditch | From its confluence with Big Run to a point approximately 0.60 mile US of an unnamed dirt road. |
| Little Walnut Creek | From the DS county boundary US to DS side of an unnamed golf course bridge. |
| Snyder Run | From its confluence with Barnes Ditch to a point approximately 1,600 feet US of an unnamed private driveway. |
| South Fork Dry Fun | From its confluence with Dry Run to a point approximately 1,400 feet US of the CONRAIL. |
| South Fork Indian Run | From approximately 200 feet DS of the confluence of Tri-County Ditch to the City of Dublin corporate limits. |
| Tributary S-4 | From approximately 1300 to 4215 feet US of the confluence with Scioto River. |
| Tri-County Ditch | From its confluence with South Fork Indian Run to the US county boundary. |
| Tudor Ditch | From its confluence with the Scioto River to a point approximately 100 feet DS of Parkway Lane. |
| Turkey Run | From its confluence with the Olentangy River US to a point approximately 100 feet DS of Kenny Road. |
| Turkey Run (Near Robinwood Avenue) | From its confluence with Mason Run US to a point approximately 1,032 feet US of Doney Street. |
| Utzinger Ditch | From its confluence with Blacklick Creek to a point approximately 0.8 mile US of East Broad Street. |

The August 2, 1995, countywide FIS report incorporated the effects of annexations or deannexations by the following communities: the Cities of Columbus, Dublin, Gahanna, and Hilliard and the Villages of New Albany, Obetz, Reynoldsburg and Worthington. In addition, the FIS report incorporated the determinations of Letters of Map Revision (LOMRs) issued by FEMA, for the projects listed by community in Table 4.

**Table 4. Previously Incorporated Letters of Map Revision**

| Community | Stream | Date |
|---|---|---|
| **City of Columbus** | | |
| DS of Hayden Run Road | Cramer Ditch | August 14, 1985 |
| Refugee Road Ditch Enclosure Project | Refugee Ditch | July 29, 1991 |
| DS of Dublin-Granville Road | Alum Creek | April 5, 1988 |
| The Quarry of the Scioto River | Scioto River | August 14, 1985 |
| Near confluence of Tributary 1 | Blacklick Creek | August 3, 1988 |
| Just US of Main Street | Big Walnut Creek | January 16, 1987 |
| Grandview Storage Assoc. Property | Scioto River | June 18, 1993 |
| DS of Dublin-Granville Road | Big Walnut Creek | March 3, 1989 |
| From approximately 1.3 miles US of Interstate Route 70 to approx. 1.0 US of Roberts Road | Clover Groff Ditch | June 17, 1993 |
| **City of Dublin** | | |
| Between Brand Road bridge and Muirfield Drive | Tributary 11 (Bear Run) | May 21, 1993 |
| **City of Gahanna** | | |
| Between Stygler Rd and Woodside Green South Development | Maple Run, West Branch, Sycamore Creek, East Branch, Sycamore Creek and Tributaries 8A and 8B | November 7, 1988 |
| Cherry Run and Cherry Ridge Subdivisions Floodway | Big Walnut Creek | April 14, 1992 |
| Floodway change just DS of Hamilton Road | Rocky Fork Creek | December 5, 1986 |
| **City of Grove City** | | |
| Channel relocation US of Demorest Road | Brown Run | December 8, 1989 |
| US of Marlane Drive | Tributary A to Brown Run, To Brown Run, and Tributary No. 6 to Brown Run | January 3, 1991 |
| Christina Villas Development, from approximately 1,400 feet US of Hoover Road to 2,000 feet US of Hoover Road | Tributary No. 1 to Tributary to Grant Run | August 22, 1994 |
| **City of Hilliard** | | |
| From approximately 600 feet DS of a maintenance road bridge to approximately 2,600 feet US | Clover Groff Ditch | October 12, 1993 |
| **City of Reynoldsburg** | | |
| Jordan Crossing Subdivision | Lateral G-B | February 9, 1993 |
| Crystal Lakes Subdivision | Lateral G | February 2, 1993 |

**Table 4. Previously Incorporated Letters of Map Revision**

| Community | Stream | Date |
|---|---|---|
| **City of Westerville** | | |
| Sunbury Lake Drive bridge over Spring Run in the vicinity of Mariners Cove Subdivision | Spring Run | December 15, 1993 |
| Blue Heron Drive to approximately 750 ft US of Blue Heron Drive | Spring Run | April 25, 1995 |
| **Unincorporated Areas** | | |
| Intersection of Berger Road and Baird Drive | West Branch Sycamore Creek | November 7, 1988 |
| Intersection of Berger Road and Baird Drive | Big Run | January 28, 1988 |
| Near mouth of Plum Run | Scioto River | September 26, 1988 |
| Near Meachum Run Court located DS of Schrock Road | Alum Creek | August 16, 1993 |
| Interstate Route 71 bridge to Brown Road Bridge | Scioto Big Run | February 16, 1995 |

The August 2, 1995 countywide FIS report also incorporated the determinations of Best Available Data Letters issued by FEMA for the following projects: a Base (1-percent-annual-chance) Flood Elevation (BFE) mismatch along the Scioto River in Grandview Heights; an area near the confluence of Plum Run and the Scioto River in the unincorporated areas of Franklin County; and Granville Road along Big Walnut Creek in Columbus. The FIS report also incorporated the determinations of Letters of Map Amendment (LOMA) issued by FEMA on the following dates: August 14, 1994; September 29, 1994; October 7, 1994; and February 1, 1995.

For the July 16, 1997, revision, Tussing-Bachman Ditch, from its confluence with Little Walnut Creek to State Route 674, and Bush Ditch, from State Route 674 to a point approximately 900 feet upstream of High Street, were restudied. Georges Creek Overland Flow was studied by detailed methods from its confluence with Georges Creek to a point approximately 2,100 feet upstream of its confluence with Georges Creek.

For the April 21, 1999, revision, the Olentangy River was restudied from a point approximately 0.8 mile upstream of Henderson Road to the upstream county boundary. In addition, portions of the Cities of Dublin and Westerville within Delaware County were removed from this countywide FIS report.

The March 16, 2004, revision incorporates the results of analyses along the Scioto River within the corporate/municipal boundaries of City of Columbus and Franklin County, as well as along Indian Run and North Fork Indian Run from the mouth of the Scioto River to the end of the Franklin County/Union County line within the City of Dublin. South Fork Indian Run was also revised from the confluence with Indian Run upstream for a distance along the channel of approximately 350 feet. There were changes to the one-percent-annual-chance flood elevations on the FIRMs that include the communities of Columbus, Grandview Heights, Marble Cliff, Upper Arlington and portions of the Unincorporated Areas of Franklin County. The communities of Bexley, Grove

City, and Obetz were included on the updated FIRMs; however, they did not experience any changes to their one-percent-annual-chance-flood elevations.

The March 2004 revision incorporates determination letters issued by FEMA resulting in LOMAs, Letters of Map Revision (LOMRs), and Letters of Map Revision Based on Fill (LOMR-F). The information in this FIS report supersedes the information shown in the previously printed FIS report and FIRM for Franklin County, Ohio and Incorporated Areas, dated April 21, 1999.

**Table 5. Previously Incorporated Letters of Map Change**

| Community | Case Number | Flooding Source(s) and Project Identifier | Date Issued |
|---|---|---|---|
| Columbus, City of | 95-05-243P | Scioto River and Hidden Lake; LOMR; Updated the decrease in the SFHAs for the Scioto River and the shoreline of Hidden Lake and the decreases in BFEs for Hidden Lake | August 23, 1995 |
| Columbus, City of | 96-05-486A | Scioto Big Run; LOMR-F Removed Kingbury Subdivision, Area One, Lots 117-134, and Area Two, Lots 141-146 from the SFHA | February 29, 1996 |
| Columbus, City of | 97-05-173P | Scioto Big Run ; LOMR; Updated the increases and decreases in the SFHAs and the BFE changes for Scioto Run | August 5, 1997 |
| Dublin, City of | 97-05-5196A | South Fork Indian Run; LOMR-F; Removed a 0.309-acre tract north of Post Road and south of South Fork Indian Run from the SFHA | January 9, 1998 |
| Dublin, City of | 98-05-007P | Cosgrove Ditch; LOMR; Updated the increases in the SFHA and the BFE changes for a culvert located on Wilcox Road | April 8, 1998 |
| Upper Arlington, City of | 98-05-181P | Scioto River; LOMR; Updated the increases in the SFHAs from a point approximately 260 feet upstream of the CONRAIL bridge to a point just upstream of the Julian Griggs Dam* | March 4, 1999* |
| Dublin, City of | 99-05-012A | Tributary 12 of the North Fork Indian Run; LOMR-F; Removed a portion of land, Shannon Glen, Section 4, Avery Road, for the SFHA | February 12, 1999 |

**Table 5. Previously Incorporated Letters of Map Change**

| Community | Case Number | Flooding Source(s) and Project Identifier | Date Issued |
|---|---|---|---|
| Columbus, City of | 99-05-630A | Scioto Big Run; Removed a portion of the 11.05-acre parcel, Gantz Road, from the SFHA | November 13, 1998 |
| Dublin, City of | 99-05-3100A | Tributary 12; Shannon Glen, 15.388-acre tract, 777 Swan Street | September 29, 1999 |
| Grandview Heights, City of | 01-05-098A | Scioto Olentangy Overland Flow; 3.556-acre tract, 777 Swan Street | August 29, 2001 |
| Dublin, City of | 01-05-355A | Tributary 12; 7.347-acre parcel | January 3, 2001 |
| Dublin, City of | 01-05-1063A | Tributary 12; 68.714-acre parcel | March 9, 2001 |
| Dublin, City of | 02-05-2572A | Tributary 12 to North Fork Indian Run; Belvedere, Section 2, Lots 39-41, 64, 70-72, and part of Lot 69 | July 24, 2002 |

* This case was incorporated upstream of the pipeline, but was superseded by the restudy downstream of the pipeline.

In the 2007 revision, the flooding for Georges Creek, Georges Creek Split Flow, Georges Creek Overflow, and Coble-Bowman Ditch in Franklin County, Ohio, and the City of Pickerington, Fairfield and Franklin Counties, Ohio, was updated for the PMR based on new study information submitted by Evans, Mechwart, Hambleton and Tilton, Inc. Georges Creek was revised from its confluence with Little Walnut Creek to approximately 2,200 feet upstream of Long Road/County Highway 220. Coble-Bowman Ditch was revised from approximately 3,500 feet downstream of Bixby Road/County Highway 229 to approximately 4,500 feet upstream of Winchester Pike/County Highway 376. Due to changes in the modeling of the Shannon Road culvert, the overflow from Georges Creek to Coble-Bowman Ditch no longer occurs.

The effective data from the City of Pickerington FIS report was used to update flooding for Blacklick Creek. The hydrologic and hydraulic analysis for Blacklick Creek included in the 1991 FIS report for the Village of Pickerington was performed by the U.S. Geological Survey (USGS) for FEMA, under Inter-Agency Agreement No. EMW-88-E-2738, Project Order No. 1. The study was completed in August 1989.

The 2007 revision impacted the following communities: City of Columbus, Village of Canal Winchester, City of Groveport, and the unincorporated areas of Franklin County. Additionally, Letters of Map Change that affect the panels revised in this process were incorporated as appropriate, and are shown in the following table.

**Table 5A. Previously Incorporated Letters of Map Change**

| Case Number | Date Issued | Project Identifier |
|---|---|---|
| 95-05-500A | 2/1/1995 | Essex Place, Section 2, Lots 65 and 66, and portions of Lots 67 through 74 |
| 95-05-300A | 9/27/1995 | An 50.080-acre parcel of land |
| 97-05-2662A | 7/16/1997 | An 8.257-acre parcel of land |
| 98-05-5040A | 7/31/1998 | Farmbrook, Section 3 |
| 99-05-1346A | 12/22/1998 | Meadows at Winchester, Section 3, Lot 179 |
| 00-05-4422A | 6/29/2000 | Essex Place 5.889 acres |
| 01-05-188A | 1/24/2001 | A portion of Section 1, Township 11, Range 21 |
| 01-05-3056A | 8/3/2001 | 120.821 acres; Dominion Homes, Inc. |
| 02-05-1883A | 4/24/2002 | A 20.243-acre tract of land |
| 01-05-1827P | 10/14/2002 | Coble-Bowman Ditch |
| 02-05-3971P | 10/15/2002 | Blacklick Creek Overflow Area |
| 03-05-2234A | 6/6/2003 | Portion s of Sections 13 and 24, Township 11, Range 21; Schirm Farms Development |
| 04-05-1327A | 4/16/2004 | 5100 Ebright Road |
| 04-05-3461A | 7/14/2004 | A portion of Section 25, Township 11, Range 21; Waterloo Road |
| 04-05-A685A | 9/29/2004 | A portion of Section 25, Township 11, Range 21 West, and a portion of Section 30, Township 15 North, Range 20 West |
| 05-05-0228A | 11/23/2004 | A portion of Section 6, Township 15 North, Range 20 West |
| 05-05-0974A | 2/1/2005 | A portion of Sections 10, 14, and 15, Township 11 North, Range 21 West, and a portion of Section 14 of the Virginia Military Survey |

The June 17, 2008 revised countywide FIS incorporated the determination of letters issued by FEMA resulting in map revisions LOMRs and LOMAs. LOMRs and mappable LOMAs & LOMR-Fs that were incorporated are shown in Table 6.

**Table 6. Incorporated Letters of Map Revision and Letters of Map Amendment**

| Community | Case Number | Flooding Source(s) | Date Issued |
|---|---|---|---|
| Canal Winchester, Village of & Franklin County, Unincorporated | 00-05-351P | Little Walnut Creek | 3/8/2001 |
| Canal Winchester, Village of | 04-05-3461A | Tussing-Bachman Ditch | 7/14/2004 |
| Canal Winchester, Village of | 04-05-A685A | Tussing-Bachman Ditch | 9/29/2004 |
| Columbus, City of | 95-05-341P | Olentangy River | 12/11/1995 |
| Columbus, City of | 95-05-083P | S-3A Ditch | 3/14/1996 |
| Columbus, City of | 97-05-008A | Clover Groff Ditch | 1/28/1997 |
| Columbus, City of | 97-05-173P | Scioto Big Run | 8/5/1997 |
| Columbus, City of | 97-05-203P | Sugar Run | 8/28/1997 |
| Columbus, City of | 97-05-087P | Clover Groff Ditch | 9/18/1997 |
| Columbus, City of | 99-05-494A | Big Walnut Creek | 11/25/1998 |
| Columbus, City of & Reynoldsburg, City of | 98-05-381P | Blacklick Creek and Utzinger Ditch | 4/19/1999 |
| Columbus, City of & Franklin County, Unincorporated | 00-05-319P | Blacklick Creek | 8/22/2001 |
| Columbus, City of & Franklin County, Unincorporated | 04-05-3556P | Unnamed Ponding Areas associated with Columbus Floodwall Interior Drainage | 10/8/2004 |
| Columbus, City of | 06-05-BD33P | Olentangy River | 3/31/2006 |
| Columbus, City of | 05-05-3986P | Olentangy River | 5/26/2006 |
| Columbus, City of & Franklin County, Unincorporated | 05-05-0944P | Scioto River and Scioto River - Bypass | 12/28/2006 |
| Columbus, City of & Franklin County, Unincorporated | 06-05-B004P | Marsh Run | 3/26/2007 |
| Columbus, City of, Franklin County, Unincorporated & Worthington, City of | 07-05-0220P | Olentangy River | 5/22/2007 |
| Dublin, City of | 96-05-247P | Tributary S4 to the Scioto River | 8/2/1995 |
| Dublin, City of | 97-05-5196A | South Fork Indian Run | 1/9/1998 |

**Table 6. Incorporated Letters of Map Revision and Letters of Map Amendment**

| Community | Case Number | Flooding Source(s) | Date Issued |
|---|---|---|---|
| Dublin, City of | 98-05-007P | Cosgray Ditch | 7/22/1998 |
| Dublin, City of | 98-05-035P | North Fork Indian Run | 9/26/1998 |
| Dublin, City of | 99-05-012A | Tributary 12 | 2/12/1999 |
| Dublin, City of | 99-05-3100A | Tributary 12 | 9/29/1999 |
| Dublin, City of | 00-05-267P | Tributary C1 to Cramer Ditch | 10/26/2000 |
| Dublin, City of | 01-05-355A | Tributary 12 | 1/3/2001 |
| Dublin, City of | 01-05-1063A | Tributary 12 | 3/9/2001 |
| Dublin, City of | 04-05-A754A | North Fork Indian Run | 9/29/2004 |
| Dublin, City of | 05-05-0757A | North Fork Indian Run | 1/5/2005 |
| Franklin County, Unincorporated & Urbancrest, Village of | 00-05-139P | Marsh Run / Baumgardner Ditch | 11/21/2000 |
| Franklin County, Unincorporated & Urbancrest, Village of | 01-05-1405P | Marsh Run / Baumgardner Ditch | 8/14/2001 |
| Franklin County, Unincorporated & Westerville, City of | 01-05-1490P | Alum Creek | 2/11/2002 |
| Franklin County, Unincorporated | 02-05-3971P | Coble-Bowman Ditch | 10/15/2002 |
| Franklin County, Unincorporated & Groveport, Village of | 01-05-1827P | Coble-Bowman Ditch | 10/14/2002 |
| Franklin County, Unincorporated | 02-05-1027P | South Fork Indian Run | 11/27/2002 |
| Franklin County, Unincorporated, Grove City, City of & Urbancrest, Village of | 03-05-377P | Marsh Run / Baumgardner Ditch | 7/3/2003 |
| Franklin County, Unincorporated | 04-05-1281A | Hamilton Ditch | 1/16/2004 |
| Franklin County, Unincorporated & Reynoldsburg, City of | 05-05-3716P | Blacklick Creek Lateral K | 5/10/2006 |
| Gahanna, City of | 199103848FIA | | 12/1/1996 |
| Gahanna, City of | 98-05-147P | Tributary 2A (locally known as Taylor Road Ditch) | 5/12/1998 |

**Table 6. Incorporated Letters of Map Revision and Letters of Map Amendment**

| Community | Case Number | Flooding Source(s) | Date Issued |
|---|---|---|---|
| Gahanna, City of | 99-05-163P | Tributary 2A (Taylor Road Ditch) | 8/10/1999 |
| Grove City, City of | 98-05-129P | Brown Run | 9/28/1998 |
| Grove City, City of | 98-05-305P | Tributary No. 1 | 11/10/1998 |
| Grove City, City of | 99-05-183P | West Water Run | 10/26/1999 |
| Grove City, City of | 00-05-353P | Tributary No. 3 | 3/26/2001 |
| Grove City, City of | 03-05-5176P | Tributary No. 2 | 2/24/2004 |
| Grove City, City of | 05-05-1698P | Tributary No. 2 and Unnamed Tributary to Tributary No. 2 | 6/9/2005 |
| Hilliard, City of | 00-05-1142X | Clover Groff Ditch | 12/28/1999 |
| Reynoldsburg, City of | 98-05-381P | Blacklick Creek | 4/19/1999 |
| Reynoldsburg, City of | 05-05-1178P | Blacklick Creek Lateral D | 10/5/2006 |
| Westerville, City of | 01-05-3976P | Spring Run | 3/8/2002 |
| Westerville, City of | 02-05-2128P | Spring Run | 4/8/2002 |

This revised FIS report incorporated LOMR 09-05-4021P, which was issued by FEMA on July 19, 2010 for the Cities of Columbus and Whitehall.

LOMAs incorporated for this study are summarized in the Summary of Map Amendment (SOMA) included in the Technical Support Data Notebook (TSDN) associated with this FIS update. Copies of the TSDN may be obtained from the Community Map Repository.

The areas studied by detailed methods were selected with priority given to all known flood hazard areas and areas of projected development and proposed construction.

All or portions of numerous flooding sources in the county were studied by approximate methods. Approximate analyses were used to study those areas having low development potential or minimal flood hazards. The scope and methods of study were proposed to and agreed upon by FEMA and Franklin County.

## 2.2 Community Description

Franklin County is located in central Ohio and is surrounded by Madison, Union, Delaware, Licking, Fairfield and Pickaway Counties. The largest city in Franklin

County is Columbus, with approximately 66 percent of the county's population. Beginning about 1984, the northwestern portion of the county began growing rapidly. This growth, which is still continuing, although at a somewhat slower rate, has been largely in residential developments with some commercial and light developments. According to the 2000 census, the total county population was 1,068,978 (Reference 2).

The climate of the Franklin County area is typical of the central temperate zone, with frequent and rapid changes in weather due to alternate invasions of continental polar and maritime tropical air masses. Average annual precipitation totals 36 inches, while mean monthly temperatures range from a low of 29 degrees Fahrenheit (°F) in January to a high of 75°F in July (Reference 3).

The Scioto River basin cuts a swath through the middle of Franklin County and includes a total drainage area of 6,510 square miles. The watershed is generally rectangular in shape and has an average width of approximately 50 miles and a total length of 135 miles.

The 2000 census population for the City of Columbus was recorded at 711,470 (Reference 2). Most small streams in the fully developed areas have heavy overgrowth and are cluttered with refuse and debris, especially where these streams pass through commercial areas.

The 2000 census data recorded the population of Dublin at 31,392 (Reference 2), a significant increase from the 1990 census population of 16,366 (Reference 1). Dublin is located in northwestern Franklin County and southwestern Delaware County, extending its western boundary into Union County. More than 85 percent of the population lies within Franklin County.

Southeastern Franklin County is still largely agricultural. Growth has been moderate and steady. It is largely residential, with single homes being built on five-acre lots in townships, resulting in construction of private structures or driveways over existing streams.

The study area lies in a glaciated, relatively low-relief portion of the Scioto River Basin. The soils of the area are a combination of Pleistocene outwash and recently deposited alluvium (Reference 4).

## 2.3 Principal Flood Problems

Periodic overflow of the Scioto and Olentangy Rivers and Big Walnut Creek is Franklin County's principal flood problem.

The maximum flood on record for the Scioto River at the Dublin gage (below O'Shaughnessy Dam), River Mile 147.5, occurred on March 25, 1913, when the Scioto River crested at 799.0 feet NAVD88. Another major flood occurred on January 22, 1959, and a crest elevation of 796.4 feet NAVD88 was reported at the Dublin gage. These elevations would have exceedence intervals of 400 and 120 years, respectively, under present-day conditions.

Historic floods are unique events and must be viewed as such. The January 1959 flood, for example, crested at the Columbus gaging station, River Mile 126.7, at an elevation of 706.62 feet NAVD88. This elevation has an exceedence interval

of only 57 years under present day conditions. The Columbus gage was not at its present location in 1913 to record that year's March flood.

The history of flooding along the Olentangy River within Franklin County indicates that flooding could occur during any season of the year. The majority of the major floods has occurred during the period from January to March and have usually been the result of spring rains and/or rapid snowmelt. The worst floods during this century occurred March 25, 1913; January 1952; and January 21, 1959. The flood of March 1913 was the maximum flood of record on the Olentangy River and the Scioto River through Columbus and Franklin County. In January 1959, limited flooding occurred principally upstream of King Avenue where flood damages were low because of the lack of major development in this portion of the floodplain. Estimated flood damages from Henderson Road to the mouth of the Olentangy River amounted to $30,000. Above Henderson Road to Wilson Bridge Road about 600 acres were inundated with no significant damages occurring (Reference 4).

The 1952 and 1959 floods crested at the Wilson Bridge Road gage (No. 03226800) at 757.9 and 758.28 feet NAVD88, respectively (Reference 5). The discharges at this gaging station were 15,100 cubic feet per second (cfs) for the 1952 flood and 16,500 cfs for the 1959 flood. No gage records are available for the March 1913 flood of record at this gaging station. However, a comparison of its crest with that of the January 1959 flood can be made from recorded high water marks at the Henderson Road Bridge (downstream from Worthington at River Mile 6.7). Its crest was 750.4 feet NAVD88 while the 1959 flood crested at only 738.3 feet at this location. In the Worthington area, the estimated return periods for the January 1952 and January 1959 floods, as modified by Delaware Dam, would be 87 and 125 years, respectively.

The flood having the largest impact on the Big Walnut Creek flood plain during the past 65 years occurred on January 22, 1959. This flood crested at 719.6 feet NAVD88 at the Reese gaging station (River Mile 10.5). An earlier major flood occurred on March 25, 1913, when a crest elevation of 718.1 feet NAVD88 was recorded at the Reese gage. Other major floods occurred in February 1929, January 1952 and March 1945 (Reference 6).

The flood of record for Alum Creek in the Columbus area occurred on January 22, 1959. This flood crested at 752.6 feet NAVD88 at the Livingston Avenue gage, which is located on Alum Creek approximately 1/4 mile downstream of Livingston Avenue and six miles upstream from the mouth of the creek. The gage has been in operation since January 1, 1924, except for the calendar years 1936 and 1937. The drainage area at this gage is 189 square miles. Another stream gaging station on Alum Creek is located at the downstream side of Orange Township Road 109 Bridge and 0.3 mile west of Africa, Delaware County, Ohio. It was installed in June 1963. The drainage area at this gage is 122 square miles. One flood of consequence, the March 1964 flood, has occurred since installation of this gage. A maximum discharge measurement of 6,160 cfs was made near the crest stage of the 1964 flood.

A gaging station on Scioto Big Run at Briggsdale is located at the Route 62 Bridge. This station was operated as a continuously recording gage from 1947 to

1959 and as a crest gage from 1960 to the present. In the 33 years of record, the maximum flow of 3,670 cfs was observed on June 30, 1973.

A USGS gage is located on Big Darby Creek downstream of the study area at Darbyville (River Mile 12.25). It is located at the State Highway 316 Bridge, 0.4 mile northeast of Darbyville, 0.4 mile upstream from Lizard Run and 3 miles downstream from Greenbrier Creek. The gage was non-recording prior to March 17, 1940, but was recording thereafter. Datum of the gage is 713.0 feet NAVD88. The period of record for this gage was from October 1921 to December 1935 and from January 1938 to September 1970.

The highest flood that occurred at Darbyville for the period of record occurred on January 22, 1959, when Big Darby Creek crested at an elevation of 730.94 feet NAVD88 with a discharge of 49,000 cfs. If this flood were to occur today under current flow conditions, it would have a frequency of occurrence of approximately 190 years.

Major floods have occurred in the City of Reynoldsburg and the Village of Groveport, in March 1913, June 1956, January 1959 and March 1964. The maximum known flood occurred in 1956, when an estimated five to six inches of rain fell in three hours on June 21 (Reference 7). The staff gage at the Reynoldsburg sewage treatment plant measured 12 to 13 feet, the highest known stage. The floodwaters receded in less than 24 hours (Reference 8). The estimated peak discharge for Blacklick Creek near the Village of Groveport was 12,300 cfs (Reference 9). The estimated return period for that flood was greater than 100 years, based on flood discharge frequency analysis developed for a flood hazard report for Blacklick Creek (Reference 10).

The Blacklick Creek watershed sustained severe damage from floodwater on January 21, 1959. U.S. Weather Service gage records for Port Columbus Airport show 4.90 inches of rain fell on that date (Reference 7). No streamflow records on Blacklick Creek exist; however, the USGS has estimated the peak discharge near the Village of Groveport to be 10,300 cfs for the January 1959 storm. The estimated return period for that flood was greater than 75 years, based on flood discharge frequency analysis developed for a flood hazard report for Blacklick Creek (Reference 10). Floodwaters blocked storm sewer outlets, causing damage to basements. Also, open basement excavations and new construction received damage in Reynoldsburg. The flood duration was less than 24 hours.

Between September 14 and 15, 1979, rainfall from Tropical Storm Frederic ranged from three to six inches on scattered parts of the Columbus area. Floodwaters from Blacklick Creek forced the Reynoldsburg Municipal Building to close. More than 300 homes in the Blacklick Estates subdivision were affected by the overflow. Six homes on Dibble Avenue near the Village of Valleyview were also flooded by overflow from Dry Run. The Valleyview municipal building was also flooded (Reference 11).

No stream gages are located within the other detailed study watersheds. However, local residents consider the January 1959 flood the worst flood to have occurred in all but one of these basins. This exception is Mulberry Run basin, in which the worst flood is believed to have occurred in March 1913.

The most recent flooding event occurred at Turkey Run in July 1989. The county received between 1.55 to 6.6 inches of rainfall between July 27 and 28 (Reference 11). Turkey Run overflowed between State Route 315 and Olentangy River Road to a subdivision, flooding 13 homes.

## 2.4 Flood Protection Measures

The Scioto River has no mainstream regulation. Following the March 1913 flood, the City of Columbus began to invest in Scioto River channel improvement (Reference 4). This included widening the channel, constructing levees and revetments and increasing bridge spans. A levee was constructed along the west bank of a reach of the Scioto River. A portion of this project is a 1,200-foot long concrete wall constructed to an elevation 3 feet lower than the top of the levee. This section is designed to act as a spillway during extreme floods to prevent the downstream levees from being overtopped and damaged. It is located approximately one-half mile below the mouth of the Olentangy River, extending upstream from Broad Street to the CONRAIL Bridge.

After the 1959 flood, Dry Run levee was raised and strengthened and a levee segment along Dublin Road was constructed. However, this levee is not recognized as providing protection from the base flood.

Prior to 1951, flows on the Olentangy River were unregulated, but since that time the USACE Delaware Dam and Lake Project has had a major effect on reducing flood peaks on the Olentangy River through Columbus and Franklin County. The dam is located in Delaware County, 164.4 miles above the mouth of the Scioto River, and 32 miles above the mouth of the Olentangy River. Its total storage capacity of 132,000 acre-feet is equal to 6.5 inches of runoff from a 381 square mile drainage area above the dam. Construction was initiated in 1946 and completed in 1951.

Alum Creek Lake, a multi-purpose reservoir on Alum Creek in Delaware County upstream of the City of Westerville and west of Africa, Ohio, was authorized by the Flood Control Act of 1962. The dam was completed in 1964 and is in operation for flood control and provides for additional water supplies for the Columbus metropolitan area, wildlife conservation and general recreation. Located 26 miles above the mouth of Alum Creek and 4.5 miles upstream of Westerville, the dam controls runoff from a drainage area of 123 square miles, providing storage of 7.2 inches of runoff and sufficient water supply storage to assure 40 million gallons per day withdrawal.

Other existing water resource projects include a small water supply intake dam at Westerville, a low water dam below the CSX Transportation railroad bridge, and a low water dam between Main and Broad Streets. These projects have a minimal effect upon flooding conditions.

A locally constructed levee which provides limited protection to the St. Charles Seminary in the City of Bexley was raised substantially following the 1959 flood. Areas behind the levee would be afforded an indeterminate amount of protection during minor flooding but these could be expected to be subject to inundation by the 1- and 0.2-percent-annual-chance floods.

Hoover Dam, a water supply project, was built by the City of Columbus in 1954. This project is located on Big Walnut Creek approximately 37 miles above the mouth. Because this is a water supply dam, it is not recognized as providing flood protection.

The USACE was authorized by the Flood Control Act of 1938 to construct the Big Darby Lake Project as a part of the general comprehensive plan for flood control in the Ohio River basin.

A high water bypass tunnel was constructed during the 1960s on South Fork Dry Run north of the CONRAIL and west of Haldy Drive. At the upstream CONRAIL culvert, the tunnel is capable of bypassing over 900 cfs of flow along the CONRAIL to the downstream CONRAIL culvert, thereby bypassing the residential area in the City of Columbus.

The USACE, Huntington District constructed a floodwall along the Scioto River as part of the West Columbus Local Protection Project, also known as the Franklinton Floodwall. This Federal project is a 7.25-mile long local protection project along the western bank of the Scioto River, composed of a linear floodwall and levees as structural features. It has a number of closures located at streets and railroads. Pump stations and related collector systems convey the storm water away from the floodwall. It has a certified completion date of April 4, 2003 and protects against the one-percent-annual-chance flood in the area of Franklinton, within Columbus.

FEMA specifies that all levees must have a minimum of 3-foot freeboard against 1-percent-annual-chance flooding to be considered a safe flood protection structure. Levees exist in the study area to provide the communities with some degree of protection against flooding. The criteria used to evaluate protection against 1-percent-annual-chance flood are: 1) adequate design, including freeboard; 2) structural stability; and 3) proper operation and maintenance. Levees that do not protect against the 1-percent-annual-chance flood are not considered in the hydraulic analysis of the 1-percent-annual-chance floodplain.

## 3.0 ENGINEERING METHODS

For the flooding sources studied in detail in the community, standard hydrologic and hydraulic study methods were used to determine the flood hazard data required for this study. The floodway computations were completed using this verified model and are delineated on the best available mapping. Flood events of a magnitude that are expected to be equaled or exceeded once on the average during any 10-, 50-, 100- or 500-year period (recurrence interval) have been selected as having special significance for floodplain management and for flood insurance rates. These events, commonly termed the 10-, 50-, 100- or 500-year floods, have a 10, 2, 1 and 0.2 percent chance, respectively, of being equaled or exceeded during any year. Although the recurrence interval represents the long-term average period between floods of a specific magnitude, rare floods could occur at short intervals or even within the same year. The risk of experiencing a rare flood increases when periods greater than 1 year are considered. For example, the risk of having a flood that equals or exceeds the 1-percent-chance flood (1 percent chance flood) in any 50-year period is approximately 40 percent (4 in 10), and for any 90-year period, the risk increases to approximately 60 percent (6 in 10). The analyses reported herein reflect flooding potentials based on conditions existing in the

community at the time of completion of this study. In addition, the future-conditions 1-percent-annual-chance flood is reflected in this study for various streams studied by detailed methods. The future-conditions floodplain is based on land use described in community zoning ordinances and community comprehensive plans. Maps and flood elevations will be amended periodically to reflect future changes.

## 3.1 Hydrologic Analyses

Hydrologic analyses were carried out to establish peak discharge-frequency relationships for each flooding source studied by detailed methods affecting the community.

This section is a compilation of previously published hydrologic information from earlier FIS reports where streams were studied in detail.

The flood discharge values along Coble-Bowman Ditch, Georges Creek, Georges Creek Split Flow, and Georges Creek Overflow were determined for the PMR using the Natural Resource Conservation Services' (NCRS) TR-20 hydrologic computer program (Reference 12). Flood discharges computed by the TR-20 model are based on average runoff conditions for the rainfall depth-duration data presented in U.S. Weather Bureau publication Technical Paper No. 40 (TP-40) (Reference 13). The 24-hour rainfall totals were distributed following the NRCS Type II storm. The analysis reflects the NRCS Type II distribution, 24-hour duration storm. The revised hydrologic data are shown in Table 7, Summary of Discharges.

Georges Creek Overflow to Blacklick Creek originates within the City of Pickerington, Fairfield County, upstream of a railroad culvert. The overflow was modeled using the Divert routine in the TR-20 model.

For Blacklick Creek, where cross-sections are shared with the City of Pickerington, discharges for the 1-percent-annual-chance recurrence interval were obtained from the SCS (Reference 12).

There were several methodologies used to determine peak discharge-frequency relationships for the following: the Scioto and Olentangy Rivers; Alum, Big Darby, Big Walnut, Georges, Grove City, Little Darby, Little Walnut, Rocky Fork, South Fork Georges, and Swisher Creeks; Baumgardner, Clover Groff, Faust County, Haines, McCoy, Molcomb (upstream of Lyman Court), Orders & Wallace, Patzer, and Rhodes Ditches; Big, Early, Hayden, Mulberry, Plum, Scioto Big, and Sugar Runs; Blacklick Creek Tributary C; and Plum Run Tributary.

Peak discharges for Utzinger Ditch (between its mouth and a point approximately 1.0 mile upstream) and Powell Ditch were taken from a flood hazard report for Blacklick Creek (Reference 10). The peak discharges for Utzinger Ditch and Powell Ditch were developed using the SCS Hydrology Program TR-20 (Reference 14).

Discharge-frequency relationships for rural, unregulated streams were computed using the regression equations developed for streams in Ohio by the USGS (Reference 15). These streams included: Barnes Ditch, Barbee Ditch, Cramer Ditch, Cosgray Ditch, Utzinger Ditch, Molcomb Ditch, Tudor Ditch, Dry Run,

South Fork Dry Run, Turkey Run, and Snyder Run. In areas where urbanization in the basin has changed the peak flows under natural conditions, the technique presented by Sauer, et al., 1983 was used to adjust the rural discharges (Reference 16).

For Dry, Indian, North Fork Indian, and South Fork Indian Runs; and Cosgray, Billingsley, Faust County, Clover Groff, Molcomb (within Hilliard), and Tudor Ditches, discharges were determined by methods of regional analysis outlined by Webber and Bartlett (Reference 17). These base discharge figures were then adjusted for land uses in the watersheds and correlated with discharge-frequencies from nearby stream gaging stations. Peak discharges were reduced if the drainage area became significantly less upstream. Gages used in this study and their lengths of record are as follows: Scioto River below O'Shaughnessy Dam near Dublin, 57 years; Scioto River at Columbus, 56 years; Scioto Big Run at Briggsdale, 32 years; Mill Creek near Bellepoint, 36 years; O'Shaughnessy Reservoir near Dublin, 54 years; Griggs Reservoir at Columbus, 57 years; and Olentangy River near Worthington, 23 years.

For the split flows that occur along Big Run, North Fork Dry Run, Turkey Run, and Cosgray Ditch, the HEC-2 split flow routine was used to determine the flow amount leaving the main channels.

For those streams where sufficient gage data were available, discharge-frequency curves were developed on a regional basis according to the method outlined in Statistical Methods in Hydrology by Leo R. Beard, and the U.S. Water Resources Council Bulletin No. 17 (References 18 and 19).

For those streams where gage data were limited, flood flow frequency analyses utilizing the computer program, Flood Flow Frequency Analysis, Preliminary, were performed (Reference 20). Twenty-five gaging stations were used, with periods of record ranging from 30 to 70 years, and representing drainage areas of 1.0 to 5,131 square miles (References 5 and 21). A period of 60 years was adopted as being representative and was used in computing the estimated frequency for each evaluation center.

The ODNR reviewed the Mason Run watershed and found that the drainage area had been reduced from the initial study after drainage improvements were completed at Columbus International Airport. Peak discharges for Mason Run were determined by the ODNR using techniques outlined in SCS Technical Release No. 55 (Reference 22). The ODNR computed travel time, time of concentration, lag time, runoff, routing, and storage variables for use in the model. TP-40 was used to determine rainfall amounts (Reference 13).

For Spring Run, the magnitude of the discharge for the 1-percent-annual-chance recurrence interval was determined by methods of regional analyses outlined in Bulletin No. 45 (Reference 23). These methods consist of regional regression equations that relate topographical and climatological characteristics of the basin to peak discharge with a given recurrence interval. The equations for the Westerville area used drainage area, main-channel slope, average basin elevation, and mean annual precipitation as explanatory variables. There were no stream-gage data available for Spring Run; therefore, no adjustments were made to the calculated discharges.

The peak discharge-frequency relationships for Blacklick Creek; Blacklick Creek Lateral D; Blacklick Creek Lateral K; Blacklick Creek Lateral GB; Dysar, and Martin Grove Ditches; Sycamore and French Runs; French Run (Lateral G-A); and Sycamore Run Overflow were determined at specific locations in the watershed through application of the SCS TR-20 computer program for the 10-, 25-, 50-, and 100- year floods (Reference 14). The 0.2-percent-annual-chance precipitation was determined by straight line projection of the 10-, 50-, and 1 percent-annual-chance precipitation on log probability paper.

Within Gahanna, discharge-frequency data for Sycamore Run were based on the SCS approach contained in TR-55 (Reference 22). For this method, flood hydrographs are developed from rainfall data obtained from TP-40, runoff numbers and time of concentrations (Reference 13).

There are no recorded streamflow data for the detailed study reach of Beem Ditch through Gahanna. The 10-, 50-, and 1-percent-annual-chance frequency discharges were determined from estimating equations developed by the USGS as presented in Bulletin No. 45 (Reference 23). The 0.2-percent-annual-chance frequency discharges were determined from extrapolation of the referenced estimating equations.

Although the drainage area for Lisle Ditch is less than one square mile, detailed study for Lisle Ditch was performed because Big Run overflows to Lisle Ditch during a 1-percent-annual-chance event.

The drainage area for Hayden Run above CONRAIL was redelineated using the Franklin County topographic maps. Peak discharges for Faust County Ditch and Hayden Run above CONRAIL were computed using the most recent regression equations (Reference 15). Drainage areas for Blacklick Creek above Central College Road were verified using USGS quadrangle maps. Peak discharges for Blacklick Creek above CONRAIL were also computed using the regression equations. For Blacklick Creek, Faust County Ditch, and Hayden Run, peak discharges for the study reaches computed using the regression equations were lower than the previously published flows.

The hydrologic analyses for Tussing-Bachman Ditch, Bush Ditch, and Georges Creek Overland Flow were prepared using the USACE HEC-1 flood hydrograph program (Reference 24). The HEC-1 model was prepared using rainfall depths from the National Weather Service Technical Paper No. 40 and Within Storm Precipitation Frequency Values (References 13 and 25).

The crossings of the Ohio and Erie Canal Traction Line and the Chesapeake and Ohio Railroad severely constrict flow on Tussing-Bachman Ditch during floods, causing water to be stored between these two crossings and in the area between the railroad and Gender Road. During the 1-percent-annual-chance flood, storage in the latter area reaches a stage sufficient for flow to be discharged overland along the railroad to Georges Creek. The presence of the storage areas and the occurrence of overland flow were accounted for in the hydrologic model of the stream.

Rating curves for the traction line and railroad crossings and the overland flow path were developed using the USACE HEC-2 water surface profile program

(Reference 26). These rating curves, along with a floodplain stage-storage relationship determined from available topographic mapping, were used to develop stage storage-discharge relationships (Reference 27). These relationships were incorporated into the HEC-1 model to define the reduction in discharges caused by the storage and overland flow characteristics of the floodplain.

A second HEC-1 model for those streams was developed to reflect the reduction in storage that would occur for a floodway between the traction line crossing and Gender Road (Reference 24). The floodplain stage-storage relationship was revised using the boundaries of the floodway, and the resultant HEC-1 model was compared to the original HEC-1 model to ensure that stage elevations did not differ by more than 1 foot.

Flood flow estimates for the Olentangy River were computed based on a log Pearson Type III analysis for 30 years of annual peak flow data available at the USGS gaging station near Worthington, downstream of the Delaware/Franklin County line. The computer program "Flood Frequency Analysis" was utilized to compute these peak discharges (Reference 28). The 30 years of annual peak flow data were obtained from the USGS Water Resources Division district office, and reflect actual flow regulation at the Delaware Dam. Flow changes upstream of the gage, into Delaware County, were based on a discharge/drainage area relationship between the Worthington gage and the outlet gage at the Delaware Reservoir.

For the March 2004, revision, discharges for the North Fork Indian Run above Tributary I2 used updated hydrologic information from a study prepared by the USGS in May 1978 and published in December 1979.

For this revision, discharges for Mason Run and Turkey Run (Near Robinwood Avenue) were updated with values obtained from LOMR 09-05-4021P (dated July 19, 2010). Hydrologic analyses for these streams were performed using XP-SWMM (Storm and Wastewater Management Model), version 9.50, developed in November of 2004 by XP Software.

A summary of the drainage area-peak discharge relationships for all streams studied by detailed methods, except West Water Run, McCoy Ditch, and Baumgardner Ditch, is shown in Table 7.

**Table 7. Summary of Discharges**

| Flooding Source and Location | Drainage Area (square miles) | Peak Discharges (cfs) | | | |
|---|---|---|---|---|---|
| | | 10-percent-annual-chance | 2-percent-annual-chance | 1-percent-annual-chance | 0.2-percent-annual-chance |
| **Alum Creek** | | | | | |
| At confluence with Big Walnut Creek | 199.0 | 4,200 | 6,500 | 8,100 | 13,600 |
| At Columbus gage at Livingston Avenue | 189.0 | 3,650 | 5,800 | 7,150 | 11,250 |
| At Morse Road | 167.4 | 3,650 | 5,800 | 7,150 | 11,250 |
| At Schrock Road | 167.4 | 2,650 | 2,650 | 6,300 | 10,200 |
| At Park Road | 142.0 | 2,300 | 4,400 | 5,500 | 9,100 |

**Table 7. Summary of Discharges**

| Flooding Source and Location | Drainage Area (square miles) | Peak Discharges (cfs) | | | |
|---|---|---|---|---|---|
| | | 10-percent-annual-chance | 2-percent-annual-chance | 1-percent-annual-chance | 0.2-percent-annual-chance |
| **Alum Creek (continued)** | | | | | |
| Approximately 2.6 miles US of Park Road | 131.9 | 1,800 | 2,800 | 3,600 | 6,200 |
| At Interstate Route 71 | 127.0 | 1,800 | 1,800 | 2,360 | 4,200 |
| At Africa Gage, approximately 0.5 mile US of Interstate Route 71 | 122.0 | 1,800 | 1,800 | 2,360 | 4,200 |
| **Barbee Ditch** | | | | | |
| At confluence with Barnes Ditch | 3.6 | 902 | 1,358 | 1,579 | 2,244 |
| At Trabue Road | 3.1 | 867 | 1,289 | 1,497 | 2,105 |
| **Barnes Ditch** | | | | | |
| At confluence with the Scioto River | 7.0 | 1,648 | 2,457 | 2,872 | 4,012 |
| At confluence of Barbee Ditch | 6.4 | 1,532 | 2,283 | 2,665 | 3,725 |
| At confluence of Synder Run | 2.7 | 796 | 1,187 | 1,379 | 1,949 |
| At Wilson Road | 1.5 | 568 | 834 | 964 | 1,353 |
| **Beem Ditch** | | | | | |
| At confluence with Big Walnut Creek | 1.5 | 480 | 775 | 910 | 1,200 |
| At Hamilton Road | 1.1 | 330 | 530 | 630 | 830 |
| **Big Darby Creek** | | | | | |
| Just US of confluence of Hellbranch Run | 457 | 17,800 | 30,800 | 38,000 | 58,000 |
| DS of confluence of Little Darby Creek | 253 | 16,000 | 27,900 | 34,200 | 52,500 |
| **Big Darby Creek (continued)** | | | | | |
| Just US of West Broad Street Bridge | 247 | 10,400 | 17,400 | 20,900 | 31,200 |
| At county boundary | 200 | 8,500 | 14,100 | 16,900 | 25,300 |
| **Big Run** | | | | | |
| At confluence with Little Walnut Creek | 8.40 | 911 | 1,217 | 1,374 | 1,958 |
| Above confluence of Lisle Ditch | 6.30 | 698 | 779 | 808 | 879 |
| Approximately 0.5 mile above Berger Road | 5.60 | 1,024 | 1,635 | 1,908 | 2,884 |
| At county boundary | 3.72 | 774 | 1,245 | 1,456 | 2,219 |
| **Big Walnut Creek** | | | | | |
| At mouth | 557 | 16,900 | 25,800 | 30,700 | 46,700 |
| At USGS gaging station approximately 10.5 miles US of mouth | 554 | 16,500 | 25,200 | 30,000 | 45,600 |
| Below confluence of Alum Creek | 534 | 16,100 | 25,000 | 29,400 | 43,200 |
| At Refugee Road | 254 | 14,000 | 21,200 | 25,300 | 37,400 |
| Approximately 1.5 miles US of Refugee Road | 248 | 12,000 | 19,800 | 24,000 | 36,300 |
| Below confluence of Rocky Fork Creek | 236 | 11,500 | 19,000 | 23,000 | 32,800 |
| At Morse Road | 198 | 10,000 | 17,200 | 21,000 | 32,200 |
| At USGS gaging station approximately 5.0 miles US of Morse Road | 190 | 9,100 | 15,800 | 19,500 | 30,200 |

**Table 7. Summary of Discharges**

| Flooding Source and Location | Drainage Area (square miles) | Peak Discharges (cfs) | | | |
|---|---|---|---|---|---|
| | | 10-percent-annual-chance | 2-percent-annual-chance | 1-percent-annual-chance | 0.2-percent-annual-chance |
| **Billingsley Ditch** | | | | | |
| At confluence with the Scioto River | 1.8 | 490 | 750 | 870 | 1,120 |
| **Bishop Run** | | | | | |
| At confluence with Little Walnut Creek | 3.70 | 914 | 1,425 | 1,668 | 2,542 |
| At Lithopolis Road | 2.18 | 613 | 957 | 1,117 | 1,654 |
| At county boundary | 1.90 | 568 | 891 | 1,041 | 1,551 |
| **Blacklick Creek** | | | | | |
| At confluence with Big Walnut | * | 7,300[1] | * | 8,800 | * |
| DS of Hamilton Road | * | 7,300[1] | * | 8,800 | * |
| DS of U.S. Route 33 | * | 7,400[1] | * | 8,600 | * |
| Just DS of confluence of Powell Ditch | * | 7,250[1] | * | 8,700 | * |
| Just DS of Long Road | * | 8,550[1] | * | 10,800 | * |
| Approximately 9,000 feet DS of Tussing Road | 50.6 | * | * | 10,900 | * |
| At cross-section Al | 42.27 | 6,540 | 8,696 | 10,000 | 13,066 |
| Just US of Livingston Avenue | * | 7,900[1] | * | 10,000 | * |
| Just US of Blacklick Creek Lateral K | 38.53 | 6,185 | 8,243 | 9,500 | 12,471 |
| Just US of French Run | 32.20 | 5,096 | 6,832 | 7,900 | 10,352 |
| Just US of Dysar Ditch | 26.96 | 4,548 | 6,101 | 7,000 | 9,212 |
| Just DS of confluence of Utzinger Ditch | * | 5,550[1] | * | 7,000 | * |
| Just US of State Route 6 | * | 5,200[1] | * | 6,800 | * |
| Just US of confluence with Blacklick Creek Tributary C | * | 4,750[1] | * | 6,000 | * |
| Just US of Clark State Road | * | 4,200[1] | * | 5,300 | * |
| Just US of Dublin-Granville Road | * | 2,825[1] | * | 3,500 | * |
| Just DS of Central College Road | 4.72 | 742 | 157 | 1,341 | 1,976 |
| Just DS of Tributary A | 3.73 | 619 | 966 | 1,120 | 1,654 |
| Just US of Tributary Al | 2.12 | 402 | 630 | 731 | 1,084 |
| **Blacklick Creek Lateral D** | | | | | |
| At confluence with Blacklick Creek | 0.80 | 313 | 425 | 495 | 652 |
| **Blacklick Creek Lateral G-B** | | | | | |
| At confluence with French Run | 0.35 | 194 | 256 | 297 | 385 |
| **Blacklick Creek Lateral K** | | | | | |
| At cross-section H | 1.17 | 240 | 315 | 361 | 465 |
| **Blacklick Creek Tributary C** | | | | | |
| At confluence with Blacklick Creek | 2.2 | * | * | 1,150 | * |
| **Blau Ditch** | | | | | |
| At Wilson Road | 0.97 | 485 | 698 | 804 | 1,200 |
| **Brown Run** | | | | | |
| At Hoover Road | 1.53 | 270 | 490 | 660 | 1,200 |
| At CSX Transportation | 1.00 | 150 | 310 | 410 | 780 |

**Table 7. Summary of Discharges**

| Flooding Source and Location | Drainage Area (square miles) | Peak Discharges (cfs) | | | |
|---|---|---|---|---|---|
| | | 10-percent-annual-chance | 2-percent-annual-chance | 1-percent-annual-chance | 0.2-percent-annual-chance |
| **Bush Ditch** | | | | | |
| At U.S. Route 33 (Columbus-Lancaster Road) | 3.24 | 1,085 | 1,530 | 1,615 | 1,930 |
| Approximately 2,250 feet DS of High Street | 2.30 | 785 | 1,105 | 1,170 | 1,400 |
| **Clover Groff Ditch** | | | | | |
| At confluence with Hellbranch Run | 8.84 | 1,400 | 2,570 | 3,250 | 5,200 |
| At Renner Road Bridge | 5.70 | 581 | 1,562 | 1,976 | 3,162 |
| At Roberts Road Bridge | 4..08 | 568 | 1,042 | 1,374 | 2,108 |
| At Scioto and Darby Creek Road Bridge | 1.96 | 246 | 451 | 571 | 914 |
| **Coble-Bowman Ditch** | | | | | |
| At confluence with Blacklick Creek | 2.7 | * | * | 1,200 | * |
| At Ebright Road | * | * | * | 1,098[2] | * |
| At U.S. Highway 33 | 1.4 | 462 | 540 | 584 | * |
| At Winchester Pike | 0.78 | 381 | 451 | 490 | * |
| **Cosgray Ditch** | | | | | |
| At confluence with Scioto River | 2.14 | 529 | 789 | 911 | 1,290 |
| At Dublin Road | 1.94 | 440 | 631 | 654 | 668 |
| At Interstate Route 270 | 1.55 | 440 | 639 | 733 | 1,016 |
| At Wilcox Road | 1.28 | 322 | 471 | 539 | 747 |
| **Cramer Ditch** | | | | | |
| At confluence with the Scioto River | 2.39 | 545 | 825 | 953 | 1,368 |
| At Interstate Route 270 | 2.12 | 477 | 718 | 827 | 1,173 |
| Just US of George Geary Ditch | 1.50 | 366 | 551 | 634 | 898 |
| At Wilcox Road | 1.20 | 229 | 355 | 411 | 602 |
| Above Dry Run Levee | 6.96 | 1,975 | 2,873 | 3,354 | 4,380 |
| **Dry Run** | | | | | |
| At confluence with the Scioto River | 6.96 | 1,953 | 1,992 | 2,003 | 2,013 |
| At confluence of South Fork Dry Run | 6.32 | 1,831 | 2,663 | 3,107 | 4,230 |
| Just US of confluence of South Fork Dry Run | 2.96 | 947 | 1,390 | 3,107 | 4,230 |
| At CONRAIL | 2.88 | 929 | 1,365 | 1,584 | 2,180 |
| At Hague Avenue | 2.66 | 859 | 1,258 | 1,458 | 2,051 |
| **Dysar Ditch** | | | | | |
| At confluence with Blacklick Creek | 4.24 | 1,294 | 1,721 | 1,983 | 2,574 |
| **Early Run** | | | | | |
| At confluence with Scioto Big Run | 3.45 | 730 | 1,400 | 1,800 | 3,020 |
| **Faust County Ditch** | | | | | |
| At Hayden Run Road US of Cosgray | 2.86 | 397 | 602 | 692 | 989 |

**Table 7. Summary of Discharges**

| Flooding Source and Location | Drainage Area (square miles) | Peak Discharges (cfs) | | | |
|---|---|---|---|---|---|
| | | 10-percent-annual-chance | 2-percent-annual-chance | 1-percent-annual-chance | 0.2-percent-annual-chance |
| **French Run** | | | | | |
| At confluence with Blacklick Creek | 5.46 | 1,765 | 2,333 | 2,700 | 3,461 |
| Just US of French Run (Lateral G-A) | 2.87 | 1,009 | 1,343 | 1,500 | 2,037 |
| **French Run (Lateral G-A)** | | | | | |
| At confluence with French Run | 2.59 | 795 | 1,037 | 1,187 | 1,524 |
| At cross-section G | 2.10 | 678 | 895 | 1,027 | 1,325 |
| **Georges Creek** | | | | | |
| At confluence with Little Walnut Creek | 14.4 | 1,368 | 1,432 | 1,448 | 1,509 |
| At C&O Railroad | 14.4 | 3,258 | 4,718 | 5,126 | 7,408 |
| Approximately 2.26 miles US of confluence with Little Walnut Creek | 4.4 | 901 | 1,272 | 1,374 | 1,836 |
| **Georges Creek Overland Flow** | | | | | |
| Overland Flow Path | * | 5 | 365 | 485 | 865 |
| **Georges Creek Split Flow** | | | | | |
| Just DS of divergence from Georges Creek | * | 150 | 380 | 400 | 695 |
| **Grant Run** | | | | | |
| Just US of confluence with the Scioto River | * | * | * | * | * |
| Just US of confluence of Patzer Ditch | * | * | * | * | * |
| At Borror Road | 3.46 | 655 | 1,269 | 1,623 | 2,729 |
| **Grove City Creek 1** | | | | | |
| At confluence with the Scioto River | 7.94 | 1,400 | 2,700 | 3,500 | 5,900 |
| **Haines Ditch** | | | | | |
| At confluence with Blacklick Creek | 2.2 | * | * | 1,182 | * |
| **Hamilton Ditch** | | | | | |
| At confluence with Hellbranch Run | 5.86 | 1,180 | 2,160 | 2,700 | 4,400 |
| At Feder Road Bridge | 4.67 | 940 | 1,721 | 2,151 | 3,506 |
| At Walker Road Bridge | 3.32 | 668 | 1,223 | 1,530 | 2,492 |
| At Roberts Road Bridge | 2.55 | 513 | 940 | 1,175 | 1,914 |
| **Hayden Run** | | | | | |
| At confluence with the Scioto River | 8.30 | 1,580 | 2,490 | 3,750 | 6,300 |
| Approximately 1.83 miles US of confluence with the Scioto River | 8.00 | 1,225 | 2,280 | 2,910 | 4,890 |
| At CONRAIL | 4.79 | 599 | 907 | 1,042 | 1,488 |
| At Hayden Run Road, approximately 0.4 miles US of Avery Road | 4.00 | 530 | 805 | 926 | 1,326 |
| **Hellbranch Run** | | | | | |
| At confluence with Big Darby Creek | 36.29 | 4,150 | 7,500 | 9,400 | 15,000 |
| At Beatty Road Bridge | 32.55 | 3,722 | 6,727 | 8,431 | 13,454 |

**Table 7. Summary of Discharges**

| Flooding Source and Location | Drainage Area (square miles) | Peak Discharges (cfs) | | | |
|---|---|---|---|---|---|
| | | 10-percent-annual-chance | 2-percent-annual-chance | 1-percent-annual-chance | 0.2-percent-annual-chance |
| **Hellbranch Run (continued)** | | | | | |
| At Johnson Road Bridge | 26.71 | 3,054 | 5,408 | 6,919 | 11,040 |
| At Alton Road Bridge | 18.80 | 2,150 | 3,885 | 4,870 | 7,771 |
| At confluence of Hamilton Ditch | 8.90 | 1,017 | 1,839 | 2,305 | 3,679 |
| **Indian Run** | | | | | |
| At confluence with the Scioto River | 17.4 | 2,000 | 3,100 | 3,610 | 4,870 |
| **Lisle Ditch** | | | | | |
| At confluence with Big Run | 0.81 | 173 | 384 | 503 | 999 |
| At survey section TBR-2 | 0.47 | 111 | 173 | 201 | 296 |
| **Little Darby Creek** | | | | | |
| DS of Alkire Road | 178 | 8,700 | 14,000 | 16,700 | 24,500 |
| DS of county boundary | 171 | 8,400 | 13,500 | 16,100 | 23,600 |
| **Little Walnut Creek** | | | | | |
| At mouth | 186.0 | 11,800 | 20,900 | 25,500 | 39,000 |
| Section 3, approximately 0.9 miles US of mouth | 177.5 | 11,500 | 20,000 | 24,900 | 38,000 |
| Section 11, approximately 2.4 miles US of mouth | 161.0 | 11,000 | 19,500 | 24,000 | 37,900 |
| **Marsh Run** | | | | | |
| At confluence with Scioto Big Run | 2.25 | 665 | 1,260 | 1,600 | 2,670 |
| **Martin Grove Ditch** | | | | | |
| At the Reynoldsburg DS corporate limits | 0.26 | 203 | 270 | 312 | 404 |
| **Mason Run** | | | | | |
| At confluence with Big Walnut Creek | 14.5 | 2,310 | 4,150 | 5,150 | 8,150 |
| At Groves Road | 12.6 | 1,975 | 3,548 | 4,405 | 6,970 |
| At Main Street | 4.1 | 642 | 790 | 855 | * |
| Just US of confluence of Turkey Run (Near Robinwood Avenue) | 1.7 | 502 | 627 | 705 | * |
| **Molcomb Ditch** | | | | | |
| At confluence with Tudor Ditch | 1.44 | 486 | 723 | 836 | 1,062 |
| At Interstate Route 270 | 1.22 | 465 | 679 | 782 | 1,005 |
| **Mulberry Run** | | | | | |
| At White Road | 6.05 | 1,220 | 2,360 | 3,060 | 5,150 |
| Just US of confluence of Grove City Creek 2 | 2.20 | 480 | 975 | 1,285 | 2,325 |
| **North Fork Indian Run** | | | | | |
| At confluence with Indian Run | 11.7 | 1,480 | 2,320 | 2,710 | 3,670 |
| US of Bear Run Tributary l-1 | * | 1,200 | 1,830 | 2,100 | 2,950 |
| US of Tributary l-2 | 6.47 | 860 | 1,360 | 1,590 | 2,150 |
| **Olentangy River** | | | | | |
| At Worthington gage | 497.0 | 10,900 | 15,900 | 18,500 | 25,600 |
| At Orange Road (in Delaware County) | 478.0 | 9,319 | 13,594 | 15,817 | 21,888 |

**Table 7. Summary of Discharges**

| Flooding Source and Location | Drainage Area (square miles) | Peak Discharges (cfs) | | | |
|---|---|---|---|---|---|
| | | 10-percent-annual-chance | 2-percent-annual-chance | 1-percent-annual-chance | 0.2-percent-annual-chance |
| **Orders & Wallace Ditch** | | | | | |
| At Country Club Road | 1.56 | 295 | 572 | 723 | 1,230 |
| **Patzer Ditch** | | | | | |
| Just US of confluence with Grant Run | 3.88 | 820 | 1,580 | 2,050 | 3,560 |
| At Interstate Route 71 | 2.15 | 454 | 876 | 1,136 | 1,973 |
| At Haughn Road | 1.60 | 338 | 652 | 848 | 1,468 |
| **Plum Run** | | | | | |
| Section 310 at confluence with the Scioto River | 10.4 | 1,900 | 3,440 | 4,280 | 6,900 |
| Section 312, approximately 0.43 miles US of confluence with the Scioto River | 7.0 | 1,340 | 2,430 | 3,060 | 4,900 |
| **Plum Run** | | | | | |
| At State Route 665 | 4.3 | 1,040 | 1,900 | 2,380 | 3,900 |
| Section 321, approximately 3.4 miles US of confluence with the Scioto River | 2.0 | 670 | 1,240 | 1,590 | 2,600 |
| Section 328, approximately 5.4 miles US of confluence with the Scioto River | 0.6 | 177 | 327 | 420 | 687 |
| **Plum Run Tributary** | | | | | |
| At confluence with Plum Run | 1.8 | 560 | 1,030 | 1,320 | 2,160 |
| Approximately 1.37 miles US of confluence with Plum Run | 0.7 | 281 | 517 | 663 | 1,084 |
| **Powell Ditch** | | | | | |
| At confluence with Blacklick Creek | 3.8 | * | * | 2,600 | * |
| **Rhodes Ditch** | | | | | |
| At confluence with Blacklick Creek | 3.8 | * | * | 1,600 | * |
| **Rocky Fork Creek** | | | | | |
| At confluence with Big Walnut Creek | 30.3 | 3,550 | 6,400 | 8,000 | 13,100 |
| At confluence of Sugar Run | 10.4 | 1,220 | 2,210 | 2,760 | 4,520 |
| **Scioto Big Run** | | | | | |
| At confluence with Scioto River | 24.9 | 3,200 | 5,800 | 7,300 | 12,000 |
| Approximately 4.35 miles US of confluence | 16.2 | 2,380 | 3,910 | 4,750 | 7,320 |
| Approximately 6.25 miles US of | 13.3 | 1,025 | 1,875 | 2,300 | 6,000 |
| Approximately 8.83 miles US of confluence | 2.8 | 325 | 610 | 720 | 1,300 |
| **Scioto River** | | | | | |
| Just DS of Big Walnut Creek | 2,266.0 | 47,600 | 74,500 | 86,600 | 122,500 |
| Just US of mouth of Big Walnut Creek | 1,709.0 | 39,000 | 63,500 | 76,600 | 110,500 |
| At gaging station at Columbus | 1,629.0 | 37,000 | 60,400 | 72,900 | 108,500 |
| Just US of confluence of Olentangy River | 1,076.0 | 29,600 | 48,500 | 58,300 | 85,500 |
| At gaging station below O'Shaughnessy Dam near Dublin | 980.0 | 27,000 | 43,400 | 52,300 | 77,900 |

**Table 7. Summary of Discharges**

| Flooding Source and Location | Drainage Area (square miles) | Peak Discharges (cfs) | | | |
|---|---|---|---|---|---|
| | | 10-percent-annual-chance | 2-percent-annual-chance | 1-percent-annual-chance | 0.2-percent-annual-chance |
| **Synder Run** | | | | | |
| At confluence with Barnes Ditch | 1.1 | 405 | 605 | 698 | 999 |
| **South Fork Dry Run** | | | | | |
| At Hague Avenue | 3.30 | 1,443 | 2,043 | 2,376 | 3,295 |
| AT CONRAIL | 2.73 | 1,072 | 1,542 | 1,789 | 2,443 |
| **South Fork Georges Creek** | | | | | |
| At confluence with Georges Creek | 5.2 | 1,200 | 2,225 | 2,800 | 4,900 |
| **South Fork Indian Run** | | | | | |
| At confluence with Indian Run | 5.69 | 950 | 1,490 | 1,750 | 2,370 |
| At confluence of Tri-County Ditch | 4.27 | 566 | 861 | 991 | 1,422 |
| Just US of Tri-County Ditch | 2.40 | 364 | 557 | 611 | 925 |
| **Spring Run** | | | | | |
| Just US of Dempsey Road | 6.97 | * | * | 1,850 | * |
| Just US of confluence of unnamed tributary | 5.04 | * | * | 1,410 | * |
| Just US of Walnut Street | 4.04 | * | * | 1,410 | * |
| Just US of Countyline Road | 3.32 | * | * | 1,020 | * |
| **Sugar Run** | | | | | |
| At confluence with Rocky Fork, Creek | 4.69 | 960 | 1,770 | 2,240 | 3,700 |
| **Swisher Creek** | | | | | |
| At confluence with Blacklick Creek | 2.0 | * | * | 1,020 | * |
| **Sycamore Run** | | | | | |
| At confluence with Rocky Fork Creek | 1.7 | 590 | 960 | 1,100 | 1,260 |
| At Larry Lane | 1.3 | 310 | 540 | 620 | 770 |
| **Sycamore Run Overflow** | | | | | |
| Just DS of divergence from Sycamore Run | * | * | * | 933 | * |
| **Tri-County Ditch** | | | | | |
| At confluence with South Fork Indian Run | 1.87 | 309 | 474 | 547 | 793 |
| At U.S. Route 33 | 1.19 | 195 | 296 | 340 | 488 |
| **Tudor Ditch** | | | | | |
| At confluence with the Scioto River | 3.06 | 893 | 1,337 | 1,555 | 1,970 |
| At confluence of Molcomb Ditch | 2.68 | 781 | 1,162 | 1,343 | 1,730 |
| At Interstate Route 270 | 1.17 | 460 | 660 | 740 | 880 |
| At Parkway Lane | 1.14 | 460 | 650 | 740 | 860 |
| At CONRAIL | 1.07 | 440 | 620 | 700 | 820 |
| **Turkey Run** | | | | | |
| At Olentangy River Road | 2.58 | 669 | 996 | 1,152 | 1,490 |
| Approximately 2,000 feet DS of Kenny Road | 1.91 | 503 | 746 | 859 | 1,100 |

**Table 7. Summary of Discharges**

| Flooding Source and Location | Drainage Area (square miles) | Peak Discharges (cfs) | | | |
|---|---|---|---|---|---|
| | | 10-percent-annual-chance | 2-percent-annual-chance | 1-percent-annual-chance | 0.2-percent-annual-chance |
| **Turkey Run (Near Robinwood Avenue)** | | | | | |
| Approximately 2,500 feet US of confluence with Mason Run | * | 261 | 274 | 286 | * |
| **Tussing-Bachman Ditch** | | | | | |
| At confluence with Little Walnut Creek | 5.17 | 851 | 930 | 940 | 972 |
| At C&O Railroad (Chessie System)[2] | 4.86 | 890 | 975 | 985 | 1,010 |
| DS of County Road 222 (Gender Road)[2] | * | 895 | 1,340 | 1,465 | 1,875 |
| US of County Road 222 (Gender Road) | 4.21 | 1,180 | 1,685 | 1,790 | 2,155 |
| **Utzinger Ditch** | | | | | |
| At confluence with Blacklick Creek | 1.90 | 536 | 819 | 950 | 1,380 |
| At Conrail | 1.20 | 332 | 541 | 634 | 980 |

* Data not available
[1] 25-year peak discharge
[2] Discharge values do not decrease with respect to decreases in drainage area because of the storage and overland flow characteristics of the floodplain

### 3.2 Hydraulic Analyses

Analyses of the hydraulic characteristics of the streams studied were carried out to provide estimated water surface elevations (WSELs) for each stream at selected flood recurrence intervals.

This section is a compilation of previously published hydraulic information from earlier FIS reports where streams were studied in detail.

Information on the methods used to determine WSELs for the streams studied by detailed methods is shown below.

Cross-sectional data for the Scioto and Olentangy Rivers; Beem, Billingsley, Bush, Coble-Bowman, Clover Groff, Cosgray, Faust County, Orders & Wallace, Haines, McCoy, Molcomb, Powell, Rhodes, Tussing-Bachman, and Utzinger Ditches; Big, Early, Brown, Grant, Hellbranch, Indian, Marsh, Patzer, Mason, Mulberry, North Fork Indian, Plum, West Water, Scioto Big, and South Fork Indian Runs; Big Darby, Georges, Little Darby, Little Walnut, South Fork Georges, and Swisher Creeks; Blacklick Creek Lateral K; Blacklick Creek Tributary C; Grove City Creek 2; Grove City Creek 1; Plum Run Tributary; and Rocky Fork Creek were obtained photogrammetrically from aerial photographs taken in 1976 and 1989 (References 29, 30, and 31). The below water sections were obtained by field measurements.

Cross-sectional data for Alum Creek and Big Walnut Creek were obtained from Scioto Conservancy District contour maps at a scale of 1:4,800, with a contour

interval of 2 feet (Reference 32). Columbus-Franklin County orthophoto mapping also provided information (Reference 33). Cross-sections were located at close intervals upstream and downstream of bridges in order to compute the backwater effects of these structures. It was assumed that bridge openings would remain unobstructed. Some bridge opening geometries were obtained from bridge plans and profiles supplied by the Ohio Department of Highways (Reference 34).

WSELs for floods of selected recurrence intervals were calculated by using the USACE HEC-2 step-backwater computer program for the following flooding sources (Reference 26): Alum, Big Darby, Big Walnut, Georges, Little Darby, Little Walnut and South Fork Georges Creeks; Beem, Coble-Bowman, Clover Groff, Faust County (within Columbus), Bush, Orders & Wallace, Haines, Hamilton, McCoy and Tussing-Bachman Ditches; Big, Hellbranch, Patzer, Brown, Early, Grant, Marsh, Mason, Mulberry, Plum, Scioto Big and Turkey Runs; Grove City Creek 1; Rocky Fork Creek; and the Scioto and Olentangy Rivers (Reference 26).

Starting WSELs for Alum Creek, Big Walnut Creek, Big Darby Creek, and Little Walnut Creek were obtained by using established ratings at the appropriate gaging stations.

Starting WSELs for the Olentangy River; Georges, Little Darby, and South Fork Georges Creeks; Indian, North Fork Indian, South Fork Indian, Early, Grant, Marsh, Mason, Mulberry, West Water, Hellbranch, Plum, Scioto Big, and Brown Runs; Billingsley, Clover Groff, Faust County, McCoy, Orders & Wallace, Bush, Beem, and Tussing-Bachman Ditches; Grove City Creek 1; Grove City Creek 2; and Plum Run Tributary were calculated using the slope/area method.

Starting WSELs for the Scioto River were obtained by using established ratings at Griggs Dam, approximately 5 miles downstream of the Dublin corporate limits, based on elevations at the dam and discharges at the gaging station on the Scioto River below O'Shaughnessy Dam near Dublin, with 57 years of record (References 22 and 35).

From the hydraulic analysis of the 1-percent-annual-chance flooding for Sycamore Run, it was determined that approximately 22 percent of the flow escapes the confines of the main channel just upstream of the CONRAIL bridge, creating an overflow channel. The flow in the overflow channel follows a path roughly parallel to the railroad tracks to the northwest of the CONRAIL bridge. The overflow rejoins the main channel through a culvert beneath the railroad embankment and as flow over the railroad embankment. The culvert is located approximately 2,500 feet northwest along the railroad from the CONRAIL bridge and the low point in the railroad is approximately 900 feet northwest of the culvert.

Cross-sectional data for Blacklick Creek; Blacklick Creek Lateral D; Blacklick Creek Lateral G-B; Blacklick Creek Lateral K; Blau, Clover Groff, Dysar, Faust County, Martin Grove, Molcomb, and Tudor Ditches; Dry, French, and Sycamore Runs; French Run (Lateral G-A); Georges Creek; and Sycamore Run Overflow were obtained from field surveys and topographic and aerial maps (References 10, 36, and 37).

Flood profiles for Coble-Bowman Ditch, Blacklick Creek Tributary C, Rhodes Ditch, Swisher Creek, Haines Ditch, Utzinger Ditch, and Powell Ditch were taken from a flood hazard analyses report for Blacklick Creek (Reference 10). The profiles in this report were developed using the SCS step backwater program, WSP-2 (Reference 38). Water surface profiles for Blacklick Creek (within Reynoldsburg), Georges Creek, Sycamore Run, Sycamore Run Overflow, Blacklick Creek Lateral D, Blacklick Creek Lateral G B, Blacklick Creek Lateral K, Dysar Ditch, French Run, French Run (Lateral G-A), and Martin Grove Ditch were computed using WSP-2 (Reference 38).

Starting water surface elevations for Blacklick Creek, Coble-Bowman Ditch, Rhodes Ditch, and Swisher Creek were taken from a flood hazard report for Blacklick Creek (Reference 10). Starting water surface elevations for Blacklick Creek Lateral D, Blacklick Creek Lateral G-B, Blacklick Creek Lateral K, Dysar Ditch, French Run, and French Run (Lateral G-A) were taken from profiles of Blacklick Creek at their confluences with Blacklick Creek.

The floodplain and floodway for Blacklick Creek from north of Central College Road to the county boundary were revised based on new computed flows. Existing WSP-2 model data were converted into HEC-2 model data (Reference 38). Bridges over Blacklick Creek were field surveyed. The starting water surface elevations of Blacklick Creek were obtained by using a rating curve developed for Central College Road bridge.

Starting water surface elevations for Powell and Haines Ditches were computed using the SCS step-backwater program, WSP-2 (Reference 38).

Starting water surface elevations for Martin Grove Ditch (within Reynoldsburg) were derived from normal depth calculations.

Starting water surface elevations for Spring Run were computed by means of standard slope/conveyance techniques using WSPRO (Reference 39).

Starting water surface elevations for Coble-Bowman Ditch within Groveport were derived from the elevations of the parent streams.

In Reynoldsburg, the shallow flooding area in the southwest corner of the community, near Birchview Drive, has been changed based on field investigations and more accurate topographic maps (Reference 30).

Cross-sectional data for the backwater analyses were obtained from Franklin County topographic maps with a contour interval of 2 feet (Reference 27). For Molcomb Ditch, Big Run, and Lisle Ditch, additional valley cross-sections were also obtained from field surveys. Cross-sectional elevations for the overbank areas for Little Walnut Creek were taken from the Franklin County topographic maps. Underwater channel section geometry was obtained from field surveys. For those bridges and structures for which construction plans were not available, elevation data and structural geometry were obtained from field surveys.

Numerous wooden foot bridges were found in the study area. Some of these structures were not included in the hydraulic models because they did not appear to be able to sustain the force of flood flows nor have any significant effect on flood stages.

The USACE HEC-2 step-backwater computer program was used to determine water surface elevations. For Barnes Ditch, Big Run, Bishop Run, Cosgray Ditch, Cramer Ditch, Blau Ditch, Dry Run, Lisle Ditch, Utzinger Ditch, Tudor Ditch, and Turkey Run, starting water surface elevations were based on normal depth. For Barbee Ditch, Molcomb Ditch, Snyder Run, South Fork Dry Run, and Tri-County Ditch, peak flows were expected to be coincident with peak flows occurring in the parent streams; therefore, main stream flood elevations were used for starting water surface elevations.

For Little Walnut Creek, the HEC-2 model was extended approximately one mile downstream and normal depth was used as a starting condition. This procedure ensured that realistic backwater elevations were established at the beginning of the detailed study. The hydraulic model was extended approximately 1.5 miles upstream to where the backwater no longer has any effect.

The floodplain and floodway for Hayden Run and Faust County Ditch west of the CONRAIL were revised based on new computed flows. The following modifications were also made to the HEC-2 model: remodeled the new Hayden Run Road bridge east of Leppert Road, which was replaced in 1991; added a new driveway culvert, which replaced the existing culvert; and added a driveway culvert that was not modeled in the previous FIS report. The starting water surface elevations downstream of the CONRAIL were taken from the existing FIS report.

Several unique flooding situations exist in the FIS report area. Each situation is described in the following paragraphs:

**Special Flood Situation, Blau Ditch**

Flows above the 10-year event will start to overtop the Dry Run Levee just west of Interstate Route 70. Flows downstream of Interstate Route 70 and over the levee are based on the HEC-2 split flow calculation. The split flow analysis assumes that the levee will not breach.

**Special Flood Situation, Georges Creek, Mile 0.62**

The FIS report includes detailed analyses for two Georges Creek cross flow areas above the CONRAIL. Since there were several large storage areas existing throughout the overflow area, a hydrologic model was developed using the TR20 model to consider these storage areas.

Channel roughness factors (Manning's "n") used in the hydraulic computations were chosen by engineering judgment and were based on field observations of the stream and floodplain areas. The 1989 aerial photographs prepared by the Mid Ohio Regional Planning Commission (Reference 40) were used in conjunction with field observations to characterize the floodplain conditions for determination of Manning's "n" for each area of the FIS report (Reference 41). For the channel and overbank "n" values of the detailed studied streams, see Table 8.

**Table 8. Summary of Roughness Coefficients**

| Stream | Channel "n" | Overbank "n" |
|---|---|---|
| Alum Creek | 0.036-0.050 | 0.042-0.140 |
| Barbee Ditch | 0.035-0.055 | 0.080-0.150 |
| Barnes Ditch | 0.035-0.050 | 0.060-0.200 |
| Baumgardner Ditch | 0.030-0.048 | 0.030-0.080 |
| Beem Ditch | 0.035-0.040 | 0.030-0.110 |
| Big Darby Creek | 0039-0.064 | 0.043-0.068 |
| Big Run | 0035-0.040 | 0.045-0.300 |
| Big Walnut Creek | 0.035-0.050 | 0.020-0.085 |
| Billingsley Ditch | 0.040-0.050 | 0.550-0.070 |
| Bishop Run | 0.030-0.035 | 0.040-0.080 |
| Blacklick Creek | 0.025-0.062 | 0.035-0.100 |
| Blacklick Creek Lateral D | 0.045-0.072 | 0.042-0.091 |
| Blacklick Creek Lateral G-B | 0.075 | 0.092 |
| Blacklick Creek Lateral K | 0.049-0.078 | 0.032-0.083 |
| Blacklick Creek Tributary C | 0.075 | 0.083-0.090 |
| Blau Ditch | 0.040-0.055 | 0.080-0.160 |
| Brown Run | 0.030-0.060 | 0.035-0.110 |
| Clover Groff Ditch | 0.028-0.036 | 0.045-0.070 |
| Coble-Bowman Ditch | 0.058-0.073 | 0.090-0.105 |
| Cosgray Ditch | 0.030-0.060 | 0.080-0.200 |
| Cramer Ditch | 0.035-0.055 | 0.060-0.120 |
| Dry Run | 0.040-0.060 | 0.080-0.160 |
| Dysar Ditch | 0.036-0.063 | 0.060-0.095 |
| Early Run | 0.045-0.050 | 0.050-0.075 |
| French Run | 0.048-0.061 | 0.065-0.085 |
| French Run (Lateral G-A) | 0.028-0.059 | 0.034-0.090 |
| Georges Creek | 030-0.050 | 0.030-0.100 |
| Grant Run | 0.012-0.048 | 0.060-0.078 |
| Grove City Creek 1 | 0.040-0.075 | 0.030-0.075 |
| Grove City Creek 2 | 0.020-0.045 | 0.040-0.080 |
| Haines Ditch | 0.050 | 0.085-0.090 |
| Hamilton Ditch | 0.035-0.045 | 0.050-0.075 |
| Hayden Run | 0.030-0.050 | 0.040-0.075 |
| Faust County Ditch | 0.030-0.050 | 0.040-0.150 |
| Hellbranch Run | 0.035-0.040 | 0.045-0.065 |
| McCoy Ditch | 0.035-0.040 | 0.045-0.065 |
| Indian Run | 0.025-0.050 | 0.055-0.100 |
| North Fork Indian Run | 0.025-0.050 | 0.055-0.100 |
| Lisle Ditch | 0.035-0.040 | 0.060-0.070 |
| Little Darby Creek | 0.045-0.060 | 0.053-0.079 |
| Little Walnut Creek | 0.030-0.050 | 0.030-0.080 |
| Marsh Run | 0.030-0.048 | 0.030-0.080 |
| Martin Grove Ditch | 0.042-0.083 | 0.041-0.076 |
| Mason Run | 0.035-0.054 | 0.043-0.090 |
| Molcomb Ditch | 0.035-0.050 | 0.045-0.150 |
| Mulberry Run | 0.040-0.075 | 0.030-0.075 |
| West Water Run | 0.020-0.045 | 0.004-0.080 |
| Olentangy River | 0.032-0.062 | 0.025-0.138 |

**Table 8. Summary of Roughness Coefficients**

| Stream | Channel "n" | Overbank "n" |
|---|---|---|
| Orders & Wallace Ditch | 0.012-0.048 | 0.060-0.078 |
| Patzer Ditch | 0.040-0.045 | 0.050-0.065 |
| Plum Run | 0.040 | 0.045-0.080 |
| Plum Run Tributary | 0.040 | 0.045-0.080 |
| Powell Ditch | 0.045-0.050 | 0.070-0.075 |
| Rhodes Ditch | 0.040-0.051 | 0.080-0.100 |
| Rocky Fork Creek | 0.020-0.040 | 0.045-0.080 |
| Scioto Big Run | 0.027-0.071 | 0.031-0.127 |
| Scioto River | 0.018-0.062 | 0.040-0.118 |
| Scioto River Divided Flow Reach | * | 0.040-0.118 |
| Snyder Run | 0.030-0.055 | 0.080-0.120 |
| South Fork Dry Run | 0.015-0.060 | 0.080-0.120 |
| South Fork Georges Creek | 0.015-0.030 | 0.040-0.050 |
| South Fork Indian Run | 0.035-0.055 | 0.060-0.100 |
| Spring Run | 0.030-0.065 | 0.028-0.100 |
| Sugar Run | 0.035-0.045 | 0.040-0.080 |
| Swisher Creek | 0.065 | 0.095 |
| Sycamore Run | 0.030-0.065 | 0.030-0.100 |
| Tri-County Ditch | 0.040-0.055 | 0.065-0.150 |
| Tudor Ditch | 0.020-0.060 | 0.060-0.120 |
| Turkey Run | 0.004-0.055 | 0.055-0.150 |
| Tussing-Bachman Ditch | 0.030-0.050 | 0.030-0.100 |
| Bush Ditch | 0.013-0.080 | 0.030-0.100 |
| Utzinger Ditch | 0.040-0.060 | 0.070-0.120 |
| Georges Greek Overland Flow | 0.045-0.050 | 0.045-0.050 |

* Data not available

Cross-sections for Tussing-Bachman Ditch and Bush Ditch were field surveyed by the ODNR. Cross-sections for Georges Creek Overland Flow were determined using topographic maps (Reference 27).

Water surface elevations of floods of the selected recurrence intervals were determined using the USACE HEC-2 step-backwater computer program (Reference 26). Starting water surface elevations for Tussing-Bachman Ditch and Bush Ditch were determined using the slope/area method. Starting water surface elevations for Georges Creek Overland Flow were determined using critical depth.

Roughness factors for Tussing-Bachman Ditch and Bush Ditch were chosen by engineering judgment and were based on field inspection of the channel and floodplain areas. Roughness factors for Georges Creek Overland Flow were determined by photographs of the channel and floodplain areas.

In the City of Dublin, cross-sections for Indian Run, North Fork Indian Run, South Fork Indian Run, Cosgray Ditch, and Billingsley Ditch were obtained from aerial photographs and photogrammetric methods (Reference 35).

The USGS step-backwater computer programs E431 or J635 were used to determine water surface profiles for Indian, North Fork Indian, and South Fork Indian Runs and Billingsley, Clover Groff, Cosgray, Faust County (within Hilliard), and Molcomb Ditches (References 39 and 42). Topographic information provided by Evans, Mechwart, Hambleton & Tilton, Inc., was included in the hydraulic analyses for North Fork Indian Run at several cross-sections (Reference 43).

Burgess & Niple, Ltd., reviewed and revised the hydraulic analysis for the Scioto River to correct several inconsistencies in the initial HEC-2 step-backwater computer program to reflect actual field conditions. Burgess & Niple, Ltd., reviewed city records and field surveys for the Water Works Intake Dam and found that the crest elevation of 714.0 feet modeled in the initial HEC-2 model was incorrect. They revised the cross-section for the dam in the HEC-2 model to reflect the correct crest elevation of 709.8 feet. In addition, Burgess & Niple, Ltd., revised several cross-sections to alter channel bank stations to reflect actual field conditions.

For the March 2004, revision, the Scioto River analysis converted the previous HEC-2 model for the Scioto River to HEC-RAS, updated the structures in the previous model, and calculated the floodway and floodplain limits for the 1 percent-annual-chance flood. The goal of the HEC-RAS model conversion and development was to update the structures within the model and to evaluate the impact of the new floodwall constructed for the West Columbus Local Protection Project. Where possible, structure data were updated with construction plans or other data obtained from the Ohio Department of Transportation (References 44 and 45). Hydraulic parameters for the HEC-RAS model were derived from the previous HEC-2 model.

The North Fork Indian Run analysis converted the previous E431 data to HEC-2 and HEC-RAS, updated the structures in the previous models, and updated the topography used to delineate the flood boundaries.

Channel roughness factors (Manning's "n") used in the hydraulic computations were chosen by engineering judgment and were based on field observations of the stream and floodplain areas. Table 5 shows the ranges of the channel and overbank roughness factors (Manning's "n") used in the hydraulic computations for all streams studied by detailed methods.

For the 2007 revision, Channel and valley cross-section data for Blacklick, Georges Creek; Georges Creek Overflow and Georges Creek Split Flow, were obtained from aerial photographs and field surveys (References 46 and 47). For Coble-Bowman Ditch, field survey information along with topographic information from the Franklin County Auditor’s GIS was used to revise the cross section information in the overbanks (Reference 47).

The hydraulic analyses for the 2007 revision of Coble-Bowman Ditch were performed by converting the original WSP-2 model for the watercourse to a HEC-2 model (Reference 48). For Georges Creek, Georges Creek Overflow, and Georges Creek Split Flow, the U.S. Army Corps of Engineer’s HEC-RAS (Reference 49) computer program was used to establish the revised flood elevations and floodway extents. Reach lengths and some bridge modeling were

modified to reflect more recent topography and field surveys. A separate HEC-RAS model was created to establish a flood profile for the overflow from Georges Creek to Blacklick Creek, which was labeled Georges Creek Overflow. This overflow occurs upstream of a railroad embankment, within Fairfield County. Water backs up at this location because of an undersized culvert, and escapes from Georges Creek to the west along the north side to the railroad embankment and eventually reaches Blacklick Creek. No floodway has been established in this area.

Whims Ditch is located behind the Franklinton Floodwall and is subject to interior flooding. Whims Ditch was modeled by the Army Corps of Engineers (Reference 50).

Starting water surface elevations for Blacklick Creek were obtained from the 1991 FIS report for the Village of Pickerington (Reference 46). Starting water surface elevations for Coble-Bowman Ditch, Georges Creek, Georges Creek Overflow and Georges Creek Split Flow were determined by using known water surface elevations.

Field reconnaissance was preformed to estimate Manning's 'n' values. The revised Manning's 'n' values for Coble-Bowman Ditch ranged from 0.022 to 0.07 for the channel, and from 0.06 to 0.5 for the overbanks. The revised Manning's 'n' values for Georges Creek and Georges Creek Split Flow ranged from 0.022 to 0.070 for the channel, and from 0.060 to 0.500 for the overbanks. Roughness coefficients (Manning's "n") for Blacklick Creek range from 0.025 to 0.06 for the main channel and from 0.035 to 0.10 for the overbank areas (Reference 46).

Locations of selected cross-sections used in the hydraulic analyses are shown on the Flood Profiles. For stream segments for which a floodway was computed, selected cross-section locations are also shown on the FIRM. Flood profiles were drawn showing computed water surface elevations for floods of the selected recurrence intervals.

For this FIS revision, LOMR 09-05-4021P (dated July 19, 2010) was used to obtain floodway data table values for a portion of Mason Run and Turkey Run (Near Robinwood Avenue). The hydraulic analyses for these streams were performed using XP Software's XP-SWMM computer model, version 9.5.

The hydraulic analyses for this FIS report were based on unobstructed flow. The flood elevations shown on the Flood Profiles are thus considered valid only if hydraulic structures remain unobstructed, operate properly, and do not fail. All elevations are referenced to NAVD88. Elevation reference marks used in this FIS report, and their descriptions, are shown on the maps.

## 3.3 Vertical Datum

All FIS reports and FIRMs are referenced to a specific vertical datum. The vertical datum provides a starting point against which flood, ground and structure elevations can be referenced and compared. Until recently, the standard vertical datum in use for newly created or revised FIS reports and FIRMs was the

NGVD29. With the finalization of the NAVD88, many FIS reports and FIRMs are being prepared using NAVD88 as the referenced vertical datum.

All flood elevations shown in this FIS report and on the FIRM are referenced to NAVD88. Structure and ground elevations in the community must, therefore, be referenced to NAVD88. It is important to note that adjacent communities may be referenced to NGVD29. This may result in differences in Base Flood Elevations (BFEs) across the corporate limits between communities.

For more information on NAVD88, see the FEMA publication entitled *Converting the National Flood Insurance Program to the North American Vertical Datum of 1988* (FEMA, June 1992), or contact the Vertical Network Branch, National Geodetic Survey, Coast and Geodetic Survey, National Oceanic and Atmospheric Administration, Silver Spring, Maryland 20910 (internet address http://www.ngs.noaa.gov).

Temporary vertical monuments are often established during the preparation of a flood hazard analysis for the purpose of establishing local vertical control. Although these monuments are not shown on the FIRM, they may be found in the TSDN associated with the FIS report and FIRM for this community. Interested individuals may contact FEMA to access these data.

## 4.0 FLOODPLAIN MANAGEMENT APPLICATIONS

The National Flood Insurance Program (NFIP) encourages the State and local governments to adopt sound floodplain management programs. Therefore, each FIS provides 1-percent-annual-chance flood elevations and delineations of the 1- and 0.2-percent-annual-chance floodplain boundaries and 1-percent-annual-chance floodway to assist communities in developing floodplain management measures.

For this study, in response to a request by the community, the future-conditions 1-percent-annual-chance floodplain boundary was delineated on the FIRM (published separately) for various streams studied by detailed methods in addition to the existing 0.2-percent annual-chance floodplain boundary. This information is presented on the FIRM and in many components of the FIS report, including Flood Profiles, Floodway Data Tables and Summary of Stillwater Elevations Table. Users should reference the data presented in the FIS report as well as additional information that may be available at the local map repository before making flood elevation and/or floodplain boundary determinations.

### 4.1 Floodplain Boundaries

To provide a national standard without regional discrimination, the 1-percent-annual-chance flood has been adopted by FEMA as the base flood for floodplain management purposes. The 0.2-percent-annual-chance flood is employed to indicate additional areas of flood risk in the community. For each stream studied, the 1- and 0.2-percent-annual-chance floodplain boundaries have been delineated using the flood elevations determined at each cross-section. Between cross-sections, the boundaries were interpolated using aerial photography and topographic maps (References 10, 29-33, 35-37, 40, 41, 51 and 52).

For the July 16, 1997, revision, the boundaries were interpolated between cross-sections using topographic maps at a scale of 1 inch = 100 feet, with a contour interval of 2 feet (Reference 27).

For the April 21, 1999, revision, the boundaries were interpolated using aerial based topographic maps at a scale of 1 inch = 500 feet, with a contour interval of 2 feet, supplied by the Franklin County auditor (Reference 27).

For the March 16, 2004, revision, the boundaries were interpolated between cross-sections using aerial-based topographic maps at a scale of 1 inch = 100 feet, with a contour interval of 2 feet for the North and South Fork Indian Run (Reference 53), and a scale of 1 inch = 500 feet for the Scioto River (Reference 54), all obtained from the Franklin County Auditor's Geographic Information System.

For the PMR (the 2007 revision), the boundaries between cross-sections were interpolated using topographic maps at a scale of 1:3,600, with a contour interval of 1 foot (Reference 47).

For information on topographic mapping that was used in the Letters of Map Change (LOMCs) that are included in this countywide FIS report (Table 5), refer to the LOMCs themselves, which can be obtained from each community's map repository.

For the flooding sources studied by approximate methods, the boundaries of the 1-percent-annual-chance floodplain were delineated using the Flood Hazard Boundary Maps for the Cities of Hilliard, Gahanna, and Grove City; and the Villages of Canal Winchester and Groveport (References 55-59). In addition, several reports and topographic maps were used to delineate the 1-percent-annual-chance floodplains of the flooding sources studied by approximate methods (References 16, 30, 33, 42, 43 and 60).

The 1- and 0.2-percent-annual-chance floodplain boundaries are shown on the FIRM. On this map, the 1-percent-annual chance floodplain boundary corresponds to the boundary of the areas of special flood hazards (Zones A, AE, and AO); and the 0.2-percent-annual-chance floodplain boundary corresponds to the boundary of areas of moderate flood hazards. In cases where the 1- and 0.2-percent-annual-chance floodplain boundaries are close together, only the 1-percent-annual-chance floodplain boundary has been shown. Small areas within the floodplain boundaries may lie above the flood elevations but cannot be shown due to limitations of the map scale and/or lack of detailed topographic data.

For the streams studied by approximate methods, only the 1-percent-annual-chance floodplain boundary is shown on the FIRM (Exhibit 2).

## 4.2 Floodways

Encroachment on floodplains, such as structures and fill, reduces flood-carrying capacity, increases flood heights and velocities and increases flood hazards in areas beyond the encroachment itself. One aspect of floodplain management involves balancing the economic gain from floodplain development against the resulting increase in flood hazard. For purposes of the NFIP, a floodway is used

as a tool to assist local communities in this aspect of floodplain management. Under this concept, the area of the existing-conditions 1-percent-annual-chance floodplain is divided into a floodway and a floodway fringe. The floodway is the channel of a stream, plus any adjacent floodplain areas, that must be kept free of encroachment so that the 1-percent-annual-chance flood can be carried without substantial increases in flood heights. Minimum standards of FEMA limit such increases in flood heights to 1.0 foot, provided that hazardous velocities are not produced. The floodways in this study are presented to local agencies as minimum standards that can be adopted directly or that can be used as a basis for additional floodway studies. The following communities observe the 0.5-foot limit as suggested by the ODNR: Bexley, Columbus, Grandview Heights, Grove City, Hilliard, Lockbourne, Obetz, Reynoldsburg, Upper Arlington, Valleyview, Westerville, Worthington and the unincorporated areas of Franklin County.

The floodways presented in this FIS and on the FIRMs were directly obtained from the previous FIS reports in the Floodway Data Tables. They were computed for certain stream segments on the basis of equal conveyance reduction from each side of the floodplain. Floodway widths were computed at cross-sections. Between cross-sections, the boundaries were interpolated. The results of the floodway computations were tabulated at selected cross-sections in Table 9. In cases where the floodway and 1-percent-annual-chance floodplain boundaries are either close together or collinear, only the floodway boundary has been shown. In addition to the existing-conditions 1-percent-annual-chance flood elevations and floodway, the future-conditions 1-percent-annual-chance elevations without the floodway are shown in Table 9, where applicable.

Because the floodway was not recalculated, there were areas where the previous floodway did not fit within the boundaries of the 1-percent-annual-chance floodplain. Therefore, in these areas, the floodway was reduced. Table 9 lists the water surface elevations, with and without a floodway, the mean velocity in the floodway, and the location and area at each surveyed cross section as determined by hydraulic methods. The width of the floodway depicted by the FIRM panels and the amount of reduction to fit the floodway inside the 100-year floodplain, if necessary, is also listed.

A storage floodway was delineated for the reach of Tussing-Bachman Ditch between the Ohio and Erie Traction Line crossing and Gender Road, and for Georges Creek Overland Flow upstream of cross-section D. Floodway boundaries were based on the limits of the storage area used for the floodway HEC-1 model. The equal conveyance reduction method was used to define the encroachment stations for the remainder of Tussing-Bachman Ditch and Georges Creek Overland Flow.

No floodway was determined for Mason Run from just upstream of Interstate Route 70 to approximately 1,300 feet downstream of Main Street, and no floodway was determined for the entire reach of Turkey Run (Near Robinwood Avenue).

Encroachment into areas subject to inundation by floodwaters having hazardous velocities aggravates the risk of flood damage, and heightens potential flood hazards by further increasing velocities. A listing of stream velocities at selected cross-sections is provided in Table 9. In order to reduce the risk of property

damage in areas where the stream velocities are high, the community may wish to restrict development in areas outside the floodway.

Near the mouths of streams studied in detail, floodway computations are made without regard to flood elevations on the parent stream. "Without Floodway" elevations presented in Table 9 for certain downstream cross-sections of Alum Creek, Big Run, Barnes Ditch, Big Walnut Creek, Bishop Run, Early Run, Georges Creek, Grant Run, Grove City Creek 1, Hayden Run, Indian Run, Lisle Ditch, Marsh Run, the Olentangy River, Patzer Ditch, Plum Run, Plum Run Tributary, Rocky Fork Creek, Scioto Big Run, South Fork Georges Creek, Tussing-Bachman Ditch, Utzinger Ditch and Georges Creek Overland Flow reflect WSELs without consideration of backwater from parent streams and are lower than the regulatory flood elevations in that area that must take into account the 1-percent-annual-chance flooding due to backwater.

The area between the floodway and the 1-percent-annual-chance floodplain boundaries is termed the floodway fringe. The floodway fringe encompasses the portion of the floodplain that could be completely obstructed without increasing the water surface elevation of the 1-percent-annual-chance flood more than 1.0 foot at any point. Typical relationships between the floodway and the floodway fringe and their significance to floodplain development are shown in **Figure 1**.

The floodways in this report are recommended to local agencies as minimum standards that can be adopted or used as a basis for additional studies.

In the redelineation efforts, the floodway was not recalculated. As a result, there were areas where the previous floodway did not fit within the boundaries of the 1-percent-annual-chance floodplain. Therefore, in these areas, the floodway was reduced. Table 9, the Floodway Data table, lists the water surface elevations, with and without a floodway, the mean velocity in the floodway, and the location and area at each surveyed cross-section as determined by hydraulic methods. The width of the floodway depicted by the FIRM panels and the amount of reduction to fit the floodway inside the 1-percent-annual-chance floodplain, if necessary, is also listed.

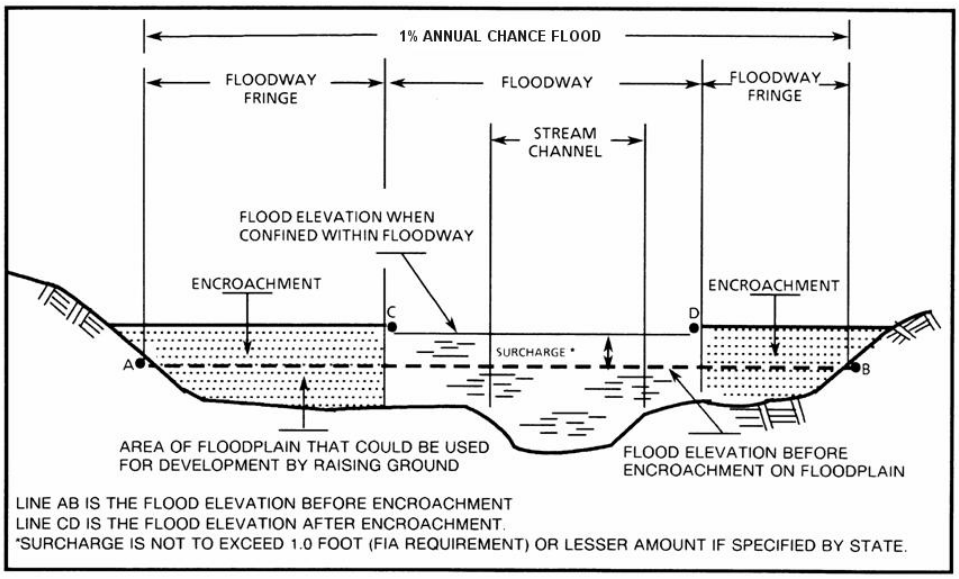


**Figure 1. Floodway Schematic**

| FLOODING SOURCE | | FLOODWAY | | | | 1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD) | | | |
|---|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE | WIDTH (FEET) | WIDTH REDUCED FROM PRIOR STUDY | SECTION AREA (SQUARE FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE (FEET) |
| Alum Creek | | | | | | | | | |
| A | 0.679[1] | 472 | | 2,193 | 3.7 | 727.8 | 723.3[2] | 723.7 | 0.4 |
| B | 0.849[1] | 459 | | 2,374 | 3.4 | 728.4 | 723.8[2] | 724.2 | 0.4 |
| C | 1.009[1] | 1,371 | | 4,912 | 1.6 | 728.4 | 724.5[2] | 724.9 | 0.4 |
| D | 1.226[1] | 1,003 | | 3,703 | 2.2 | 728.4 | 724.9[2] | 725.4 | 0.5 |
| E | 1.727[1] | 1,984 | | 5,219 | 1.6 | 728.5 | 727.9[2] | 728.4 | 0.5 |
| F | 1.831[1] | 1,774 | | 4,030 | 2.0 | 728.7 | 728.1[2] | 728.5 | 0.4 |
| G | 2.033[1] | 1,166 | | 3,452 | 2.3 | 729.1 | 729.1 | 729.5 | 0.4 |
| H | 2.294[1] | 1,568 | | 5,024 | 1.6 | 729.9 | 729.9 | 730.4 | 0.5 |
| I | 2.640[1] | 879 | | 2,321 | 3.5 | 731.7 | 731.7 | 732.2 | 0.5 |
| J | 2.797[1] | 430 | | 1,492 | 5.4 | 732.4 | 732.4 | 732.9 | 0.5 |
| K | 3.021[1] | 935 | | 4,137 | 2.0 | 733.6 | 733.6 | 734.1 | 0.5 |
| L | 3.263[1] | 1,464 | | 3,399 | 2.4 | 734.1 | 734.1 | 734.6 | 0.5 |
| M | 3.467[1] | 1,464 | 133[3] | 3,894 | 2.1 | 734.8 | 734.8 | 735.3 | 0.5 |
| N | 3.958[1] | 1,136 | 505[3] | 3,491 | 2.3 | 736.8 | 736.8 | 737.2 | 0.4 |
| O | 4.103[1] | 847 | 532[3] | 3,754 | 1.9 | 737.4 | 737.4 | 737.9 | 0.5 |
| P | 4.377[1] | 175 | | 1,673 | 4.3 | 738.7 | 738.7 | 739.1 | 0.4 |
| Q | 4.519[1] | 120 | | 1,220 | 5.9 | 739.5 | 739.5 | 739.9 | 0.4 |
| R | 4.912[1] | 120 | | 1,368 | 5.2 | 742.4 | 742.4 | 742.8 | 0.4 |
| S | 5.003[1] | 114 | | 1,479 | 4.8 | 742.9 | 742.9 | 743.4 | 0.5 |
| T | 5.387[1] | 402 | | 2,251 | 3.2 | 744.5 | 744.5 | 744.9 | 0.4 |
| U | 5.617[1] | 368 | | 2,202 | 3.2 | 745.3 | 745.3 | 745.7 | 0.4 |
| V | 5.847[1] | 364 | | 2,830 | 2.5 | 746.0 | 746.0 | 746.4 | 0.4 |
| W | 5.985[1] | 137 | | 2,007 | 3.6 | 746.3 | 746.3 | 746.7 | 0.4 |
| X | 6.123[1] | 140 | | 1,826 | 3.9 | 746.6 | 746.6 | 747.0 | 0.4 |
| Y | 6.308[1] | 141 | | 1,744 | 4.1 | 747.3 | 747.3 | 747.6 | 0.3 |
| Z | 6.534[1] | 174 | | 1,881 | 3.8 | 748.0 | 748.0 | 748.3 | 0.3 |

[1]Miles above confluence with Big Walnut Creek [2]Elevation without considering backwater effect from Big Walnut Creek [3]See explanation in Section 4.2

**Table 9**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

FRANKLIN COUNTY, OHIO
AND INCORPORATED AREAS

# FLOODWAY DATA

Alum Creek

| FLOODING SOURCE | | FLOODWAY | | | | 1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD) | | | |
|---|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE [1] | WIDTH (FEET) | WIDTH REDUCED FROM PRIOR STUDY | SECTION AREA (SQUARE FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE (FEET) |
| Alum Creek | | | | | | | | | |
| AA | 6.706 | 144 | | 1,866 | 3.8 | 748.5 | 748.5 | 748.8 | 0.3 |
| AB | 6.937 | 114 | | 1,484 | 4.8 | 749.2 | 749.2 | 749.5 | 0.3 |
| AC | 7.138 | 111 | | 1,342 | 5.3 | 750.3 | 750.3 | 750.5 | 0.2 |
| AD | 7.338 | 155 | | 1,741 | 4.1 | 751.3 | 751.3 | 751.8 | 0.5 |
| AE | 7.464 | 404 | | 2,161 | 3.3 | 751.8 | 751.8 | 752.3 | 0.5 |
| AF | 7.617 | 136 | | 1,438 | 5.0 | 752.5 | 752.5 | 752.9 | 0.4 |
| AG | 7.783 | 136 | | 1,486 | 4.8 | 753.3 | 753.3 | 753.8 | 0.5 |
| AH | 7.920 | 255 | 84[2] | 1,904 | 3.8 | 754.1 | 754.1 | 754.5 | 0.4 |
| AI | 8.040 | 198 | | 1,980 | 3.6 | 754.5 | 754.5 | 754.9 | 0.4 |
| AJ | 8.267 | 262 | | 2,090 | 3.4 | 755.2 | 755.2 | 755.7 | 0.5 |
| AK | 8.427 | 251 | | 2,564 | 2.8 | 755.7 | 755.7 | 756.2 | 0.5 |
| AL | 8.654 | 141 | | 1,773 | 4.0 | 756.1 | 756.1 | 756.6 | 0.5 |
| AM | 8.891 | 140 | | 1,687 | 4.2 | 756.9 | 756.9 | 757.4 | 0.5 |
| AN | 9.042 | 157 | | 1,910 | 3.7 | 757.5 | 757.5 | 757.9 | 0.4 |
| AO | 9.199 | 132 | | 1,772 | 4.0 | 757.8 | 757.8 | 758.3 | 0.5 |
| AP | 9.294 | 163 | | 1,723 | 4.1 | 758.1 | 758.1 | 758.6 | 0.5 |
| AQ | 9.409 | 183 | | 2,215 | 3.2 | 758.6 | 758.6 | 759.0 | 0.4 |
| AR | 9.564 | 290 | | 3,092 | 2.3 | 759.3 | 759.3 | 759.7 | 0.4 |
| AS | 9.688 | 139 | | 1,674 | 4.3 | 759.4 | 759.4 | 759.8 | 0.4 |
| AT | 9.888 | 449 | | 3,550 | 2.0 | 760.1 | 760.1 | 760.5 | 0.4 |
| AU | 10.191 | 365 | | 2,846 | 2.5 | 760.7 | 760.7 | 761.1 | 0.4 |
| AV | 10.504 | 370 | | 3,467 | 2.1 | 761.1 | 761.1 | 761.5 | 0.4 |
| AW | 10.922 | 626 | | 3,632 | 2.0 | 762.3 | 762.3 | 762.8 | 0.5 |
| AX | 11.135 | 299 | | 2,197 | 3.3 | 763.0 | 763.0 | 763.5 | 0.5 |
| AY | 11.384 | 139 | | 1,718 | 4.2 | 764.0 | 764.0 | 764.5 | 0.5 |
| AZ | 11.605 | 573 | | 5,177 | 2.3 | 764.9 | 764.9 | 765.4 | 0.5 |

[1]Miles above confluence with Big Walnut Creek [2]See explanation in Section 4.2

**Table 9**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

FRANKLIN COUNTY, OHIO
AND INCORPORATED AREAS

# FLOODWAY DATA

Alum Creek

| FLOODING SOURCE | | FLOODWAY | | | | 1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD) | | | |
|---|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE [1] | WIDTH (FEET) | WIDTH REDUCED FROM PRIOR STUDY | SECTION AREA (SQUARE FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE (FEET) |
| Alum Creek | | | | | | | | | |
| BA | 11.814 | 122 | | 1,322 | 5.4 | 765.5 | 765.5 | 766.0 | 0.5 |
| BB | 12.152 | 285 | | 2,088 | 3.4 | 767.3 | 767.3 | 767.8 | 0.5 |
| BC | 12.498 | 161 | | 6,520 | 1.1 | 768.3 | 768.3 | 768.8 | 0.5 |
| BD | 12.705 | 246 | | 1,186 | 6.0 | 768.3 | 768.3 | 768.8 | 0.5 |
| BE | 12.967 | 403 | | 2,483 | 2.9 | 770.5 | 770.5 | 770.9 | 0.4 |
| BF | 13.145 | 281 | | 1,764 | 4.1 | 771.3 | 771.3 | 771.7 | 0.4 |
| BG | 13.363 | 381 | | 2,134 | 3.4 | 772.7 | 772.7 | 773.2 | 0.5 |
| BH | 13.463 | 233 | | 1,987 | 3.6 | 773.1 | 773.1 | 773.6 | 0.5 |
| BI | 13.682 | 341 | | 2,118 | 3.4 | 774.0 | 774.0 | 774.5 | 0.5 |
| BJ | 13.913 | 214 | | 1,994 | 3.6 | 774.8 | 774.8 | 775.3 | 0.5 |
| BK | 14.123 | 267 | | 1,994 | 3.6 | 775.6 | 775.6 | 776.1 | 0.5 |
| BL | 14.361 | 335 | | 2,474 | 2.9 | 776.6 | 776.6 | 777.1 | 0.5 |
| BM | 14.526 | 302 | | 2,010 | 3.6 | 777.1 | 777.1 | 777.6 | 0.5 |
| BN | 14.755 | 630 | | 3,844 | 1.9 | 778.0 | 778.0 | 778.5 | 0.5 |
| BO | 15.262 | 158 | | 1,845 | 3.9 | 780.0 | 780.0 | 780.3 | 0.3 |
| BP | 15.553 | 289 | | 1,758 | 4.1 | 781.3 | 781.3 | 781.7 | 0.4 |
| BQ | 15.742 | 832 | | 3,847 | 1.9 | 782.6 | 782.6 | 783.1 | 0.5 |
| BR | 15.900 | 306 | | 2,557 | 2.8 | 783.0 | 783.0 | 783.5 | 0.5 |
| BS | 16.048 | 752 | | 2,976 | 2.4 | 783.5 | 783.5 | 784.0 | 0.5 |
| BT | 16.276 | 247 | | 1,837 | 3.9 | 784.4 | 784.4 | 784.9 | 0.5 |
| BU | 16.435 | 554 | | 2,348 | 3.2 | 785.4 | 785.4 | 785.9 | 0.5 |
| BV | 16.618 | 285 | | 1,446 | 5.3 | 786.2 | 786.2 | 786.7 | 0.5 |
| BW | 17.187 | 288 | | 1,540 | 4.4 | 787.8 | 787.8 | 788.2 | 0.4 |
| BX | 17.481 | 451 | | 2,346 | 3.0 | 791.3 | 791.3 | 791.8 | 0.5 |
| BY | 17.795 | 150 | | 7,103 | 1.0 | 792.6 | 792.6 | 793.1 | 0.5 |
| BZ | 17.915 | 106 | | 7,319 | 1.0 | 792.8 | 792.8 | 793.2 | 0.4 |

[1]Miles above confluence with Big Walnut Creek

**Table 9**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

FRANKLIN COUNTY, OHIO
AND INCORPORATED AREAS

# FLOODWAY DATA

Alum Creek

| FLOODING SOURCE | | FLOODWAY | | | | 1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD) | | | |
|---|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE | WIDTH (FEET) | WIDTH REDUCED FROM PRIOR STUDY | SECTION AREA (SQUARE FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE (FEET) |
| Alum Creek | | | | | | | | | |
| CA | 18.079[1] | 1,165 | | 3,475 | 2.1 | 792.9 | 792.9 | 793.3 | 0.4 |
| CB | 18.283[1] | 483 | | 3,388 | 2.1 | 794.2 | 794.2 | 794.6 | 0.4 |
| CC | 18.596[1] | 196 | | 1,534 | 4.6 | 795.5 | 795.5 | 795.9 | 0.4 |
| CD | 19.071[1] | 277 | 92[3] | 1,551 | 4.6 | 797.7 | 797.7 | 798.0 | 0.3 |
| CE | 19.259[1] | 162 | | 1,507 | 4.7 | 799.0 | 799.0 | 799.3 | 0.3 |
| CF | 19.822[1] | 202 | | 1,294 | 4.9 | 802.4 | 802.4 | 802.8 | 0.4 |
| CG | 19.996[1] | 680 | | 2,221 | 2.8 | 803.8 | 803.8 | 804.2 | 0.4 |
| CH | 20.266[1] | 300 | | 2,374 | 2.7 | 805.4 | 805.4 | 805.7 | 0.3 |
| CI | 20.541[1] | 211 | | 2,413 | 2.6 | 806.4 | 806.4 | 806.8 | 0.4 |
| CJ | 20.901[1] | 259 | | 1,750 | 3.1 | 808.8 | 808.8 | 809.0 | 0.2 |
| CK | 21.884[1] | 635 | | 2,448 | 2.2 | 813.3 | 813.3 | 813.3 | 0.0 |
| CL | 22.273[1] | 204 | | 1,235 | 4.5 | 814.0 | 814.0 | 814.2 | 0.2 |
| CM | 22.610[1] | 202 | | 1,744 | 3.2 | 814.8 | 814.8 | 815.5 | 0.7 |
| CN | 22.961[1] | 107 | | 1,132 | 4.9 | 816.1 | 816.1 | 816.9 | 0.8 |
| CO | 23.260[1] | 365 | | 1,968 | 2.8 | 818.4 | 818.4 | 819.2 | 0.8 |
| Barbee Ditch | | | | | | | | | |
| A | 389[2] | 138 | | 619 | 2.6 | 787.9 | 787.9 | 788.4 | 0.5 |
| B | 1,260[2] | 120 | | 695 | 2.3 | 794.6 | 794.6 | 794.6 | 0.0 |
| C | 1,760[2] | 85 | | 343 | 4.6 | 794.6 | 794.6 | 794.6 | 0.0 |
| D | 2,200[2] | 78 | | 227 | 7.0 | 795.4 | 795.4 | 795.5 | 0.1 |
| E | 3,400[2] | 80 | | 215 | 7.4 | 807.2 | 807.2 | 807.3 | 0.1 |
| F | 4,235[2] | 73 | | 338 | 407.0 | 813.5 | 813.5 | 813.9 | 0.4 |
| G | 5,295[2] | 113 | | 444 | 3.3 | 819.2 | 819.2 | 819.7 | 0.5 |
| H | 6,150[2] | 106 | | 448 | 3.3 | 825.5 | 825.5 | 826.0 | 0.5 |

[1]Miles above confluence with Big Walnut Creek [2]Feet above confluence with Barnes Ditch [3]See explanation in Section 4.2

**Table 9**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

FRANKLIN COUNTY, OHIO
AND INCORPORATED AREAS

# FLOODWAY DATA

Alum Creek, Barbee Ditch

| FLOODING SOURCE | | FLOODWAY | | | | 1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD) | | | |
|---|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE | WIDTH (FEET) | WIDTH REDUCED FROM PRIOR STUDY | SECTION AREA (SQUARE FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE (FEET) |
| Barnes Ditch | | | | | | | | | |
| A | 1,150[1] | 84 | | 793 | 3.6 | 734.0 | 733.0[2] | 733.0 | 0.0 |
| B | 2,165[1] | 164 | | 513 | 5.6 | 738.2 | 738.2 | 738.4 | 0.2 |
| C | 3,046[1] | 119 | | 535 | 5.4 | 748.0 | 748.0 | 748.3 | 0.3 |
| D | 4,114[1] | 59 | | 349 | 8.2 | 762.6 | 762.6 | 762.6 | 0.0 |
| E | 5,750[1] | 251 | | 1,738 | 1.7 | 779.6 | 779.6 | 780.1 | 0.5 |
| F | 6,789[1] | 177 | | 869 | 3.1 | 781.2 | 781.2 | 781.7 | 0.5 |
| G | 7,390[1] | 89 | | 466 | 5.7 | 784.5 | 784.5 | 784.9 | 0.4 |
| H | 8,833[1] | 71 | | 328 | 4.4 | 795.0 | 795.0 | 795.5 | 0.5 |
| I | 9,750[1] | 105 | | 556 | 2.6 | 801.8 | 801.8 | 802.3 | 0.5 |
| J | 11,077[1] | 53 | | 159 | 6.1 | 812.5 | 812.5 | 812.6 | 0.1 |
| K | 12,150[1] | 72 | | 161 | 6.0 | 823.7 | 823.7 | 823.7 | 0.0 |
| L | 13,243[1] | 54 | | 196 | 4.9 | 835.2 | 835.2 | 835.4 | 0.2 |
| Baumgardner Ditch | | | | | | | | | |
| S | 3.873[3] | 54[4] | | 157 | 4.9 | 813.4 | 813.4 | 813.4 | 0.0 |
| T | 4.642[3] | 41[4] | | 125 | 4.9 | 839.2 | 839.2 | 839.2 | 0.0 |
| U | 4.888[3] | 55 | | 90 | 6.4 | 846.7 | 846.7 | 846.7 | 0.0 |
| V | 5.111[3] | 81 | | 208 | 2.8 | 854.7 | 854.7 | 855.0 | 0.3 |
| W | 5.224[3] | 63 | | 159 | 3.7 | 856.4 | 856.4 | 856.7 | 0.3 |
| X | 5.328[3] | 70 | | 115 | 3.1 | 858.9 | 858.9 | 858.9 | 0.0 |
| Y | 5.481[3] | 28 | | 75 | 4.7 | 862.4 | 862.4 | 862.5 | 0.1 |
| Z | 5.602[3] | 110 | | 136 | 2.6 | 865.9 | 865.9 | 865.9 | 0.0 |
| AA | 5.651[3] | 200 | | 605 | 0.6 | 869.8 | 869.8 | 869.8 | 0.0 |
| AB | 5.942[3] | 225 | | 192 | 1.9 | 875.9 | 875.9 | 876.1 | 0.2 |

[1]Feet above Mouth [2]Elevation without considering backwater effect from Scioto River [3]Miles above confluence with Scioto Big Run [4]Floodway width is equal to the channel width

**Table 9**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

FRANKLIN COUNTY, OHIO
AND INCORPORATED AREAS

# FLOODWAY DATA

Barnes Ditch, Baumgardner Ditch

| FLOODING SOURCE | | FLOODWAY | | | | 1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD) | | | |
|---|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE | WIDTH (FEET) | WIDTH REDUCED FROM PRIOR STUDY | SECTION AREA (SQUARE FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE (FEET) |
| Beem Ditch | | | | | | | | | |
| A | 0.195[1] | 39 | | 116 | 7.9 | 803.9 | 803.9 | 803.9 | 0.0 |
| B | 0.216[1] | 46 | | 209 | 4.4 | 806.2 | 806.2 | 806.2 | 0.0 |
| C | 0.236[1] | 112 | | 535 | 1.7 | 807.2 | 807.2 | 807.3 | 0.1 |
| D | 0.272[1] | 64 | | 239 | 3.8 | 807.2 | 807.2 | 807.3 | 0.1 |
| E | 0.296[1] | 73 | | 280 | 3.1 | 808.2 | 808.2 | 808.5 | 0.3 |
| F | 0.441[1] | 49 | | 127 | 6.9 | 812.2 | 812.2 | 812.2 | 0.0 |
| G | 0.653[1] | 62 | | 156 | 5.6 | 821.4 | 821.4 | 821.9 | 0.5 |
| H | 0.854[1] | 40 | | 157 | 5.0 | 826.0 | 826.0 | 826.4 | 0.4 |
| I | 1.017[1] | 53 | | 100 | 7.9 | 831.3 | 831.3 | 831.3 | 0.0 |
| J | 1.047[1] | 44 | | 114 | 6.8 | 833.2 | 833.2 | 833.5 | 0.3 |
| K | 1.300[1] | 40 | | 132 | 5.8 | 841.1 | 841.1 | 841.1 | 0.0 |
| L | 1.546[1] | 55 | | 113 | 6.1 | 850.9 | 850.9 | 851.1 | 0.2 |
| M | 2.033[1] | 39 | | 100 | 6.9 | 885.5 | 885.5 | 885.6 | 0.1 |

[1]Miles above confluence with Big Walnut Creek

**Table 9**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

FRANKLIN COUNTY, OHIO
AND INCORPORATED AREAS

# FLOODWAY DATA

Beem Ditch

| FLOODING SOURCE | | FLOODWAY | | | | 1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD) | | | |
|---|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE [1] | WIDTH (FEET) | WIDTH REDUCED FROM PRIOR STUDY | SECTION AREA (SQUARE FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE (FEET) |
| Big Darby Creek | | | | | | | | | |
| A | 23.644 | 2,700 | | 14,687 | 2.6 | 784.9 | 784.9 | 785.4 | 0.5 |
| B | 24.065 | 3,541 | | 28,674 | 1.3 | 787.4 | 787.4 | 787.9 | 0.5 |
| C | 24.522 | 2,985 | | 18,048 | 2.1 | 787.9 | 787.9 | 788.4 | 0.5 |
| D | 24.727 | 2,670 | | 16,581 | 2.3 | 788.3 | 788.3 | 788.8 | 0.5 |
| E | 25.044 | 2,847 | | 21,707 | 1.8 | 792.1 | 792.1 | 792.3 | 0.2 |
| F | 25.298 | 3,555 | | 16,588 | 1.1 | 792.4 | 792.4 | 792.6 | 0.2 |
| G | 25.765 | 1,889 | | 10,229 | 3.5 | 794.9 | 794.9 | 795.4 | 0.5 |
| H | 26.073 | 1,288 | | 8,024 | 4.5 | 797.0 | 797.0 | 797.5 | 0.5 |
| I | 26.415 | 1,708 | | 9,365 | 3.9 | 799.4 | 799.4 | 799.9 | 0.5 |
| J | 26.712 | 2,192 | | 7,850 | 4.6 | 802.3 | 802.3 | 802.8 | 0.5 |
| K | 27.008 | 2,146 | | 11,141 | 3.2 | 805.3 | 805.3 | 805.7 | 0.4 |
| M | 27.104 | 2,795 | | 15,013 | 2.4 | 805.9 | 805.9 | 806.3 | 0.4 |
| N | 27.253 | 2,322 | | 12,705 | 2.8 | 806.2 | 806.2 | 806.6 | 0.4 |
| O | 27.997 | 365 | | 4,183 | 8.5 | 809.7 | 809.7 | 810.1 | 0.4 |
| P | 28.173 | 564 | | 6,376 | 5.6 | 812.3 | 812.3 | 812.8 | 0.5 |
| Q | 28.534 | 1,240 | | 11,906 | 3.0 | 814.3 | 814.3 | 814.7 | 0.4 |
| R | 29.012 | 393 | | 4,731 | 7.5 | 816.2 | 816.2 | 816.4 | 0.2 |
| S | 29.310 | 1,466 | | 11,152 | 3.2 | 818.8 | 818.8 | 819.0 | 0.2 |
| T | 29.791 | 1,862 | | 13,461 | 2.6 | 820.9 | 820.9 | 821.2 | 0.3 |
| U | 30.089 | 1,525 | | 12,877 | 2.8 | 821.8 | 821.8 | 822.2 | 0.4 |
| V | 30.398 | 827 | | 4,569 | 7.8 | 822.6 | 822.6 | 822.8 | 0.2 |
| W | 30.688 | 957 | | 8,254 | 4.3 | 826.8 | 826.8 | 827.3 | 0.5 |
| X | 30.995 | 1,299 | | 13,643 | 2.6 | 828.2 | 828.2 | 828.7 | 0.5 |
| Y | 31.180 | 984 | | 11,152 | 3.2 | 828.7 | 828.7 | 829.2 | 0.5 |
| Z | 31.487 | 679 | | 7,543 | 4.7 | 829.5 | 829.5 | 830.0 | 0.5 |

[1] Miles above mouth

**Table 9**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

FRANKLIN COUNTY, OHIO
AND INCORPORATED AREAS

# FLOODWAY DATA

Big Darby Creek

| FLOODING SOURCE | | FLOODWAY | | | | 1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD) | | | |
|---|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE [1] | WIDTH (FEET) | WIDTH REDUCED FROM PRIOR STUDY | SECTION AREA (SQUARE FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE (FEET) |
| Big Darby Creek | | | | | | | | | |
| AA | 31.994 | 806 | | 9,028 | 3.9 | 831.9 | 831.9 | 832.4 | 0.5 |
| AB | 32.273 | 800 | | 9,358 | 3.7 | 833.1 | 833.1 | 833.6 | 0.5 |
| AC | 32.505 | 1,040 | | 11,005 | 3.1 | 833.9 | 833.9 | 834.4 | 0.5 |
| AD | 32.996 | 349 | 61[3] | 4,752 | 7.2 | 836.1 | 836.1 | 836.3 | 0.2 |
| AE | 33.083 | 889 | | 9,827 | 2.2 | 837.5 | 837.5 | 837.8 | 0.3 |
| AF | 33.484 | 560 | | 5,807 | 3.7 | 838.1 | 838.1 | 838.4 | 0.3 |
| AG | 33.791 | 805 | | 6,020 | 3.6 | 839.2 | 839.2 | 839.7 | 0.5 |
| AH | 34.030 | 764 | | 5,863 | 3.7 | 840.2 | 840.2 | 840.7 | 0.5 |
| AI | 34.248 | 656 | | 4,962 | 4.3 | 841.0 | 841.0 | 841.5 | 0.5 |
| AJ | 34.437 | 411 | | 4,922 | 4.3 | 842.1 | 842.1 | 842.6 | 0.5 |
| AK | 34.651 | 400 | | 4,450 | 4.8 | 843.0 | 843.0 | 843.5 | 0.5 |
| AL | 34.955 | 1,398 | | 7,582 | 2.8 | 844.9 | 844.9 | 845.4 | 0.5 |
| AM | 35.102 | 1,262 | | 7,460 | 2.9 | 845.6 | 845.6 | 846.1 | 0.5 |
| AN | 35.232 | 673 | | 5,517 | 3.9 | 846.1 | 846.1 | 846.6 | 0.5 |
| AO | 35.376 | 275 | | 2,905 | 7.4 | 846.6 | 846.6 | 847.0 | 0.4 |
| AP | 35.664 | 264 | | 3,132 | 6.8 | 849.7 | 849.7 | 850.1 | 0.4 |
| AQ | 35.975 | 372 | | 3,643 | 5.9 | 852.5 | 852.5 | 852.9 | 0.4 |
| AR | 36.256 | 549/535[2] | | 5,277 | 4.1 | 855.8 | 855.8 | 856.3 | 0.5 |
| AS | 36.541 | 376/90[2] | | 5,020 | 4.3 | 856.8 | 856.8 | 857.3 | 0.5 |
| AT | 36.859 | 304/190[2] | | 4,063 | 5.3 | 857.7 | 857.7 | 858.2 | 0.5 |
| AU | 37.073 | 319/260[2] | | 4,611 | 4.6 | 860.4 | 860.4 | 860.9 | 0.5 |
| AW | 37.490 | 313/130[2] | | 3,928 | 5.3 | 862.3 | 862.3 | 862.7 | 0.4 |
| AX | 37.942 | 312/250[2] | | 5,136 | 4.1 | 864.2 | 864.2 | 864.6 | 0.4 |
| AZ | 37.983 | 545/360[2] | | 6,337 | 3.3 | 864.4 | 864.4 | 864.8 | 0.4 |

[1]Miles above Mouth [2]Total width/width within county boundary [3]See explanation in Section 4.2

**Table 9**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

FRANKLIN COUNTY, OHIO
AND INCORPORATED AREAS

# FLOODWAY DATA

Big Darby Creek

| FLOODING SOURCE | | FLOODWAY | | | | 1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD) | | | |
|---|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE[1] | WIDTH[2] (FEET) | WIDTH REDUCED FROM PRIOR STUDY | SECTION AREA (SQUARE FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE (FEET) |
| Big Darby Creek | | | | | | | | | |
| BA | 39.107 | 525/115 | | 5,802 | 3.6 | 868.2 | 868.2 | 868.7 | 0.5 |
| BB | 39.387 | 756/700 | | 8,308 | 2.5 | 869.4 | 869.4 | 869.9 | 0.5 |
| BC | 39.709 | 586/60 | | 6,916 | 3.0 | 870.2 | 870.2 | 870.7 | 0.5 |
| BD | 39.923 | 648/80 | | 7,953 | 2.6 | 870.8 | 870.8 | 871.3 | 0.5 |
| BE | 40.170 | 1,000/975 | | 11,820 | 1.8 | 871.2 | 871.2 | 871.7 | 0.5 |
| BF | 40.524 | 442/350 | | 5,089 | 4.1 | 871.7 | 871.7 | 872.2 | 0.5 |
| BG | 41.098 | 678/490 | | 8,214 | 2.5 | 877.1 | 877.1 | 877.3 | 0.2 |
| BH | 41.517 | 836/300 | | 7,733 | 2.7 | 877.8 | 877.8 | 878.1 | 0.3 |
| BI | 41.933 | 818/150 | | 7,201 | 2.9 | 878.8 | 878.8 | 879.2 | 0.4 |
| BJ | 42.258 | 693/100 | | 6,147 | 3.4 | 879.9 | 879.9 | 880.3 | 0.4 |
| BK | 42.806 | 401/150 | | 3,394 | 6.2 | 882.6 | 882.6 | 883.1 | 0.5 |
| BL | 43.184 | 446/50 | | 4,655 | 4.1 | 885.7 | 885.7 | 886.2 | 0.5 |
| BM | 43.486 | 1,167/76 | | 9,035 | 2.1 | 886.8 | 886.8 | 887.3 | 0.5 |
| BN | 44.114 | 643/506 | | 6,627 | 2.9 | 887.7 | 887.7 | 888.2 | 0.5 |
| BO | 44.409 | 610/200 | | 5,843 | 3.3 | 888.4 | 888.4 | 888.8 | 0.4 |
| BP | 44.715 | 200/50 | | 2,504 | 7.6 | 889.5 | 889.5 | 890.0 | 0.5 |
| BQ | 44.983 | 241/40 | | 3,498 | 5.4 | 892.2 | 892.2 | 892.7 | 0.5 |
| BR | 45.094 | 308/200 | | 3,731 | 5.1 | 892.7 | 892.7 | 893.2 | 0.5 |
| BS | 45.314 | 822/770 | | 7,561 | 2.5 | 893.7 | 893.7 | 894.2 | 0.5 |
| BT | 45.603 | 590/450 | | 5,421 | 3.5 | 894.3 | 894.3 | 894.7 | 0.4 |
| BU | 45.931 | 327/50 | | 3,531 | 5.4 | 895.3 | 895.3 | 895.7 | 0.4 |
| BV | 46.110 | 606/100 | | 7,342 | 2.6 | 896.4 | 896.4 | 896.8 | 0.4 |
| BW | 46.525 | 708/600 | | 5,389 | 3.1 | 897.1 | 897.1 | 897.6 | 0.5 |
| BX | 46.775 | 492/300 | | 5,123 | 3.3 | 898.0 | 898.0 | 898.5 | 0.5 |

[1]Miles above Mouth [2]Total width/width within county boundary

**Table 9**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

FRANKLIN COUNTY, OHIO
AND INCORPORATED AREAS

# FLOODWAY DATA

Big Darby Creek

| FLOODING SOURCE | | FLOODWAY | | | | 1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD) | | | |
|---|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE[1] | WIDTH (FEET) | WIDTH REDUCED FROM PRIOR STUDY | SECTION AREA (SQUARE FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE (FEET) |
| Big Run | | | | | | | | | |
| A | 575 | 500 | | 856 | 1.6 | 734.8 | 729.8[4] | 730.2 | 0.4 |
| B | 1,795 | 820 | | 1,891 | 0.7 | 734.8 | 730.1[4] | 730.5 | 0.4 |
| C | 2,629 | 681 | | 1,646 | 0.8 | 734.8 | 730.2[4] | 730.7 | 0.5 |
| D | 3,522 | 383 | | 338 | 4.1 | 734.8 | 730.8[4] | 730.8 | 0.0 |
| E | 4,256 | 520 | | 817 | 1.7 | 734.8 | 732.9[4] | 732.9 | 0.0 |
| F | 5,555 | 350 | | 594 | 2.3 | 734.8 | 734.3[4] | 734.6 | 0.3 |
| G | 6,347 | 354 | | 465 | 3.0 | 736.1 | 736.1 | 736.5 | 0.4 |
| H | 7,333 | 362 | | 882 | 1.6 | 737.8 | 737.8 | 738.0 | 0.2 |
| I | 7,961 | 208[2] | | 508 | 2.4 | 740.9 | 740.9 | 741.1 | 0.2 |
| J | 8,384 | 532[2] | | 1,199 | 1.0 | 741.2 | 741.2 | 741.4 | 0.2 |
| K | 9,577 | 480 | | 568 | 1.4 | 741.7 | 741.7 | 742.1 | 0.4 |
| L | 10,062 | 548 | | 259 | 3.1 | 742.7 | 742.7 | 742.8 | 0.1 |
| M | 11,257 | 160 | | 257 | 3.1 | 745.9 | 745.9 | 746.3 | 0.4 |
| N | 11,577 | 342 | | 535 | 1.5 | 747.8 | 747.8 | 748.3 | 0.5 |
| O | 13,047 | 135 | 51[5] | 263 | 2.7 | 751.2 | 751.2 | 751.7 | 0.5 |
| P | 14,347 | 58 | | 171 | 4.1 | 754.3 | 754.3 | 754.6 | 0.3 |
| Q | 15,587 | 390 | | 621 | 3.1 | 757.5 | 757.5 | 757.5 | 0.0 |
| R | 17,107 | 80 | | 315 | 601.0 | 762.9 | 762.9 | 763.4 | 0.5 |
| S | 18,800 | 67 | | 357 | 5.3 | 769.1 | 769.1 | 769.6 | 0.5 |
| T | 21,135 | 86 | | 337 | 5.7 | 780.3 | 780.3 | 780.5 | 0.2 |
| U | 22,917 | 101 | | 377 | 5.1 | 787.9 | 787.9 | 788.4 | 0.5 |
| V | 24,197 | 33 | | 224 | 6.5 | 795.1 | 795.1 | 795.4 | 0.3 |
| W | 25,257 | 30 | | 125 | 11.7 | 799.3 | 799.3 | 799.3 | 0.0 |
| X | 26,182 | 36/20[3] | | 143 | 10.2 | 808.6 | 808.6 | 808.7 | 0.1 |

[1]Feet above confluence with Little Walnut Creek [2]Combined Big Run/Lisle Ditch floodway [3]Total width/width within county boundary [4]Elevation without considering backwater effect from Little Walnut Creek [5]See explanation in Section 4.2

**Table 9**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

FRANKLIN COUNTY, OHIO
AND INCORPORATED AREAS

# FLOODWAY DATA

Big Run

| FLOODING SOURCE | | FLOODWAY | | | | 1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD) | | | |
|---|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE [1] | WIDTH (FEET) | WIDTH REDUCED FROM PRIOR STUDY | SECTION AREA (SQUARE FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE (FEET) |
| Big Walnut Creek | | | | | | | | | |
| A | 1.920 | 2,948/2,770[2] | | 16,555 | 1.9 | 693.2 | 693.2[3] | 693.7 | 0.5 |
| B | 3.081 | 2,303 | | 8,775 | 3.5 | 695.7 | 695.7 | 696.2 | 0.5 |
| C | 3.383 | 1,301 | | 13,290 | 2.3 | 697.4 | 697.4 | 697.9 | 0.5 |
| D | 3.468 | 1,888 | | 15,928 | 1.9 | 697.7 | 697.7 | 698.2 | 0.5 |
| E | 3.976 | 1,577 | | 13,841 | 2.2 | 698.6 | 698.6 | 699.1 | 0.5 |
| F | 4.115 | 1,110 | | 9,855 | 3.1 | 698.8 | 698.8 | 699.3 | 0.5 |
| G | 4.200 | 1,101 | | 8,926 | 3.4 | 699.1 | 699.1 | 699.6 | 0.5 |
| H | 4.277 | 1,414 | | 9,543 | 3.2 | 699.5 | 699.5 | 700.0 | 0.5 |
| I | 4.626 | 1,300 | | 12,452 | 2.5 | 700.8 | 700.8 | 701.3 | 0.5 |
| J | 5.054 | 721 | | 5,679 | 5.4 | 702.1 | 702.1 | 702.5 | 0.4 |
| K | 5.249 | 1,260 | | 5,552 | 5.5 | 704.2 | 704.2 | 704.6 | 0.4 |
| L | 5.510 | 2,788 | | 20,875 | 1.5 | 706.7 | 706.7 | 706.9 | 0.2 |
| M | 5.701 | 3,340 | | 25,725 | 1.2 | 706.9 | 706.9 | 707.1 | 0.2 |
| N | 6.391 | 3,070 | | 18,874 | 1.6 | 707.5 | 707.5 | 707.7 | 0.2 |
| O | 6.678 | 2,148 | | 16,116 | 1.9 | 707.8 | 707.8 | 708.1 | 0.3 |
| P | 6.901 | 1,608 | | 13,279 | 2.3 | 708.9 | 708.9 | 709.2 | 0.3 |
| Q | 7.420 | 3,004 | | 16,925 | 1.8 | 709.9 | 709.9 | 710.3 | 0.4 |
| R | 7.846 | 2,718 | | 11,826 | 2.6 | 710.4 | 710.4 | 710.8 | 0.4 |
| S | 7.983 | 2,974 | | 8,450 | 3.6 | 710.9 | 710.9 | 711.3 | 0.4 |
| T | 8.282 | 2,534 | | 11,598 | 2.6 | 712.5 | 712.5 | 712.8 | 0.3 |
| U | 8.563 | 2,552 | | 12,457 | 2.5 | 713.5 | 713.5 | 713.9 | 0.4 |
| V | 8.913 | 2,195 | | 15,155 | 2.0 | 714.4 | 714.4 | 714.7 | 0.3 |
| W | 9.238 | 1,579 | | 13,301 | 2.3 | 714.9 | 714.9 | 715.3 | 0.4 |
| X | 9.314 | 973 | | 11,335 | 2.6 | 715.3 | 715.3 | 715.7 | 0.4 |
| Y | 9.591 | 1,203 | | 11,350 | 2.6 | 715.8 | 715.8 | 716.2 | 0.4 |
| Z | 10.055 | 1,980 | | 18,183 | 1.6 | 716.3 | 716.3 | 716.8 | 0.5 |

[1]Miles above mouth [2]Total width/width within county boundary [3]Elevation without considering backwater effect from Scioto River

**Table 9**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

FRANKLIN COUNTY, OHIO
AND INCORPORATED AREAS

# FLOODWAY DATA

Big Walnut Creek

| FLOODING SOURCE | | FLOODWAY | | | | 1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD) | | | |
|---|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE [1] | WIDTH (FEET) | WIDTH REDUCED FROM PRIOR STUDY | SECTION AREA (SQUARE FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE (FEET) |
| Big Walnut Creek | | | | | | | | | |
| AA | 10.340 | 1,429 | | 11,290 | 2.7 | 716.7 | 716.7 | 717.2 | 0.5 |
| AB | 10.514 | 805 | | 7,594 | 4.0 | 718.4 | 718.4 | 718.6 | 0.2 |
| AC | 10.712 | 660 | | 9,115 | 3.3 | 719.8 | 719.8 | 720.0 | 0.2 |
| AD | 10.837 | 208 | | 4,366 | 6.9 | 719.8 | 719.8 | 720.2 | 0.4 |
| AE | 10.989 | 1,225 | | 11,222 | 2.7 | 720.5 | 720.5 | 720.9 | 0.4 |
| AF | 11.329 | 1,608 | | 8,712 | 3.4 | 721.2 | 721.2 | 721.6 | 0.4 |
| AG | 11.668 | 1,454 | | 13,668 | 2.2 | 723.1 | 723.1 | 723.5 | 0.4 |
| AH | 11.842 | 1,289 | | 9,765 | 3.1 | 723.2 | 723.2 | 723.6 | 0.4 |
| AI | 12.059 | 1,246 | | 9,367 | 3.2 | 723.7 | 723.7 | 724.2 | 0.5 |
| AJ | 12.332 | 1,535 | | 9,837 | 3.0 | 724.3 | 724.3 | 724.8 | 0.5 |
| AK | 12.513 | 307 | | 6,166 | 4.9 | 724.6 | 724.6 | 725.0 | 0.4 |
| AL | 12.526 | 468 | | 8,475 | 3.5 | 724.8 | 724.8 | 725.2 | 0.4 |
| AM | 12.640 | 1,323 | | 14,342 | 2.1 | 725.2 | 725.2 | 725.7 | 0.5 |
| AN | 13.000 | 1,675 | | 15,194 | 2.0 | 725.6 | 725.6 | 726.1 | 0.5 |
| AO | 13.390 | 1,703 | | 17,253 | 1.7 | 725.9 | 725.9 | 726.4 | 0.5 |
| AP | 13.680 | 2,509 | | 16,755 | 1.8 | 726.2 | 726.2 | 726.7 | 0.5 |
| AQ | 14.503 | 215 | | 4,160 | 7.1 | 727.4 | 727.4 | 727.8 | 0.4 |
| AR | 15.385 | 1,845 | | 11,351 | 2.4 | 728.4 | 728.4 | 728.8 | 0.4 |
| AS | 15.656 | 1,950 | | 12,723 | 2.1 | 728.7 | 728.7 | 729.1 | 0.4 |
| AT | 15.695 | 1,599 | | 9,733 | 2.8 | 728.9 | 728.9 | 729.3 | 0.4 |
| AU | 15.995 | 1,113 | | 6,303 | 4.3 | 729.8 | 729.8 | 730.2 | 0.4 |
| AV | 16.295 | 1,219 | | 6,970 | 4.2 | 732.1 | 732.1 | 732.4 | 0.3 |
| AW | 16.587 | 1,042 | | 9,293 | 2.9 | 736.9 | 736.9 | 737.1 | 0.2 |
| AX | 16.695 | 1,264 | | 13,273 | 2.0 | 737.0 | 737.0 | 737.3 | 0.3 |
| AY | 16.845 | 1,014 | | 7,613 | 3.5 | 737.0 | 737.0 | 737.4 | 0.4 |
| AZ | 17.039 | 281 | | 4,490 | 5.6 | 737.6 | 737.6 | 737.8 | 0.2 |

[1] Miles above mouth

**Table 9**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

FRANKLIN COUNTY, OHIO
AND INCORPORATED AREAS

# FLOODWAY DATA

Big Walnut Creek

| FLOODING SOURCE | | FLOODWAY | | | | 1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD) | | | |
|---|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE [1] | WIDTH (FEET) | WIDTH REDUCED FROM PRIOR STUDY | SECTION AREA (SQUARE FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE (FEET) |
| Big Walnut Creek | | | | | | | | | |
| BA | 17.104 | 1,382 | | 12,269 | 2.0 | 738.1 | 738.1 | 738.4 | 0.3 |
| BB | 17.232 | 1,607 | | 11,947 | 2.1 | 738.2 | 738.2 | 738.5 | 0.3 |
| BC | 17.492 | 1,047 | | 6,351 | 4.0 | 738.6 | 738.6 | 739.0 | 0.4 |
| BD | 17.592 | 1,224 | | 7,143 | 3.6 | 739.2 | 739.2 | 739.7 | 0.5 |
| BE | 17.692 | 1,189 | | 6,712 | 3.8 | 739.6 | 739.6 | 740.1 | 0.5 |
| BF | 17.990 | 1,266 | | 7,812 | 3.3 | 742.2 | 742.2 | 742.6 | 0.4 |
| BG | 18.087 | 1,066 | | 8,737 | 2.9 | 742.7 | 742.7 | 743.1 | 0.4 |
| BH | 18.262 | 1,177 | | 8,342 | 3.1 | 743.1 | 743.1 | 743.5 | 0.4 |
| BI | 18.389 | 1,519 | 225[2] | 9,665 | 2.6 | 743.6 | 743.6 | 744.0 | 0.4 |
| BJ | 18.490 | 1,214 | | 7,923 | 3.2 | 743.8 | 743.8 | 744.2 | 0.4 |
| BK | 18.590 | 1,847 | | 8,588 | 3.0 | 744.2 | 744.2 | 744.7 | 0.5 |
| BL | 18.689 | 1,463 | | 7,498 | 3.4 | 744.6 | 744.6 | 745.0 | 0.4 |
| BM | 18.810 | 1,321 | | 6,068 | 4.2 | 744.9 | 744.9 | 745.4 | 0.5 |
| BN | 19.023 | 918 | | 5,693 | 4.4 | 747.0 | 747.0 | 747.3 | 0.3 |
| BO | 19.105 | 1,507 | | 8,563 | 3.0 | 747.6 | 747.6 | 748.0 | 0.4 |
| BP | 19.312 | 1,284 | | 7,265 | 3.5 | 748.2 | 748.2 | 748.6 | 0.4 |
| BQ | 19.559 | 1,561 | | 9,099 | 2.8 | 749.2 | 749.2 | 749.7 | 0.5 |
| BR | 20.050 | 644 | | 3,537 | 7.2 | 751.4 | 751.4 | 751.5 | 0.1 |
| BS | 20.184 | 1,140 | | 7,297 | 3.5 | 753.5 | 753.5 | 754.0 | 0.5 |
| BT | 20.385 | 1,246 | | 7,095 | 3.6 | 754.8 | 754.8 | 755.2 | 0.4 |
| BU | 20.981 | 1,008 | | 8,254 | 2.9 | 761.0 | 761.0 | 761.4 | 0.4 |
| BV | 21.211 | 1,235 | | 10,197 | 2.4 | 761.4 | 761.4 | 761.9 | 0.5 |
| BW | 21.493 | 1,716 | | 10,564 | 2.3 | 762.4 | 762.4 | 762.8 | 0.4 |
| BX | 21.548 | 1,474 | | 9,053 | 2.7 | 762.5 | 762.5 | 762.9 | 0.4 |
| BY | 21.617 | 1,224 | | 9,003 | 2.7 | 762.6 | 762.6 | 763.0 | 0.4 |
| BZ | 21.725 | 859 | | 7,668 | 3.1 | 762.8 | 762.8 | 763.2 | 0.4 |

[1]Miles above mouth [2]See explanation in Section 4.2

**Table 9**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

FRANKLIN COUNTY, OHIO
AND INCORPORATED AREAS

# FLOODWAY DATA

Big Walnut Creek

| FLOODING SOURCE | | FLOODWAY | | | | 1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD) | | | |
|---|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE [1] | WIDTH (FEET) | WIDTH REDUCED FROM PRIOR STUDY | SECTION AREA (SQUARE FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE (FEET) |
| Big Walnut Creek | | | | | | | | | |
| CA | 21.822 | 745 | | 6,537 | 3.7 | 763.1 | 763.1 | 763.5 | 0.4 |
| CB | 21.945 | 775 | | 5,508 | 4.4 | 763.7 | 763.7 | 764.1 | 0.4 |
| CC | 22.110 | 955 | | 7,161 | 3.4 | 764.7 | 764.7 | 765.2 | 0.5 |
| CD | 22.246 | 220 | | 3,717 | 6.3 | 765.1 | 765.1 | 765.5 | 0.4 |
| CE | 22.343 | 375 | 96[2] | 4,480 | 5.3 | 766.0 | 766.0 | 766.5 | 0.5 |
| CF | 22.492 | 650 | | 7,176 | 3.3 | 766.8 | 766.8 | 767.3 | 0.5 |
| CG | 22.571 | 600 | | 6,012 | 3.9 | 766.9 | 766.9 | 767.4 | 0.5 |
| CH | 22.650 | 650 | | 5,431 | 4.3 | 767.2 | 767.2 | 767.7 | 0.5 |
| CI | 22.850 | 650 | | 6,304 | 3.7 | 768.3 | 768.3 | 768.8 | 0.5 |
| CJ | 23.173 | 650 | | 7,213 | 3.3 | 769.9 | 769.9 | 770.3 | 0.4 |
| CK | 23.339 | 906 | | 8,497 | 2.8 | 770.9 | 770.9 | 771.3 | 0.4 |
| CL | 23.461 | 1,175 | | 11,534 | 2.0 | 771.3 | 771.3 | 771.7 | 0.4 |
| CM | 23.593 | 1,110 | | 10,941 | 2.2 | 771.7 | 771.7 | 772.1 | 0.4 |
| CN | 23.673 | 1,167 | | 10,792 | 2.2 | 772.0 | 772.0 | 772.4 | 0.4 |
| CO | 23.752 | 842 | | 10,392 | 2.3 | 772.3 | 772.3 | 772.7 | 0.4 |
| CP | 23.827 | 1,051 | | 10,381 | 2.3 | 772.4 | 772.4 | 772.8 | 0.4 |
| CQ | 24.031 | 1,447 | | 6,484 | 3.6 | 773.1 | 773.1 | 773.5 | 0.4 |
| CR | 24.257 | 900 | | 5,263 | 4.5 | 775.7 | 775.7 | 776.0 | 0.3 |
| CS | 24.450 | 506 | | 5,375 | 4.3 | 776.9 | 776.9 | 777.4 | 0.5 |
| CT | 24.575 | 590 | | 6,382 | 3.6 | 777.7 | 777.7 | 778.2 | 0.5 |
| CU | 24.665 | 503 | | 5,610 | 4.1 | 778.0 | 778.0 | 778.4 | 0.4 |
| CV | 24.763 | 229 | | 3,249 | 7.2 | 778.0 | 778.0 | 778.4 | 0.4 |
| CW | 24.868 | 377 | | 3,608 | 6.4 | 778.9 | 778.9 | 779.3 | 0.4 |
| CX | 25.094 | 1,124 | | 9,021 | 2.5 | 781.2 | 781.2 | 781.5 | 0.3 |
| CY | 25.416 | 1,027 | | 10,002 | 2.3 | 781.8 | 781.8 | 782.2 | 0.4 |
| CZ | 25.575 | 805 | | 8,285 | 2.8 | 782.1 | 782.1 | 782.5 | 0.4 |

[1]Miles above mouth [2]See explanation in Section 4.2

**Table 9**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

FRANKLIN COUNTY, OHIO
AND INCORPORATED AREAS

# FLOODWAY DATA

Big Walnut Creek

| FLOODING SOURCE | | FLOODWAY | | | | 1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD) | | | |
|---|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE [1] | WIDTH (FEET) | WIDTH REDUCED FROM PRIOR STUDY | SECTION AREA (SQUARE FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE (FEET) |
| Big Walnut Creek | | | | | | | | | |
| DA | 25.832 | 1,346 | | 11,490 | 2.0 | 782.4 | 782.4 | 782.8 | 0.4 |
| DB | 26.018 | 1,402 | | 12,275 | 1.9 | 782.5 | 782.5 | 782.9 | 0.4 |
| DC | 26.074 | 1,037 | | 5,402 | 4.3 | 782.9 | 782.9 | 783.4 | 0.5 |
| DD | 26.279 | 1,132 | | 8,570 | 2.7 | 784.2 | 784.2 | 784.7 | 0.5 |
| DE | 26.640 | 658 | | 6,082 | 3.8 | 786.6 | 786.6 | 787.0 | 0.4 |
| DF | 26.808 | 842 | | 8,771 | 2.6 | 787.2 | 787.2 | 787.6 | 0.4 |
| DG | 26.966 | 859 | | 6,736 | 3.4 | 787.6 | 787.6 | 788.0 | 0.4 |
| DH | 27.125 | 557 | | 3,690 | 6.2 | 788.5 | 788.5 | 788.9 | 0.4 |
| DI | 27.495 | 886 | | 7,249 | 3.2 | 791.8 | 791.8 | 792.1 | 0.3 |
| DJ | 27.696 | 1,474 | | 13,475 | 1.7 | 792.3 | 792.3 | 792.6 | 0.3 |
| DK | 28.003 | 854 | | 4,995 | 4.2 | 792.6 | 792.6 | 793.0 | 0.4 |
| DL | 28.563 | 558 | | 5,803 | 3.6 | 796.1 | 796.1 | 796.6 | 0.5 |
| DM | 28.787 | 869 | | 6,457 | 3.3 | 797.1 | 797.1 | 797.6 | 0.5 |
| DN | 29.103 | 573 | | 5,273 | 4.0 | 798.8 | 798.8 | 799.3 | 0.5 |
| DO | 29.349 | 805 | | 7,712 | 2.7 | 800.0 | 800.0 | 800.5 | 0.5 |
| DP | 29.608 | 790 | | 7,037 | 3.0 | 800.8 | 800.8 | 801.3 | 0.5 |
| DQ | 29.799 | 541 | | 5,020 | 4.2 | 801.5 | 801.5 | 802.0 | 0.5 |
| DR | 30.042 | 494 | | 5,170 | 4.1 | 802.9 | 802.9 | 803.4 | 0.5 |
| DS | 30.370 | 1,129 | | 7,999 | 2.6 | 804.4 | 804.4 | 804.9 | 0.5 |
| DT | 30.704 | 809 | | 7,210 | 2.9 | 805.5 | 805.5 | 805.9 | 0.4 |
| DU | 31.006 | 1,150 | | 6,126 | 3.4 | 806.5 | 806.5 | 806.9 | 0.4 |
| DV | 31.574 | 650 | | 5,659 | 3.7 | 808.4 | 808.4 | 808.6 | 0.2 |
| DW | 31.904 | 523 | | 4,515 | 4.7 | 809.5 | 809.5 | 810.0 | 0.5 |
| DX | 32.408 | 697 | | 6,522 | 3.2 | 814.9 | 814.9 | 815.3 | 0.4 |
| DY | 33.178 | 2,585 | | 14,759 | 1.4 | 815.7 | 815.7 | 816.2 | 0.5 |
| DZ | 33.431 | 1,132 | | 5,262 | 4.0 | 816.1 | 816.1 | 816.5 | 0.4 |

[1]Miles above mouth

| FLOODING SOURCE | | FLOODWAY | | | | 1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD) | | | |
|---|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE | WIDTH (FEET) | WIDTH REDUCED FROM PRIOR STUDY | SECTION AREA (SQUARE FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE (FEET) |
| Big Walnut Creek | | | | | | | | | |
| EA | 33.600[1] | 534 | | 4,217 | 5.0 | 816.7 | 816.7 | 817.1 | 0.4 |
| EB | 33.808[1] | 578 | | 4,385 | 4.8 | 817.9 | 817.9 | 818.4 | 0.5 |
| EC | 34.100[1] | 600 | | 5,064 | 4.1 | 819.4 | 819.4 | 819.9 | 0.5 |
| ED | 34.443[1] | 179 | | 3,166 | 6.6 | 822.2 | 822.2 | 822.2 | 0.0 |
| EE | 34.516[1] | 930 | | 9,399 | 2.1 | 822.9 | 822.9 | 822.9 | 0.0 |
| EF | 34.576[1] | 904 | | 8,639 | 2.3 | 823.0 | 823.0 | 823.1 | 0.1 |
| EG | 34.678[1] | 465 | | 3,002 | 6.5 | 823.0 | 823.0 | 823.1 | 0.1 |
| EH | 34.914[1] | 864 | | 5,058 | 3.9 | 824.9 | 824.9 | 825.4 | 0.5 |
| EI | 35.187[1] | 302 | | 3,217 | 6.1 | 826.4 | 826.4 | 826.9 | 0.5 |
| EJ | 35.485[1] | 566 | | 5,415 | 3.6 | 828.0 | 828.0 | 828.5 | 0.5 |
| EK | 35.641[1] | 326 | | 3,578 | 5.4 | 828.2 | 828.2 | 828.7 | 0.5 |
| EL | 35.838[1] | 333 | | 3,370 | 5.8 | 829.1 | 829.1 | 829.6 | 0.5 |
| EM | 35.920[1] | 396 | | 4,185 | 4.7 | 829.6 | 829.6 | 830.1 | 0.5 |
| EN | 36.039[1] | 722 | | 4,996 | 3.9 | 830.2 | 830.2 | 830.7 | 0.5 |
| EO | 36.358[1] | 804 | | 5,784 | 3.4 | 831.3 | 831.2 | 831.8 | 0.5 |
| EP | 36.650[1] | 188 | | 3,081 | 6.3 | 831.7 | 831.7 | 832.0 | 0.3 |
| EQ | 36.824[1] | 580 | | 6,391 | 3.1 | 833.8 | 833.8 | 834.2 | 0.4 |
| ER | 36.984[1] | 705 | | 10,137 | 1.9 | 834.1 | 834.1 | 834.5 | 0.4 |
| Billingsley Ditch | | | | | | | | | |
| A-C* | | | | | | | | | |
| D | 1,610[2] | 18 | | 81 | 10.7 | 835.2 | 835.2 | 835.7 | 0.5 |
| E | 1,790[2] | 29 | | 124 | 7.0 | 840.6 | 840.6 | 841.1 | 0.5 |
| G | 2,410[2] | 49 | | 193 | 4.5 | 847.0 | 847.0 | 847.5 | 0.5 |
| H | 2,830[2] | 43 | | 111 | 7.8 | 850.8 | 850.8 | 851.3 | 0.5 |
| I | 2,900[2] | 90 | | 356 | 2.4 | 852.8 | 852.8 | 853.3 | 0.5 |

[1]Miles above mouth [2]Feet above confluence with Scioto River *Data not available - floodway coincident with channel banks

**Table 9**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

FRANKLIN COUNTY, OHIO
AND INCORPORATED AREAS

# FLOODWAY DATA

Big Walnut Creek, Billingsley Ditch

| FLOODING SOURCE | | FLOODWAY | | | | 1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD) | | | |
|---|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE | WIDTH (FEET) | WIDTH REDUCED FROM PRIOR STUDY | SECTION AREA (SQUARE FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE (FEET) |
| Billingsley Ditch | | | | | | | | | |
| J | 3,220[1] | 29 | | 90 | 9.7 | 854.7 | 854.7 | 854.7 | 0.0 |
| K | 3,400[1] | 79 | | 356 | 2.4 | 856.2 | 856.2 | 856.7 | 0.5 |
| L | 3,700[1] | 60 | | 172 | 5.1 | 858.4 | 858.4 | 858.6 | 0.2 |
| M | 3,890[1] | 284 | 72[5] | 986 | 0.9 | 859.7 | 859.7 | 859.8 | 0.1 |
| N | 4,130[1] | 80 | | 124 | 7.0 | 860.6 | 860.6 | 860.9 | 0.3 |
| O | 4,400[1] | 90 | | 281 | 3.1 | 864.8 | 864.8 | 865.0 | 0.2 |
| P | 4,680[1] | 84 | | 147 | 5.9 | 866.7 | 866.7 | 866.7 | 0.0 |
| Bishop Run | | | | | | | | | |
| A | 30[2] | 69 | | 291 | 5.7 | 750.8 | 742.4[4] | 742.9 | 0.5 |
| B | 1,730[2] | 74 | | 251 | 4.4 | 750.8 | 750.4[4] | 750.6 | 0.2 |
| C | 2,400[2] | 84 | | 245 | 4.6 | 752.3 | 752.3 | 752.4 | 0.1 |
| D | 3,350[2] | 89 | | 318 | 3.5 | 757.4 | 757.4 | 757.4 | 0.0 |
| E | 4,590[2] | 41 | | 172 | 6.5 | 763.2 | 763.2 | 763.7 | 0.5 |
| F | 5,155[2] | 58 | | 280 | 4.0 | 767.5 | 767.5 | 767.9 | 0.4 |
| G | 6,240[2] | 32 | | 122 | 8.5 | 772.9 | 772.9 | 773.4 | 0.5 |
| H | 6,860[2] | 40 | | 166 | 6.3 | 777.7 | 777.7 | 778.2 | 0.5 |
| I | 7,170[2] | 28 | | 108 | 9.6 | 779.3 | 779.3 | 779.6 | 0.3 |
| Blacklick Creek | | | | | | | | | |
| A | 3,050[3] | 1,063 | | 15,108 | 0.6 | 727.8 | 727.8 | 728.3 | 0.5 |
| B | 4,670[3] | 1,628 | | 14,113 | 0.6 | 730.2 | 730.2 | 730.7 | 0.5 |
| C | 6,400[3] | 1,210 | | 11,174 | 0.8 | 732.9 | 732.9 | 733.4 | 0.5 |
| D | 7,700[3] | 1,578 | | 13,230 | 0.7 | 733.4 | 733.4 | 733.9 | 0.5 |
| E | 9,700[3] | 1,330 | | 8,578 | 1.0 | 735.5 | 735.5 | 736.0 | 0.5 |
| F | 11,100[3] | 743 | | 5,601 | 1.7 | 736.4 | 736.4 | 736.9 | 0.5 |

[1]Feet above confluence with Scioto River [2]Feet above confluence with Little Walnut Creek [3]Feet above confluence with Big Walnut Creek [4]Elevation without considering backwater effect from Little Walnut Creek [5]See explanation in Section 4.2

**Table 9**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

FRANKLIN COUNTY, OHIO
AND INCORPORATED AREAS

# FLOODWAY DATA

Billingsley Ditch, Bishop Run, Blacklick Creek

| FLOODING SOURCE | | FLOODWAY | | | | 1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD) | | | |
|---|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE [1] | WIDTH (FEET) | WIDTH REDUCED FROM PRIOR STUDY | SECTION AREA (SQUARE FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE (FEET) |
| Blacklick Creek | | | | | | | | | |
| G | 13,230 | 1,630 | | 7,206 | 1.2 | 736.7 | 736.7 | 737.2 | 0.5 |
| H | 15,365 | 942 | | 3,964 | 2.2 | 740.5 | 740.5 | 741.0 | 0.5 |
| I | 16,815 | 1,681 | | 10,078 | 0.9 | 744.9 | 744.9 | 745.4 | 0.5 |
| J | 17,675 | 1,141 | | 6,678 | 1.3 | 745.2 | 745.2 | 745.7 | 0.5 |
| K | 19,325 | 1,190 | | 5,789 | 1.5 | 746.3 | 746.3 | 746.8 | 0.5 |
| L | 21,950 | 698 | | 4,953 | 1.7 | 750.0 | 750.0 | 750.5 | 0.5 |
| M | 23,150 | 1,252 | | 5,148 | 1.7 | 750.9 | 750.9 | 751.4 | 0.5 |
| N | 24,050 | 1,263 | | 4,971 | 1.8 | 752.2 | 752.2 | 752.7 | 0.5 |
| O | 25,225 | 1,579 | | 6,486 | 1.3 | 753.3 | 753.3 | 753.8 | 0.5 |
| P | 26,175 | 1,823 | | 6,341 | 1.4 | 755.2 | 755.2 | 755.7 | 0.5 |
| Q | 27,175 | 686 | | 3,449 | 2.5 | 757.0 | 757.0 | 757.5 | 0.5 |
| R | 28,475 | 986 | | 6,083 | 1.4 | 758.7 | 758.7 | 759.2 | 0.5 |
| S | 30,325 | 1,179 | | 4,607 | 1.9 | 762.6 | 762.6 | 763.1 | 0.5 |
| T | 32,100 | 907 | | 5,233 | 2.1 | 765.9 | 765.9 | 766.4 | 0.5 |
| U | 33,800 | 1,006 | | 6,857 | 1.6 | 769.8 | 769.8 | 770.3 | 0.5 |
| V | 34,425 | 865 | | 4,491 | 2.4 | 773.7 | 773.7 | 774.2 | 0.5 |
| W | 38,000 | 486 | | 3,123 | 3.5 | 778.0 | 778.0 | 778.5 | 0.5 |
| X | 40,000 | 673 | | 3,659 | 3.0 | 782.7 | 782.7 | 783.2 | 0.5 |
| Y | 40,815 | 961 | | 5,590 | 1.9 | 786.5 | 786.5 | 787.0 | 0.5 |
| Z | 41,890 | 647 | | 3,981 | 2.7 | 788.8 | 788.8 | 789.3 | 0.5 |
| AA | 42,925 | 552 | | 3,242 | 3.3 | 790.9 | 790.9 | 791.4 | 0.5 |
| AB | 43,020 | 1,249 | | 9,194 | 1.2 | 794.6 | 794.6 | 795.1 | 0.5 |
| AC | 44,650 | 559[2] | | 4,217 | 2.6 | 796.1 | 796.1 | 796.6 | 0.5 |
| AD | 46,640 | 557 | | 4,214 | 2.6 | 800.2 | 800.2 | 800.7 | 0.5 |

[1]Feet above confluence with Big Walnut Creek [2]Floodway lies partially outside City of Columbus

**Table 9**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

FRANKLIN COUNTY, OHIO
AND INCORPORATED AREAS

# FLOODWAY DATA

Blacklick Creek

| FLOODING SOURCE | | FLOODWAY | | | | 1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD) | | | |
|---|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE [1] | WIDTH (FEET) | WIDTH REDUCED FROM PRIOR STUDY | SECTION AREA (SQUARE FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE (FEET) |
| Blacklick Creek | | | | | | | | | |
| AE | 48,250 | 486/402[2] | | 2,961 | 3.7 | 804.8 | 804.8 | 805.3 | 0.5 |
| AF | 50,680 | 462/240[2] | | 2,848 | 3.8 | 811.9 | 811.9 | 812.4 | 0.5 |
| AG | 53,300 | 325 | | 1,911 | 5.6 | 819.7 | 819.7 | 820.2 | 0.5 |
| AH | 54,700 | 482 | 246[3] | 2,948 | 3.6 | 822.6 | 822.6 | 823.1 | 0.5 |
| AI | 57,050 | 993 | | 6,626 | 1.5 | 831.9 | 831.9 | 832.4 | 0.5 |
| AJ | 61,125 | 488 | | 3,155 | 3.2 | 840.0 | 840.0 | 840.5 | 0.5 |
| AK | 62,775 | 520 | | 3,517 | 2.8 | 845.4 | 845.4 | 845.9 | 0.5 |
| AL | 63,200 | 318 | | 2,545 | 3.9 | 847.2 | 847.2 | 847.7 | 0.5 |
| AM | 63,300 | 460 | | 3,958 | 2.4 | 849.8 | 849.8 | 850.3 | 0.5 |
| AN | 63,575 | 460 | | 3,958 | 2.4 | 850.0 | 850.0 | 850.5 | 0.5 |
| AO | 64,275 | 543 | | 4,070 | 2.3 | 850.4 | 850.4 | 850.9 | 0.5 |
| AP | 65,085 | 509 | | 2,352 | 4.0 | 851.7 | 851.7 | 852.2 | 0.5 |
| AQ | 66,135 | 353 | | 1,785 | 5.3 | 855.6 | 855.6 | 856.1 | 0.5 |
| AR | 66,980 | 118 | | 1,458 | 6.5 | 859.4 | 859.4 | 859.9 | 0.5 |
| AS | 67,110 | 160 | | 1,251 | 7.6 | 859.4 | 859.4 | 859.9 | 0.5 |
| AT | 67,460 | 590 | | 3,349 | 2.4 | 860.7 | 860.7 | 861.1 | 0.4 |
| AU | 68,680 | 480 | | 2,547 | 3.1 | 861.1 | 861.1 | 861.5 | 0.4 |
| AV | 69,330 | 520 | | 2,534 | 3.1 | 861.8 | 861.8 | 862.3 | 0.5 |
| AW | 70,030 | 220 | | 1,152 | 6.9 | 863.4 | 863.4 | 863.8 | 0.4 |
| AX | 70,430 | 510 | | 1,724 | 4.6 | 865.6 | 865.6 | 865.6 | 0.0 |
| AY | 70,740 | 675 | | 3,015 | 2.6 | 866.5 | 866.5 | 866.9 | 0.4 |
| AZ | 71,390 | 530 | | 2,166 | 3.7 | 867.6 | 867.6 | 867.9 | 0.3 |
| BA | 72,090 | 395 | | 2,317 | 3.4 | 869.3 | 869.3 | 869.6 | 0.3 |
| BB | 72,310 | 246 | | 1,327 | 6.0 | 869.5 | 869.5 | 869.8 | 0.3 |

[1]Feet above confluence with Big Walnut Creek [2]Total width/width within county boundary [3]See explanation in Section 4.2

**Table 9**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

FRANKLIN COUNTY, OHIO
AND INCORPORATED AREAS

# FLOODWAY DATA

Blacklick Creek

| FLOODING SOURCE | | FLOODWAY | | | | 1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD) | | | |
|---|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE [1] | WIDTH (FEET) | WIDTH REDUCED FROM PRIOR STUDY | SECTION AREA (SQUARE FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE (FEET) |
| Blacklick Creek | | | | | | | | | |
| BC | 72,910 | 550 | | 4,035 | 1.7 | 870.8 | 870.8 | 871.0 | 0.2 |
| BD | 73,480 | 570 | | 3,332 | 2.1 | 870.9 | 870.9 | 871.2 | 0.3 |
| BE | 74,360 | 590 | | 2,819 | 2.5 | 871.4 | 871.4 | 871.7 | 0.3 |
| BF | 74,960 | 770 | | 3,231 | 2.2 | 871.8 | 871.8 | 872.2 | 0.4 |
| BG | 75,550 | 1,025 | | 2,324 | 3.0 | 872.5 | 872.5 | 872.9 | 0.4 |
| BH | 76,700 | 915 | | 2,384 | 2.9 | 874.4 | 874.4 | 874.9 | 0.5 |
| BI | 77,880 | 603 | 177[2] | 21,118 | 3.3 | 877.3 | 877.3 | 877.6 | 0.3 |
| BJ | 81,850 | 522 | 380[2] | 793 | 7.2 | 887.2 | 887.2 | 887.3 | 0.1 |
| BK | 82,580 | 513 | | 3,674 | 1.9 | 892.9 | 892.9 | 893.3 | 0.4 |
| BL | 84,005 | 279 | | 2,014 | 3.4 | 894.3 | 894.3 | 894.7 | 0.4 |
| BM | 85,255 | 340 | | 1,815 | 3.9 | 898.6 | 898.6 | 899.1 | 0.5 |
| BN | 88,615 | 135 | | 7,217 | 9.5 | 914.5 | 914.5 | 914.9 | 0.4 |
| BO | 90,733 | 350 | | 2,875 | 2.4 | 926.6 | 926.6 | 926.9 | 0.3 |
| BP | 91,523 | 435 | | 3,120 | 2.2 | 927.2 | 927.2 | 927.6 | 0.4 |
| BQ | 92,828 | 269 | | 1,755 | 3.9 | 930.7 | 930.7 | 931.2 | 0.5 |
| BR | 94,139 | 259 | | 1,753 | 3.9 | 935.6 | 935.6 | 936.1 | 0.5 |
| BS | 94,758 | 314 | | 1,807 | 3.8 | 937.5 | 937.5 | 938.0 | 0.5 |
| BT | 95,536 | 371 | | 2,028 | 3.0 | 939.5 | 939.5 | 940.0 | 0.5 |
| BU | 96,948 | 378 | | 1,558 | 3.9 | 945.6 | 945.6 | 946.1 | 0.5 |
| BV | 98,044 | 255 | | 1,427 | 4.2 | 950.1 | 950.1 | 950.6 | 0.5 |
| BW | 99,015 | 219 | | 1,394 | 4.3 | 954.4 | 954.4 | 954.9 | 0.5 |
| BX | 99,728 | 242 | | 2,035 | 3.0 | 957.6 | 957.6 | 958.1 | 0.5 |
| BY | 101,043 | 265 | | 1,538 | 3.9 | 961.4 | 961.4 | 961.9 | 0.5 |
| BZ | 104,066 | 210 | | 1,343 | 4.3 | 978.4 | 978.4 | 978.9 | 0.5 |
| CA | 105,571 | 204 | | 1,575 | 3.7 | 984.1 | 984.1 | 984.6 | 0.5 |

[1]Feet above confluence with Big Walnut Creek [2]See explanation in Section 4.2

**Table 9**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

FRANKLIN COUNTY, OHIO
AND INCORPORATED AREAS

# FLOODWAY DATA

Blacklick Creek

| FLOODING SOURCE | | FLOODWAY | | | | 1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD) | | | |
|---|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE [1] | WIDTH (FEET) | WIDTH REDUCED FROM PRIOR STUDY | SECTION AREA (SQUARE FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE (FEET) |
| Blacklick Creek | | | | | | | | | |
| CB | 108,607 | 203 | | 2,012 | 2.6 | 992.1 | 992.1 | 992.6 | 0.5 |
| CC | 110,635 | 187 | | 1,288 | 4.1 | 1,002.1 | 1,002.1 | 1,002.6 | 0.5 |
| CD | 112,935 | 230 | | 1,431 | 3.7 | 1,010.6 | 1,010.6 | 1,011.1 | 0.5 |
| CE | 113,682 | 325 | | 1,866 | 2.8 | 1,012.7 | 1,012.7 | 1,013.2 | 0.5 |
| CF | 115,196 | 162 | | 1,875 | 2.8 | 1,021.5 | 1,021.5 | 1,022.0 | 0.5 |
| CG | 116,299 | 241 | | 1,319 | 4.0 | 1,021.8 | 1,021.8 | 1,022.3 | 0.5 |
| CH | 117,541 | 266 | | 1,414 | 3.8 | 1,026.4 | 1,026.4 | 1,026.9 | 0.5 |
| CI | 118,880 | 235 | | 1,348 | 3.9 | 1,030.9 | 1,030.9 | 1,031.4 | 0.5 |
| CJ | 120,264 | 214 | | 1,286 | 4.1 | 1,034.8 | 1,034.8 | 1,035.3 | 0.5 |
| CK | 121,195 | 167 | | 981 | 5.4 | 1,038.0 | 1,038.0 | 1,038.5 | 0.5 |
| CL | 122,370 | 157 | | 918 | 5.8 | 1,042.8 | 1,042.8 | 1,043.3 | 0.5 |
| CM | 124,766 | 129 | | 1,450 | 3.7 | 1,050.4 | 1,050.4 | 1,050.9 | 0.5 |
| CN | 126,452 | 205 | | 1,041 | 3.4 | 1,055.7 | 1,055.7 | 1,056.2 | 0.5 |
| CO | 127,846 | 223 | | 1,137 | 3.1 | 1,060.7 | 1,060.7 | 1,061.2 | 0.5 |
| CP | 129,259 | 210 | | 1,278 | 2.7 | 1,063.4 | 1,063.4 | 1,063.9 | 0.5 |
| CQ | 130,346 | 377 | | 1,459 | 2.4 | 1,066.1 | 1,066.1 | 1,066.6 | 0.5 |
| CR | 131,831 | 138 | | 821 | 4.3 | 1,072.6 | 1,072.6 | 1,073.1 | 0.5 |
| CS | 132,651 | 133 | | 729 | 3.6 | 1,075.0 | 1,075.0 | 1,075.5 | 0.5 |
| CT | 133,957 | 97 | | 587 | 4.4 | 1,080.2 | 1,080.2 | 1,080.7 | 0.5 |
| CU | 134,113 | 61 | | 330 | 4.1 | 1,084.3 | 1,084.3 | 1,084.7 | 0.4 |
| CV | 135,530 | 141 | | 456 | 2.9 | 1,088.9 | 1,088.9 | 1,089.3 | 0.4 |
| CW | 137,115 | 90 | | 415 | 3.2 | 1,094.1 | 1,094.1 | 1,094.3 | 0.2 |
| CX | 137,494 | 114 | | 468 | 2.9 | 1,095.2 | 1,095.2 | 1,095.5 | 0.3 |
| CY | 139,006 | 67 | | 284 | 4.7 | 1,100.1 | 1,100.1 | 1,100.5 | 0.4 |
| CZ | 140,226 | 127 | | 518 | 2.2 | 1,104.3 | 1,104.3 | 1,104.7 | 0.4 |
| DA | 141,494 | 162 | | 451 | 2.5 | 1,107.3 | 1,107.3 | 1,107.8 | 0.5 |
| DB | 142,795 | 130 | | 304 | 2.4 | 1,111.7 | 1,111.7 | 1,112.2 | 0.5 |
| DC | 143,897 | 84 | | 205 | 3.6 | 1,117.0 | 1,117.0 | 1,117.3 | 0.3 |
| DD | 144,255 | 85 | | 332 | 2.2 | 1,118.2 | 1,118.2 | 1,118.6 | 0.4 |

[1]Feet above confluence with Big Walnut Creek

**Table 9**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

FRANKLIN COUNTY, OHIO
AND INCORPORATED AREAS

# FLOODWAY DATA

Blacklick Creek

| FLOODING SOURCE | | FLOODWAY | | | | 1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD) | | | |
|---|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE | WIDTH (FEET) | WIDTH REDUCED FROM PRIOR STUDY | SECTION AREA (SQUARE FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE (FEET) |
| Blacklick Creek Lateral D | | | | | | | | | |
| A | 1,180[1] | 22 | | 71 | 7.0 | 847.9 | 847.9 | 847.9 | 0.0 |
| B | 1,315[1] | 15 | | 61 | 8.1 | 849.5 | 849.5 | 849.5 | 0.0 |
| C | 1,626[1] | 23 | | 69 | 7.1 | 855.9 | 855.9 | 856.1 | 0.2 |
| D | 2,032[1] | 32 | | 207 | 2.4 | 871.9 | 871.9 | 872.0 | 0.1 |
| E | 2,878.2[1] | 29 | | 77 | 3.3 | 881.8 | 881.8 | 882.0 | 0.2 |
| F | 3,828.2[1] | 51 | | 53 | 4.8 | 893.4 | 893.4 | 893.4 | 0.0 |
| Blacklick Creek Lateral G-B | | | | | | | | | |
| A | 990[2] | 25 | | 75 | 4.0 | 899.3 | 899.3 | 899.8 | 0.5 |
| B | 1,100[2] | 35 | | 1,187 | 0.3 | 912.2 | 912.2 | 912.7 | 0.5 |
| Blacklick Creek Lateral K | | | | | | | | | |
| A | 1,000[1] | 33 | | 207 | 4.4 | 853.2 | 853.2 | 853.2 | 0.0 |
| B | 1,140[1] | 19 | | 149 | 6.1 | 854.2 | 854.2 | 854.2 | 0.0 |
| C | 1,300[1] | 53 | | 211 | 4.3 | 855.1 | 855.1 | 855.2 | 0.1 |
| D | 3,490[1] | 45 | | 247 | 3.7 | 880.5 | 880.5 | 881.0 | 0.5 |
| E | 4,380[1] | 38 | | 172 | 5.2 | 886.2 | 886.2 | 886.7 | 0.5 |
| F | 4,825[1] | 38 | | 172 | 5.2 | 891.0 | 891.0 | 891.5 | 0.5 |
| G | 6,145[1] | 37 | | 191 | 4.7 | 907.6 | 907.6 | 907.6 | 0.0 |

[1]Feet above confluence with Blacklick Creek [2]Feet above confluence with French Run [3]See explanation in Section 4.2

**Table 9**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

FRANKLIN COUNTY, OHIO
AND INCORPORATED AREAS

# FLOODWAY DATA

Blacklick Creek Lateral D, Blacklick Creek Lateral G-B, Blacklick Creek Lateral K

| FLOODING SOURCE | | FLOODWAY | | | | 1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD) | | | |
|---|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE | WIDTH (FEET) | WIDTH REDUCED FROM PRIOR STUDY | SECTION AREA (SQUARE FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE (FEET) |
| Blacklick Creek Tributary C | | | | | | | | | |
| A | 2,300[1] | 34 | | 203 | 5.7 | 967.4 | 967.4 | 967.9 | 0.5 |
| B | 3,650[1] | 43 | | 199 | 5.8 | 984.3 | 984.3 | 984.8 | 0.5 |
| Blau Ditch | | | | | | | | | |
| Y | 14,400[2] | 50 | | 184 | 4.3 | 797.5 | 797.5 | 798.0 | 0.5 |
| Z | 14,900[2] | 65 | | 206 | 3.8 | 801.3 | 801.3 | 801.6 | 0.3 |
| AA | 15,505[2] | 50 | | 131 | 6.0 | 806.7 | 806.7 | 807.0 | 0.3 |
| AB | 15,805[2] | 60 | | 184 | 4.3 | 810.0 | 810.0 | 810.2 | 0.2 |
| AC | 16,500[2] | 43 | | 125 | 5.6 | 820.5 | 820.5 | 820.7 | 0.2 |
| AD | 16,900[2] | 90 | | 292 | 2.4 | 823.2 | 823.2 | 823.4 | 0.2 |
| AE | 17,810[2] | 74 | | 287 | 2.4 | 831.6 | 831.6 | 831.7 | 0.1 |
| AF | 18,200[2] | 52 | | 172 | 4.7 | 833.2 | 833.2 | 833.6 | 0.4 |
| AG | 18,700[2] | 45 | | 203 | 4.0 | 837.0 | 837.0 | 837.3 | 0.3 |

[1]Feet above confluence with Blacklick Creek [2]Feet above confluence with Scioto River

**Table 9**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

FRANKLIN COUNTY, OHIO
AND INCORPORATED AREAS

# FLOODWAY DATA

Blacklick Creek Tributary C, Blau Ditch

| FLOODING SOURCE | | FLOODWAY | | | | 1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD) | | | |
|---|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE | WIDTH (FEET) | WIDTH REDUCED FROM PRIOR STUDY | SECTION AREA (SQUARE FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE (FEET) |
| Brown Run | | | | | | | | | |
| A | 2.600[1] | 33 | | 137 | 4.8 | 805.4 | 805.4 | 805.5 | 0.1 |
| B | 2.714[1] | 40 | | 98 | 6.7 | 808.7 | 808.7 | 808.7 | 0.0 |
| C | 2.760[1] | 68 | | 285 | 2.3 | 814.8 | 814.8 | 814.8 | 0.0 |
| D | 2.903[1] | 37 | | 98 | 6.8 | 816.6 | 816.6 | 816.6 | 0.0 |
| E | 2.942[1] | 52 | | 193 | 3.1 | 821.1 | 821.1 | 821.4 | 0.3 |
| F | 3.214[1] | 115 | 91[3] | 135 | 4.0 | 824.8 | 824.8 | 824.8 | 0.0 |
| G | 3.388[1] | 51 | | 124 | 4.4 | 828.4 | 828.4 | 828.9 | 0.5 |
| H | 3.425[1] | 57 | | 184 | 2.8 | 830.1 | 830.1 | 830.6 | 0.5 |
| I | 3.537[1] | 34 | | 85 | 6.0 | 831.9 | 831.9 | 831.9 | 0.0 |
| J | 3.576[1] | 110 | | 297 | 1.6 | 834.8 | 834.8 | 835.2 | 0.4 |
| K | 3.748[1] | 33 | | 71 | 6.8 | 836.8 | 836.8 | 836.8 | 0.0 |
| L | 3.788[1] | 80 | 40[3] | 280 | 1.6 | 839.8 | 839.8 | 840.3 | 0.5 |
| M | 3.923[1] | 51 | | 157 | 2.8 | 840.3 | 840.3 | 840.8 | 0.5 |
| N-S* | | | | | | | | | |
| Bush Ditch | | | | | | | | | |
| J | 1.865[1] | 140 | | 484 | 3.7 | 760.4 | 760.4 | 760.9 | 0.5 |
| K | 1.901[2] | 170 | | 990 | 1.8 | 763.6 | 763.6 | 764.6 | 1.0 |
| L | 1.994[2] | 170 | | 864 | 2.1 | 763.7 | 763.7 | 764.7 | 1.0 |
| M | 2.072[2] | 170 | | 748 | 2.4 | 763.8 | 763.8 | 764.8 | 1.0 |

[1]Miles above confluence with Scioto Big Run [2]Miles above confluence with Little Walnut Creek [3]See explanation in Section 4.2 *No floodway data computed

**Table 9**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

FRANKLIN COUNTY, OHIO
AND INCORPORATED AREAS

# FLOODWAY DATA

Brown Run, Bush Ditch

| FLOODING SOURCE | | FLOODWAY | | | | 1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD) | | | |
|---|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE [1] | WIDTH (FEET) | WIDTH REDUCED FROM PRIOR STUDY | SECTION AREA (SQUARE FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE (FEET) |
| Clover Groff Ditch | | | | | | | | | |
| A | 0.157 | 550 | | 703 | 4.6 | 902.6 | 902.6 | 902.9 | 0.3 |
| B | 0.335 | 641 | | 2,219 | 1.5 | 902.7 | 902.7 | 903.2 | 0.5 |
| C | 0.826 | 577 | | 3,092 | 1.1 | 908.2 | 908.2 | 908.5 | 0.3 |
| D | 1.096 | 233 | | 1,025 | 3.2 | 909.1 | 909.1 | 909.6 | 0.5 |
| E | 1.499 | 108 | | 517 | 6.3 | 912.2 | 912.2 | 912.6 | 0.4 |
| F | 1.728 | 222 | | 1,990 | 1.6 | 922.9 | 922.9 | 923.2 | 0.3 |
| G | 2.010 | 232 | | 1,801 | 1.8 | 922.9 | 922.9 | 923.4 | 0.5 |
| H | 2.116 | 340 | | 1,939 | 1.7 | 923.0 | 923.0 | 923.5 | 0.5 |
| I | 2.193 | 294 | | 1,982 | 1.6 | 923.0 | 923.0 | 923.5 | 0.5 |
| J | 2.285 | 256 | | 1,569 | 2.1 | 923.1 | 923.1 | 923.6 | 0.5 |
| K | 2.366 | 243 | | 1,601 | 2.0 | 923.2 | 923.2 | 923.7 | 0.5 |
| L | 2.402 | 207 | | 1,433 | 2.3 | 923.3 | 923.3 | 923.8 | 0.5 |
| M | 2.449 | 119 | | 761 | 4.3 | 923.4 | 923.4 | 923.9 | 0.5 |
| N | 2.531 | 225 | | 1,180 | 2.8 | 826.1 | 926.1 | 926.2 | 0.1 |
| O | 2.641 | 287 | | 1,249 | 2.6 | 927.6 | 927.6 | 927.7 | 0.1 |
| P | 3.132 | 170 | | 666 | 1.0 | 928.2 | 928.2 | 928.7 | 0.5 |
| Q | 3.359 | 129 | | 551 | 1.2 | 928.8 | 928.8 | 929.3 | 0.5 |
| R | 3.664 | 114 | | 381 | 1.5 | 929.0 | 929.0 | 929.5 | 0.5 |
| S | 4.040 | 104 | | 385 | 1.5 | 929.5 | 929.5 | 930.0 | 0.5 |
| T | 4.341 | 69 | | 310 | 1.5 | 929.8 | 929.8 | 930.2 | 0.4 |
| U | 4.588 | 85 | | 255 | 1.8 | 930.9 | 930.9 | 931.1 | 0.2 |
| V | 4.812 | 35 | | 172 | 2.7 | 932.9 | 932.9 | 933.0 | 0.1 |
| W | 5.246 | 62 | | 156 | 2.3 | 934.1 | 934.1 | 934.5 | 0.4 |
| X | 5.646 | 200 | | 339 | 1.1 | 934.8 | 934.8 | 935.3 | 0.5 |
| Y | 5.910 | 575 | | 898 | 0.4 | 935.0 | 935.0 | 935.5 | 0.5 |
| Z | 6320 | 84 | 53[2] | 177 | 2.0 | 935.8 | 935.8 | 936.3 | 0.5 |

[1]Miles above confluence with Hellbranch Run [2]See explanation in Section 4.2

**Table 9**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

FRANKLIN COUNTY, OHIO
AND INCORPORATED AREAS

# FLOODWAY DATA

Clover Groff Ditch

| FLOODING SOURCE | | FLOODWAY | | | | 1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD) | | | |
|---|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE | WIDTH (FEET) | WIDTH REDUCED FROM PRIOR STUDY | SECTION AREA (SQUARE FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE (FEET) |
| Clover Groff Ditch[1] | | | | | | | | | |
| AA | 6.750 | 390 | | 497 | 0.7 | 936.5 | 936.5 | 937.0 | 0.5 |
| AB | 7.276 | 62 | | 129 | 2.7 | 938.1 | 938.1 | 938.4 | 0.3 |
| AC | 7.741 | 250 | | 565 | 0.6 | 940.5 | 940.5 | 940.8 | 0.3 |
| AD | 7.945 | 163 | | 144 | 1.5 | 940.7 | 940.7 | 941.0 | 0.3 |
| AE | 8.040 | 29 | | 80 | 2.6 | 941.1 | 941.1 | 941.4 | 0.3 |
| AF | 8.512 | 85 | | 358 | 0.7 | 946.0 | 946.0 | 946.0 | 0.0 |
| Coble-Bowman Ditch[2] | | | | | | | | | |
| A | 3,150 | 169 | | 696 | 2.1 | 741.0 | 741.0 | 741.5 | 0.5 |
| B | 6,487 | 240 | | 1,108 | 1.0 | 745.8 | 745.8 | 745.9 | 0.1 |
| C | 9,107 | 85 | | 182 | 2.1 | 746.6 | 746.6 | 746.9 | 0.3 |
| D | 9,997 | 110 | | 344 | 1.1 | 747.3 | 747.3 | 747.6 | 0.3 |
| E | 10,687 | 30 | | 60 | 2.8 | 748.0 | 748.0 | 748.1 | 0.1 |
| F | 12,035 | 68 | | 182 | 0.7 | 751.4 | 751.4 | 751.8 | 0.4 |
| G | 13,251 | 21 | | 47 | 5.5 | 752.2 | 752.2 | 752.7 | 0.5 |
| H | 13,801 | 32 | | 84 | 3.1 | 755.5 | 755.5 | 755.7 | 0.2 |
| I | 15,149 | 80 | | 161 | 1.6 | 758.3 | 758.3 | 758.7 | 0.4 |
| Cosgray Ditch[3] | | | | | | | | | |
| A | 1,255 | 42 | | 103 | 8.8 | 803.2 | 803.2 | 803.2 | 0.0 |
| B | 1,778 | 69 | | 178 | 5.1 | 814.0 | 814.0 | 814.1 | 0.1 |
| C | 2,523 | 36 | | 124 | 7.4 | 834.8 | 834.8 | 835.1 | 0.3 |
| D | 3,300 | 51 | | 112 | 8.2 | 846.2 | 846.2 | 846.2 | 0.0 |
| E | 4,300 | 63 | | 277 | 3.3 | 857.8 | 857.8 | 858.2 | 0.4 |
| F | 5,300 | 99 | | 457 | 2.0 | 868.9 | 868.9 | 869.2 | 0.3 |
| G | 6,598 | 62 | | 203 | 4.5 | 877.4 | 877.4 | 877.9 | 0.5 |
| H | 7,700 | 24 | | 133 | 4.9 | 884.8 | 884.8 | 885.1 | 0.3 |
| I | 9,388 | 92 | | 286 | 2.6 | 895.3 | 895.3 | 895.5 | 0.2 |
| J | 10,200 | 85 | | 253 | 2.9 | 898.9 | 898.9 | 899.2 | 0.3 |

[1]Miles above confluence with Hellbranch Run [2]Feet above confluence with Blacklick Creek [3]Feet above confluence with Scioto River

**Table 9**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

FRANKLIN COUNTY, OHIO
AND INCORPORATED AREAS

# FLOODWAY DATA

Clover Groff Ditch, Coble-Bowman Ditch, Cosgray Ditch

| FLOODING SOURCE | | FLOODWAY | | | | 1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD) | | | |
|---|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE [1] | WIDTH (FEET) | WIDTH REDUCED FROM PRIOR STUDY | SECTION AREA (SQUARE FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE (FEET) |
| Cosgray Ditch | | | | | | | | | |
| K | 12,200 | 41 | | 115 | 6.4 | 909.0 | 909.0 | 909.0 | 0.0 |
| L | 13,502 | 49 | | 160 | 3.4 | 915.4 | 915.4 | 915.8 | 0.4 |
| M | 14,610 | 150 | | 288 | 1.9 | 918.7 | 918.7 | 918.9 | 0.2 |
| N | 15,223 | 165 | 57[2] | 302 | 1.8 | 920.4 | 920.4 | 920.8 | 0.4 |
| Cramer Ditch | | | | | | | | | |
| A | 648 | 26 | | 90 | 10.6 | 823.7 | 823.7 | 823.7 | 0.0 |
| B | 900 | 33 | | 132 | 7.2 | 829.7 | 829.7 | 830.2 | 0.5 |
| C | 1,300 | 35 | | 114 | 8.3 | 837.5 | 837.5 | 837.5 | 0.0 |
| D | 2,000 | 27 | | 117 | 8.1 | 851.3 | 851.3 | 851.5 | 0.2 |
| E | 3,050 | 82 | | 323 | 2.9 | 863.7 | 863.7 | 863.7 | 0.0 |
| F | 4,000 | 72 | | 202 | 4.1 | 869.8 | 869.8 | 870.0 | 0.2 |
| G | 4,830 | 170 | | 546 | 1.5 | 875.3 | 875.3 | 875.6 | 0.3 |
| H | 5,786 | 126 | | 414 | 2.0 | 880.1 | 880.1 | 880.2 | 0.1 |
| I | 6,407 | 89 | | 255 | 3.2 | 883.0 | 883.0 | 883.3 | 0.3 |
| J | 7,700 | 109 | | 336 | 1.9 | 892.8 | 892.8 | 893.0 | 0.2 |
| K | 8,400 | 56 | | 169 | 3.7 | 895.9 | 895.9 | 896.3 | 0.4 |
| L | 8,977 | 100 | | 538 | 1.2 | 903.2 | 903.2 | 903.6 | 0.4 |
| M | 10,255 | 55 | | 153 | 4.2 | 908.1 | 908.1 | 908.1 | 0.0 |
| N | 11,175 | 100 | | 236 | 2.7 | 912.4 | 912.4 | 912.4 | 0.0 |
| O | 11,632 | 21 | | 94 | 4.4 | 913.1 | 913.1 | 913.4 | 0.3 |
| P | 12,666 | 40 | | 116 | 3.5 | 915.7 | 915.7 | 916.1 | 0.4 |
| Q | 13,564 | 69 | | 170 | 2.4 | 919.3 | 919.3 | 919.4 | 0.1 |

[1]Feet above confluence with Scioto River [2]See explanation in Section 4.2

**Table 9**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

FRANKLIN COUNTY, OHIO
AND INCORPORATED AREAS

# FLOODWAY DATA

Cramer Ditch

| FLOODING SOURCE | | FLOODWAY | | | | 1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD) | | | |
|---|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE [1] | WIDTH (FEET) | WIDTH REDUCED FROM PRIOR STUDY | SECTION AREA (SQUARE FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE (FEET) |
| Dry Run | | | | | | | | | |
| A | 2,003 | 150 | | 2,231 | 1.0 | 740.6 | 740.6 | 740.7 | 0.1 |
| B | 2,371 | 195 | | 2,149 | 1.5 | 740.6 | 740.6 | 740.7 | 0.1 |
| C | 2,701 | 189 | | 2,408 | 1.4 | 740.7 | 740.7 | 740.8 | 0.1 |
| D | 3,555 | 71 | | 905 | 3.7 | 746.4 | 746.4 | 746.5 | 0.1 |
| E | 4,400 | 350 | | 3,683 | 0.8 | 746.9 | 746.9 | 747.3 | 0.4 |
| F | 5,000 | 205 | | 1,233 | 2.5 | 746.9 | 746.9 | 747.4 | 0.5 |
| G | 5,700 | 52 | | 423 | 7.3 | 749.1 | 749.1 | 749.4 | 0.3 |
| H | 5,900 | 54 | | 475 | 6.5 | 749.9 | 749.9 | 750.3 | 0.4 |
| I | 6,940 | 243 | | 1,453 | 2.1 | 759.2 | 759.2 | 759.2 | 0.0 |
| J | 7,740 | 114 | | 535 | 5.8 | 761.5 | 761.5 | 761.6 | 0.1 |
| K | 8,300 | 90 | | 855 | 3.6 | 770.3 | 770.3 | 770.3 | 0.0 |
| L | 8,750 | 165 | | 1,241 | 1.3 | 770.9 | 770.9 | 771.1 | 0.2 |
| M | 9,400 | 140 | | 523 | 3.1 | 771.1 | 771.1 | 771.5 | 0.4 |
| N | 9,800 | 80 | | 321 | 5.0 | 773.3 | 773.3 | 773.3 | 0.0 |
| O | 10,110 | 68 | | 178 | 8.9 | 775.9 | 775.9 | 775.9 | 0.0 |
| P | 10,350 | 135 | | 388 | 4.1 | 778.7 | 778.7 | 779.2 | 0.5 |
| Q | 10,556 | 41 | | 329 | 4.8 | 785.5 | 785.5 | 786.0 | 0.5 |
| R | 10,855 | 148 | | 1,181 | 1.3 | 786.6 | 786.6 | 787.0 | 0.4 |
| S | 11,200 | 105 | | 734 | 2.2 | 786.7 | 786.7 | 787.1 | 0.4 |
| T | 11,700 | 39 | | 238 | 6.1 | 786.9 | 786.9 | 787.3 | 0.4 |
| U | 12,130 | 109 | | 423 | 3.4 | 789.5 | 789.5 | 790.0 | 0.5 |
| V | 12,585 | 130 | | 541 | 2.7 | 791.1 | 791.1 | 791.1 | 0.0 |
| W | 12,735 | 130 | | 536 | 2.7 | 791.3 | 791.3 | 791.8 | 0.5 |
| X | 14,000 | 33 | | 214 | 6.8 | 794.8 | 794.8 | 795.2 | 0.4 |

[1] Feet above confluence with Scioto River

| FLOODING SOURCE | | FLOODWAY | | | | 1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD) | | | |
|---|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE | WIDTH (FEET) | WIDTH REDUCED FROM PRIOR STUDY | SECTION AREA (SQUARE FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE (FEET) |
| Dysar Ditch | | | | | | | | | |
| A | 1,430[1] | 174 | | 757 | 2.6 | 874.5 | 874.5 | 875.0 | 0.5 |
| B | 1,540[1] | 190 | | 946 | 2.1 | 876.1 | 876.1 | 876.6 | 0.5 |
| C | 2,480[1] | 173 | | 660 | 3.0 | 881.9 | 881.9 | 882.4 | 0.5 |
| D | 3,240[1] | 156 | 43[4] | 551 | 3.6 | 884.4 | 884.4 | 884.9 | 0.5 |
| E | 4,715[1] | 58 | | 243 | 8.2 | 894.8 | 894.8 | 895.3 | 0.5 |
| Early Run | | | | | | | | | |
| A | 0.194[2] | 76 | | 374 | 4.8 | 730.4 | 727.0[3] | 727.1 | 0.1 |
| B | 0.333[2] | 82 | | 569 | 3.2 | 733.4 | 733.4 | 733.4 | 0.0 |
| C | 0.447[2] | 69 | | 306 | 5.9 | 734.7 | 734.7 | 734.8 | 0.1 |
| D | 0.713[2] | 88 | | 382 | 4.7 | 740.4 | 740.4 | 740.6 | 0.2 |
| E | 0.906[2] | 160 | | 531 | 3.4 | 743.2 | 743.2 | 743.6 | 0.4 |
| F | 1.244[2] | 75 | | 347 | 3.5 | 749.4 | 749.4 | 749.4 | 0.0 |
| G | 1.526[2] | 32 | | 222 | 5.4 | 754.7 | 754.7 | 755.0 | 0.3 |
| H | 1.579[2] | 86 | | 407 | 2.9 | 756.4 | 756.4 | 756.6 | 0.2 |
| I | 1.805[2] | 59 | | 313 | 3.8 | 761.4 | 761.4 | 761.5 | 0.1 |
| J | 1.900[2] | 91 | | 558 | 2.2 | 763.2 | 763.2 | 763.4 | 0.2 |
| K | 1.955[2] | 83 | | 371 | 3.2 | 763.2 | 763.2 | 763.4 | 0.2 |
| L | 2.031[2] | 150 | | 256 | 4.7 | 764.2 | 764.2 | 764.6 | 0.4 |

[1]Feet above confluence with Blacklick Creek [2]Miles above confluence with Scioto Big Run [3]Elevation without considering backwater effect from Scioto Big Run [4]See explanation in Section 4.2

**Table 9**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

FRANKLIN COUNTY, OHIO
AND INCORPORATED AREAS

# FLOODWAY DATA

Dysar Ditch, Early Run

| FLOODING SOURCE | | FLOODWAY | | | | 1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD) | | | |
|---|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE | WIDTH (FEET) | WIDTH REDUCED FROM PRIOR STUDY | SECTION AREA (SQUARE FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE (FEET) |
| Faust County Ditch | | | | | | | | | |
| R | 4.958[1] | 380 | | 1,004 | 0.9 | 934.0 | 934.0 | 934.0 | 0.0 |
| S | 5.174[1] | 112 | | 319 | 2.2 | 935.5 | 935.5 | 935.5 | 0.0 |
| T | 5.435[1] | 340 | | 1,050 | 0.7 | 935.8 | 935.8 | 935.9 | 0.1 |
| U | 5.726[1] | 230 | | 590 | 1.2 | 936.1 | 936.1 | 936.3 | 0.2 |
| V | 6.101[1] | 339 | | 512 | 1.4 | 937.1 | 937.1 | 937.3 | 0.2 |
| W | 6.350[1] | 112 | | 336 | 2.1 | 940.0 | 940.0 | 940.2 | 0.2 |
| French Run | | | | | | | | | |
| A | 325[2] | 163 | 126[4] | 978 | 2.8 | 859.9 | 859.9 | 860.4 | 0.5 |
| B | 375[2] | 163 | 91[4] | 978 | 2.8 | 860.7 | 860.7 | 861.2 | 0.5 |
| C | 1,560[2] | 124 | | 687 | 3.9 | 865.5 | 865.5 | 866.0 | 0.5 |
| D | 3,050[2] | 93 | | 447 | 3.4 | 873.0 | 873.0 | 873.5 | 0.5 |
| E | 4,375[2] | 76 | | 426 | 3.5 | 883.0 | 883.0 | 883.5 | 0.5 |
| F | 5,875[2] | 102 | | 390 | 3.8 | 891.4 | 891.4 | 891.9 | 0.5 |
| G | 7,375[2] | 97 | | 386 | 3.9 | 898.9 | 898.9 | 899.4 | 0.5 |
| French Run (Lateral G-A) | | | | | | | | | |
| A | 390[3] | 50 | | 139 | 8.6 | 873.5 | 873.5 | 874.0 | 0.5 |
| B | 1,000[3] | 39 | | 192 | 6.2 | 878.1 | 878.1 | 878.6 | 0.5 |
| C | 1,280[3] | 50 | | 262 | 4.5 | 881.1 | 881.1 | 881.6 | 0.5 |
| D | 2,900[3] | 89 | 36[4] | 196 | 6.1 | 901.2 | 901.2 | 901.7 | 0.5 |
| E | 6,140[3] | 60 | | 239 | 4.3 | 950.3 | 950.3 | 950.8 | 0.5 |
| F | 6,300[3] | 142 | | 1,601 | 0.6 | 963.8 | 963.8 | 964.3 | 0.5 |

[1] Miles above confluence with Scioto River [2] Feet above confluence with Blacklick Creek [3] Feet above confluence with French Run [4] See explanation in Section 4.2

**Table 9**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

FRANKLIN COUNTY, OHIO
AND INCORPORATED AREAS

# FLOODWAY DATA

Faust County Ditch, French Run, French Run Lateral G-A

| FLOODING SOURCE | | FLOODWAY | | | | 1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD) | | | |
|---|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE [1] | WIDTH (FEET) | WIDTH REDUCED FROM PRIOR STUDY | SECTION AREA (SQUARE FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE (FEET) |
| Georges Creek | | | | | | | | | |
| A | 2,130[1] | 251 | | 722 | 1.7 | 739.4 | 735.7[3] | 736.1 | 0.4 |
| B | 4,338[1] | 205 | | 1,864 | 0.7 | 748.3 | 748.3 | 748.3 | 0.0 |
| C | 5,608[1] | 200 | | 1,572 | 3.3 | 748.4 | 748.4 | 748.4 | 0.0 |
| D | 6,938[1] | 165 | | 1,021 | 5.0 | 749.6 | 749.6 | 749.9 | 0.3 |
| E | 7,888[1] | 427 | | 1,550 | 3.3 | 751.2 | 751.2 | 751.5 | 0.3 |
| F | 9,632[1] | 380 | | 1,723 | 2.5 | 754.2 | 754.2 | 754.4 | 0.2 |
| G | 10,667[1] | 485 | | 1,579 | 2.7 | 755.1 | 755.1 | 755.3 | 0.2 |
| H | 12,210[1] | 650 | | 2,727 | 0.5 | 757.7 | 757.7 | 757.8 | 0.1 |
| I | 13,355[1] | 530 | | 1,576 | 0.9 | 757.8 | 757.8 | 757.9 | 0.1 |
| J | 14,270[1] | 121 | | 213 | 6.5 | 759.2 | 759.2 | 759.2 | 0.0 |
| K | 15,260[1] | 188 | | 487 | 2.8 | 762.3 | 762.3 | 762.5 | 0.2 |
| L | 16,130[1] | 160 | | 447 | 3.1 | 763.3 | 763.3 | 763.6 | 0.3 |
| M | 17,220[1] | 212 | | 704 | 1.3 | 764.2 | 764.2 | 764.5 | 0.3 |
| N | 18,410[1] | 58 | | 286 | 3.2 | 764.7 | 764.7 | 765.0 | 0.3 |
| O | 19,445[1] | 358 | | 1,601 | 0.6 | 765.0 | 765.0 | 765.2 | 0.2 |
| P | 20,520[1] | 30 | | 143 | 6.5 | 765.0 | 765.0 | 765.1 | 0.1 |
| Q | 22,879[1] | 58 | | 304 | 3.0 | 771.6 | 771.6 | 771.6 | 0.0 |
| R | 24,458[1] | 200 | | 818 | 2.1 | 775.9 | 775.9 | 776.3 | 0.4 |
| S | 25,448[1] | 166 | | 656 | 2.6 | 776.3 | 776.3 | 776.6 | 0.3 |
| T | 26,313[1] | 303 | | 1,035 | 1.8 | 776.7 | 776.7 | 776.9 | 0.2 |
| U | 5.381[2] | 368 | | 1,655 | 1.7 | 778.9 | 778.9 | 779.3 | 0.4 |
| V | 5.499[2] | 282 | | 1,058 | 2.6 | 779.1 | 779.1 | 779.5 | 0.4 |
| W | 5.730[2] | 246 | | 606 | 4.5 | 780.4 | 780.4 | 780.8 | 0.4 |
| X | 5.896[2] | 388 | | 1,075 | 2.6 | 782.8 | 782.8 | 783.3 | 0.5 |
| Y | 6.131[2] | 346 | | 788 | 3.6 | 784.8 | 784.8 | 785.2 | 0.4 |
| Z | 6.308[2] | 209 | | 462 | 6.1 | 787.5 | 787.5 | 787.5 | 0.0 |

[1]Feet above confluence with Little Walnut Creek [2]Miles above confluence with Little Walnut Creek [3]Elevation without considering backwater effect from Little Walnut Creek

**Table 9**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

FRANKLIN COUNTY, OHIO
AND INCORPORATED AREAS

# FLOODWAY DATA

Georges Creek

| FLOODING SOURCE | | FLOODWAY | | | | 1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD) | | | |
|---|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE | WIDTH (FEET) | WIDTH REDUCED FROM PRIOR STUDY | SECTION AREA (SQUARE FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE (FEET) |
| Georges Creek | | | | | | | | | |
| AA | 6.491[1] | 533 | | 1,468 | 1.9 | 789.7 | 789.7 | 790.2 | 0.5 |
| AB | 6.678[1] | 784 | | 744 | 3.8 | 792.1 | 792.1 | 792.2 | 0.1 |
| AC | 6.996[1] | 465 | | 868 | 3.2 | 796.2 | 796.2 | 796.6 | 0.4 |
| AD | 7.197[1] | 364 | | 649 | 4.3 | 801.4 | 801.4 | 801.5 | 0.1 |
| AE | 7.316[1] | 300 | | 524 | 5.3 | 805.7 | 805.7 | 805.7 | 0.0 |
| Grant Run | | | | | | | | | |
| A | 0.430[2] | 394 | | 2,164 | 2.7 | 696.9 | 690.7[3] | 691.2 | 0.5 |
| B | 0.712[2] | 281 | | 1,575 | 3.8 | 697.2 | 694.3[3] | 694.7 | 0.4 |
| C | 1.202[2] | 389 | | 2,474 | 2.3 | 703.2 | 703.2 | 703.7 | 0.5 |
| D | 1.366[2] | 112 | | 661 | 5.8 | 704.8 | 704.8 | 705.2 | 0.4 |
| E | 1.882[2] | 334 | | 1,715 | 2.2 | 715.2 | 715.2 | 715.7 | 0.5 |
| F | 2.254[2] | 45 | | 280 | 13.6 | 725.6 | 725.6 | 725.6 | 0.0 |
| G | 2.542[2] | 283 | | 1,415 | 2.2 | 735.2 | 735.2 | 735.7 | 0.5 |
| H | 2.852[2] | 165 | | 354 | 7.1 | 743.3 | 743.3 | 743.3 | 0.0 |
| I | 3.071[2] | 221 | | 726 | 3.4 | 751.4 | 751.4 | 751.9 | 0.5 |
| J | 3.287[2] | 109 | | 713 | 2.3 | 761.3 | 761.3 | 761.3 | 0.0 |
| K | 3.628[2] | 101 | | 200 | 8.1 | 771.1 | 771.1 | 771.1 | 0.0 |
| L | 4.073[2] | 80 | | 392 | 4.1 | 787.7 | 787.7 | 787.7 | 0.0 |
| M | 4.708[2] | 95 | | 649 | 2.0 | 804.0 | 804.0 | 804.0 | 0.0 |
| N | 4.751[2] | 62 | | 349 | 3.7 | 804.0 | 804.0 | 804.3 | 0.3 |
| O | 4.823[2] | 155 | | 486 | 2.7 | 804.2 | 804.2 | 804.7 | 0.5 |
| P | 4.895[2] | 46 | | 161 | 8.1 | 605.9 | 805.9 | 805.9 | 0.0 |

[1]Miles above confluence with Little Walnut Creek [2]Miles above confluence with Scioto River [3]Elevation without considering backwater effect from Scioto River

**Table 9**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

FRANKLIN COUNTY, OHIO
AND INCORPORATED AREAS

# FLOODWAY DATA

Georges Creek, Grant Run

| FLOODING SOURCE | | FLOODWAY | | | | 1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD) | | | |
|---|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE | WIDTH (FEET) | WIDTH REDUCED FROM PRIOR STUDY | SECTION AREA (SQUARE FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE (FEET) |
| Grove City Creek 1[1] | | | | | | | | | |
| A | 0.060 | 661 | | 2,606 | 1.3 | 698.1 | 691.4[2] | 691.9 | 0.5 |
| B | 0.500 | 365 | | 1,327 | 2.6 | 699.7 | 699.0[2] | 699.5 | 0.5 |
| C | 0.815 | 404 | | 1,001 | 3.5 | 708.5 | 708.5 | 709.0 | 0.5 |
| D | 1.124 | 333 | | 659 | 4.6 | 718.9 | 718.9 | 718.9 | 0.0 |
| E | 1.565 | 155 | | 724 | 4.2 | 734.7 | 734.7 | 734.7 | 0.0 |
| F | 1.860 | 156 | | 606 | 5.0 | 739.6 | 739.6 | 740.0 | 0.4 |
| G | 2.071 | 90 | | 406 | 7.5 | 745.2 | 745.2 | 745.3 | 0.1 |
| Grove City Creek 2[2] | | | | | | | | | |
| A | 0.040 | 90 | | 553 | 3.6 | 749.6 | 749.6 | 750.1 | 0.5 |
| B | 0.171 | 110 | | 1,644 | 1.2 | 766.6 | 766.6 | 766.6 | 0.0 |
| C | 0.240 | 148 | | 1,224 | 1.6 | 766.5 | 766.5 | 766.5 | 0.0 |
| D | 0.395 | 70 | | 273 | 7.3 | 766.5 | 766.5 | 766.5 | 0.0 |
| E | 0.551 | 69 | | 341 | 5.8 | 771.7 | 771.7 | 771.8 | 0.1 |
| F | 0.651 | 54 | | 280 | 7.1 | 774.2 | 774.2 | 774.2 | 0.0 |
| G | 0.839 | 65 | | 919 | 2.2 | 787.0 | 787.0 | 787.3 | 0.3 |
| H | 1.071 | 90 | | 250 | 7.9 | 791.0 | 791.0 | 791.1 | 0.1 |
| I | 1.120 | 52 | | 217 | 9.1 | 794.8 | 794.8 | 794.8 | 0.0 |
| J | 1.332 | 43 | | 207 | 9.6 | 800.3 | 800.3 | 800.3 | 0.0 |
| K | 1.464 | 40 | | 169 | 11.7 | 803.1 | 803.1 | 803.1 | 0.0 |
| L | 1.719 | 100 | | 586 | 3.4 | 818.5 | 818.5 | 818.9 | 0.4 |
| M | 1.947 | 90 | 64[3] | 266 | 7.5 | 820.1 | 820.1 | 820.3 | 0.2 |
| N | 2.017 | 150 | 96[3] | 469 | 4.2 | 822.3 | 822.3 | 822.3 | 0.0 |
| O | 2.091 | 350 | 231[3] | 372 | 5.3 | 825.4 | 825.4 | 825.8 | 0.4 |
| P | 2.242 | 200 | | 546 | 2.4 | 830.5 | 830.5 | 830.8 | 0.3 |
| Q | 2.289 | 90 | | 316 | 4.2 | 830.9 | 830.9 | 831.1 | 0.2 |

[1]Miles above confluence with Scioto River [2]Miles above confluence with Grove City Creek 1 [3]See explanation in Section 4.2

**Table 9**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

FRANKLIN COUNTY, OHIO
AND INCORPORATED AREAS

# FLOODWAY DATA

Grove City Creek 1, Grove City Creek 2

| FLOODING SOURCE | | FLOODWAY | | | | 1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD) | | | |
|---|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE | WIDTH (FEET) | WIDTH REDUCED FROM PRIOR STUDY | SECTION AREA (SQUARE FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE (FEET) |
| Haines Ditch | | | | | | | | | |
| A | 1,585[1] | 96 | 37[3] | 721 | 1.6 | 1,079.2 | 1,079.2 | 1,079.7 | 0.5 |
| B | 2,525[1] | 83 | | 271 | 4.4 | 1,087.0 | 1,087.0 | 1,087.5 | 0.5 |
| C | 3,700[1] | 69 | | 277 | 4.3 | 1,100.0 | 1,100.0 | 1,100.5 | 0.5 |
| D | 4,600[1] | 80 | | 293 | 4.0 | 1,106.7 | 1,106.7 | 1,107.2 | 0.5 |
| Hamilton Ditch | | | | | | | | | |
| A | 0.210[2] | 248 | | 879 | 3.1 | 903.3 | 903.3 | 903.8 | 0.5 |
| B | 0.351[2] | 119 | | 529 | 5.1 | 904.3 | 904.3 | 904.5 | 0.2 |
| C | 0.458[2] | 171 | | 920 | 2.9 | 907.0 | 907.0 | 907.3 | 0.3 |
| D | 0.604[2] | 281 | | 2,658 | 1.0 | 912.8 | 912.8 | 912.8 | 0.0 |
| E | 0.823[2] | 225 | | 1,500 | 1.8 | 912.9 | 912.9 | 912.9 | 0.0 |
| F | 1.265[2] | 278 | | 1,365 | 1.6 | 914.7 | 914.7 | 915.2 | 0.5 |
| G | 1.600[2] | 159 | | 900 | 2.4 | 918.7 | 918.7 | 919.0 | 0.3 |
| H | 2.005[2] | 125 | | 669 | 3.2 | 921.4 | 921.4 | 921.5 | 0.1 |
| I | 2.572[2] | 69 | | 387 | 4.0 | 924.5 | 924.5 | 924.9 | 0.4 |
| J | 3.287[2] | 206 | | 536 | 2.9 | 932.5 | 932.5 | 933.0 | 0.5 |
| K | 3.589[2] | 240 | | 519 | 2.3 | 934.6 | 934.6 | 935.1 | 0.5 |
| L | 4.015[2] | 412 | | 1,591 | 0.7 | 936.2 | 936.2 | 936.7 | 0.5 |
| M | 4.159[2] | 914 | | 1,591 | 0.7 | 936.2 | 936.2 | 936.7 | 0.5 |
| N | 4.538[2] | 398 | | 994 | 1.2 | 936.5 | 936.5 | 937.0 | 0.5 |
| O | 4.796[2] | 129 | | 296 | 4.0 | 938.8 | 938.8 | 939.0 | 0.2 |
| P | 4.843[2] | 183 | | 661 | 1.8 | 939.1 | 939.1 | 939.6 | 0.5 |
| Q | 5.172[2] | 717 | | 1,661 | 0.7 | 939.4 | 939.4 | 939.9 | 0.5 |
| R | 5.355[2] | 499 | | 1,656 | 0.7 | 939.7 | 939.7 | 940.2 | 0.5 |
| S | 5.574[2] | 837 | | 1,626 | 0.7 | 939.8 | 939.8 | 940.3 | 0.5 |

[1]Feet above confluence with Blacklick Creek [2]Miles above confluence with Hellbranch Run [3]See explanation in Section 4.2

**Table 9**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

FRANKLIN COUNTY, OHIO
AND INCORPORATED AREAS

# FLOODWAY DATA

Haines Ditch, Hamilton Ditch

| FLOODING SOURCE | | FLOODWAY | | | | 1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD) | | | |
|---|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE [1] | WIDTH (FEET) | WIDTH REDUCED FROM PRIOR STUDY | SECTION AREA (SQUARE FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE (FEET) |
| Hayden Run | | | | | | | | | |
| A | 0.020 | 164 | | 1,548 | 2.4 | 771.5 | 761.5[2] | 761.9 | 0.4 |
| B | 0.156 | 57 | | 290 | 12.9 | 806.4 | 806.4 | 806.4 | 0.0 |
| C | 0.264 | 75 | | 599 | 6.3 | 817.2 | 817.2 | 817.2 | 0.0 |
| D | 0.461 | 286 | | 1,338 | 2.8 | 832.9 | 832.9 | 833.1 | 0.2 |
| E | 0.637 | 160 | | 623 | 6.0 | 841.7 | 841.7 | 841.7 | 0.0 |
| F | 1.030 | 149 | | 741 | 5.1 | 857.5 | 857.5 | 857.9 | 0.4 |
| G | 1.213 | 141 | | 921 | 4.1 | 865.5 | 865.5 | 865.5 | 0.0 |
| H | 1.266 | 84 | | 438 | 8.6 | 865.7 | 865.7 | 865.7 | 0.0 |
| I | 1.419 | 80 | | 575 | 6.5 | 873.1 | 873.1 | 873.1 | 0.0 |
| J | 1.474 | 240 | | 1,179 | 3.2 | 874.5 | 874.5 | 874.7 | 0.2 |
| K | 1.827 | 263 | 40[3] | 475 | 6.1 | 879.1 | 879.1 | 879.1 | 0.0 |
| L | 2.790 | 220 | | 1,287 | 2.3 | 902.7 | 902.7 | 903.0 | 0.3 |
| M | 2.863 | 182 | | 1,257 | 2.3 | 903.3 | 903.3 | 903.7 | 0.4 |
| N | 3.168 | 130 | | 554 | 1.9 | 906.4 | 906.4 | 906.9 | 0.5 |
| O | 3.266 | 122 | | 511 | 2.0 | 908.6 | 908.6 | 908.6 | 0.0 |
| P | 3.689 | 129 | | 596 | 1.6 | 914.4 | 914.4 | 914.5 | 0.1 |
| Q | 4.545 | 75 | | 123 | 7.6 | 927.1 | 927.1 | 927.1 | 0.0 |

[1]Miles above confluence with Scioto River [2]Elevation without considering backwater effect from Scioto River [3]See explanation in Section 4.2

**Table 9**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

FRANKLIN COUNTY, OHIO
AND INCORPORATED AREAS

# FLOODWAY DATA

Hayden Run

| FLOODING SOURCE | | FLOODWAY | | | | 1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD) | | | |
|---|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE [1] | WIDTH (FEET) | WIDTH REDUCED FROM PRIOR STUDY | SECTION AREA (SQUARE FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE (FEET) |
| Hellbranch Run | | | | | | | | | |
| A | 0.871 | 475 | | 3,057 | 3.1 | 795.1 | 795.1 | 795.5 | 0.4 |
| B | 0.967 | 472 | | 1,599 | 5.9 | 796.5 | 796.5 | 796.8 | 0.3 |
| C | 1.144 | 671 | | 3,660 | 2.6 | 798.9 | 798.9 | 799.4 | 0.5 |
| D | 1.342 | 581 | | 2,620 | 3.6 | 801.5 | 801.5 | 802.0 | 0.5 |
| E | 1.692 | 326 | | 1,214 | 7.7 | 808.0 | 808.0 | 808.0 | 0.0 |
| F | 2.034 | 911 | | 2,910 | 3.2 | 816.1 | 816.1 | 816.6 | 0.5 |
| G | 2.400 | 478 | | 1,524 | 5.8 | 822.7 | 822.7 | 822.9 | 0.2 |
| H | 2.814 | 476 | | 2,068 | 4.3 | 832.4 | 832.4 | 832.4 | 0.0 |
| I | 3.270 | 169 | | 925 | 9.6 | 838.4 | 838.4 | 838.8 | 0.4 |
| J | 3.508 | 207 | | 1,796 | 4.7 | 842.6 | 842.6 | 843.0 | 0.4 |
| K | 3.781 | 296 | | 2,883 | 2.9 | 848.6 | 848.6 | 848.9 | 0.3 |
| L | 4.202 | 414 | | 3,421 | 2.5 | 849.5 | 849.5 | 849.8 | 0.3 |
| M | 4.580 | 162 | | 1,080 | 7.4 | 850.6 | 850.6 | 850.8 | 0.2 |
| N | 5.231 | 264 | | 1,303 | 6.1 | 861.3 | 861.3 | 861.5 | 0.2 |
| O | 5.567 | 303 | | 1,577 | 5.0 | 864.9 | 864.9 | 865.3 | 0.4 |
| P | 6.025 | 71 | | 779 | 10.2 | 869.3 | 869.3 | 869.4 | 0.1 |
| Q | 6.069 | 212 | | 1,340 | 5.9 | 870.6 | 870.6 | 870.6 | 0.0 |
| R | 6.114 | 182 | | 1,365 | 5.8 | 871.3 | 871.3 | 871.5 | 0.2 |
| S | 6.359 | 626 | | 3,894 | 1.8 | 872.9 | 872.9 | 873.4 | 0.5 |
| T | 6.511 | 519 | | 3,872 | 1.8 | 878.1 | 878.1 | 878.1 | 0.0 |
| U | 6.750 | 421 | | 3,314 | 2.1 | 878.2 | 878.2 | 878.2 | 0.0 |
| V | 7.331 | 643 | | 5,125 | 1.4 | 885.4 | 885.4 | 885.6 | 0.2 |
| W | 8.041 | 526 | | 3,471 | 1.8 | 889.2 | 889.2 | 889.7 | 0.5 |
| X | 8.747 | 603 | | 4,969 | 1.2 | 893.2 | 893.2 | 893.7 | 0.5 |
| Y | 9.321 | 150 | | 1,388 | 4.4 | 894.9 | 894.9 | 895.4 | 0.5 |
| Z | 9.740 | 257 | | 1,629 | 3.0 | 896.6 | 896.6 | 897.1 | 0.5 |
| AA | 102470 | 547 | | 4,159 | 1.2 | 902.3 | 902.3 | 902.8 | 0.5 |
| AB | 10.704 | 374 | | 2,850 | 1.7 | 902.5 | 902.5 | 902.9 | 0.4 |
| AC | 10.990 | 635 | | 5,976 | 0.7 | 902.6 | 902.6 | 903.1 | 0.5 |
| AD | 11.644 | 717 | | 3,681 | 0.6 | 902.9 | 902.9 | 903.4 | 0.5 |

[1]Miles above confluence with Big Darby Creek

**Table 9**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

FRANKLIN COUNTY, OHIO
AND INCORPORATED AREAS

# FLOODWAY DATA

Hellbranch Run

| FLOODING SOURCE | | FLOODWAY | | | | 1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD) | | | |
|---|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE | WIDTH (FEET) | WIDTH REDUCED FROM PRIOR STUDY | SECTION AREA (SQUARE FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE (FEET) |
| Indian Run | | | | | | | | | |
| A | 610[3] | 419 | | 3,021 | 1.2 | 777.2 | 777.0[4] | 777.2 | 0.2 |
| B | 900[3] | 208 | | 1,491 | 2.4 | 780.3 | 780.3 | 780.3 | 0.0 |
| C | 1,650[3] | 133 | | 690 | 5.2 | 789.4 | 789.4 | 789.4 | 0.0 |
| Lisle Ditch | | | | | | | | | |
| A | 1,880[1] | 123 | | 200 | 2.5 | 741.4 | 740.8[4] | 741.3 | 0.5 |
| B | 2,520[1] | 28 | | 98 | 3.0 | 742.3 | 742.3 | 742.7 | 0.4 |
| C | 3,220[1] | 27 | | 114 | 2.6 | 743.0 | 743.0 | 743.4 | 0.4 |
| D | 4,090[1] | 15 | | 69 | 2.9 | 744.0 | 744.0 | 744.5 | 0.5 |
| E | 5,650[1] | 32 | | 45 | 4.4 | 746.9 | 746.9 | 747.4 | 0.5 |
| F | 6,280[1] | 52 | | 107 | 1.9 | 748.9 | 748.9 | 749.4 | 0.5 |
| G | 6,910[1] | 40 | | 70 | 2.9 | 750.7 | 750.7 | 751.1 | 0.4 |
| H | 7,450[1] | 30 | | 56 | 3.6 | 752.5 | 752.5 | 753.0 | 0.5 |
| I | 8,150[1] | 19 | | 47 | 4.3 | 755.6 | 755.6 | 755.6 | 0.0 |
| Little Darby Creek | | | | | | | | | |
| A | 0.087[2] | 185 | | 2,639 | 6.3 | 840.1 | 840.1 | 840.1 | 0.0 |
| B | 0.325[2] | 750 | | 7,467 | 2.2 | 841.1 | 841.1 | 841.4 | 0.3 |
| C | 0.629[2] | 914 | | 7,009 | 2.4 | 841.5 | 841.5 | 841.9 | 0.4 |
| D | 0.868[2] | 331 | | 3,003 | 5.5 | 841.9 | 841.9 | 842.4 | 0.5 |
| E | 1,237[2] | 379 | | 3,655 | 4.6 | 845.7 | 845.7 | 846.0 | 0.3 |
| F | 1,583[2] | 976 | | 7,484 | 2.2 | 847.8 | 847.8 | 848.2 | 0.4 |
| G | 1.867[2] | 435 | | 3,443 | 4.8 | 848.9 | 848.9 | 849.3 | 0.4 |
| H | 2.166[2] | 833 | | 4,969 | 3.2 | 852.1 | 852.1 | 852.6 | 0.5 |
| I | 2.504[2] | 712 | | 3,376 | 4.8 | 855.5 | 855.5 | 855.9 | 0.4 |
| J | 2.864[2] | 558 | | 4,053 | 4.0 | 859.7 | 859.7 | 860.1 | 0.4 |
| K | 3.163[2] | 582 | | 4,583 | 3.5 | 862.3 | 862.3 | 862.7 | 0.4 |
| L | 3.455[2] | 435 | | 3,466 | 4.6 | 864.5 | 864.5 | 864.9 | 0.4 |

[1]Feet above confluence with Big Run [2]Miles above confluence with Big Darby Creek [3]Feet above confluence with Scioto River [4]Elevation without considering backwater effect from Big Run

**Table 9**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

FRANKLIN COUNTY, OHIO
AND INCORPORATED AREAS

# FLOODWAY DATA

Lisle Ditch, Little Darby Creek

| FLOODING SOURCE | | FLOODWAY | | | | 1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD) | | | |
|---|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE [1] | WIDTH (FEET) | WIDTH REDUCED FROM PRIOR STUDY | SECTION AREA (SQUARE FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE (FEET) |
| Little Walnut Creek | | | | | | | | | |
| A | 13.446 | 612 | | 6,709 | 3.8 | 721.0 | 721.0 | 721.5 | 0.5 |
| B | 13.943 | 1,109 | | 10,246 | 2.5 | 721.7 | 721.7 | 722.2 | 0.5 |
| C | 14.577 | 678 | | 6,269 | 4.1 | 722.5 | 722.5 | 723.0 | 0.5 |
| D | 15.179 | 1,082 | | 9,311 | 2.7 | 723.8 | 723.8 | 724.3 | 0.5 |
| E | 15.850 | 773 | | 6,451 | 4.0 | 724.9 | 724.9 | 725.4 | 0.5 |
| F | 16.018 | 789 | | 7,079 | 3.6 | 725.4 | 725.4 | 725.9 | 0.5 |
| G | 16.596 | 1,033 | | 13,541 | 1.9 | 729.7 | 729.7 | 730.2 | 0.5 |
| H | 16.927 | 651 | | 6,862 | 3.7 | 729.6 | 729.6 | 730.1 | 0.5 |
| I | 17.022 | 618 | | 7,043 | 3.6 | 730.1 | 730.1 | 730.5 | 0.4 |
| J | 17.336 | 853 | | 8,605 | 3.0 | 730.5 | 730.5 | 731.0 | 0.5 |
| K | 17.530 | 1,582 | | 13,150 | 1.9 | 730.7 | 730.7 | 731.2 | 0.5 |
| L | 17.897 | 2,028 | | 22,512 | 1.1 | 730.8 | 730.8 | 731.3 | 0.5 |
| M | 18.132 | 2,075 | | 15,071 | 1.7 | 730.9 | 730.9 | 731.4 | 0.5 |
| N | 18.378 | 1,380 | | 12,499 | 2.0 | 731.0 | 731.0 | 731.5 | 0.5 |
| O | 18.428 | 897 | | 8,046 | 3.2 | 731.1 | 731.1 | 731.6 | 0.5 |
| P | 18.517 | 945 | | 8,515 | 3.0 | 731.3 | 731.3 | 731.8 | 0.5 |
| Q | 18.958 | 2,057 | | 10,435 | 2.4 | 733.4 | 733.4 | 733.9 | 0.5 |
| R | 19.798 | 201 | | 2,435 | 10.2 | 734.8 | 734.8 | 735.3 | 0.5 |
| S | 20.195 | 1,351 | | 9,450 | 2.6 | 737.8 | 737.8 | 738.3 | 0.5 |
| T | 20.430 | 1,086 | | 7,451 | 3.3 | 738.5 | 738.5 | 739.0 | 0.5 |
| U | 21.169 | 1,830 | | 12,498 | 1.9 | 740.5 | 740.5 | 741.0 | 0.5 |
| V | 21.501 | 1,036 | | 6,151 | 3.9 | 740.8 | 740.8 | 741.3 | 0.5 |
| W | 21.620 | 1,310 | | 7,633 | 3.1 | 741.2 | 741.2 | 741.9 | 0.7 |
| X | 21.951 | 1,435 | | 8,479 | 2.8 | 742.8 | 742.8 | 743.4 | 0.6 |
| Y | 22.122 | 1,291 | | 10,506 | 2.3 | 743.1 | 743.1 | 743.7 | 0.6 |
| Z | 22.391 | 734 | | 4,858 | 4.9 | 743.5 | 743.5 | 744.1 | 0.6 |

[1] Miles above confluence with Walnut Creek

**Table 9**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

FRANKLIN COUNTY, OHIO
AND INCORPORATED AREAS

# FLOODWAY DATA

Little Walnut Creek

| FLOODING SOURCE | | FLOODWAY | | | | 1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD) | | | |
|---|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE [1] | WIDTH (FEET) | WIDTH REDUCED FROM PRIOR STUDY | SECTION AREA (SQUARE FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE (FEET) |
| Little Walnut Creek | | | | | | | | | |
| AA | 22.662 | 680 | | 5,081 | 4.7 | 745.4 | 745.4 | 746.3 | 0.9 |
| AB | 22.857 | 891 | | 6,581 | 3.6 | 746.8 | 746.8 | 747.8 | 1.0 |
| AC | 22.999 | 206 | | 2,541 | 9.4 | 747.3 | 747.3 | 748.1 | 0.8 |
| AD | 23.035 | 275 | | 2,608 | 9.2 | 748.8 | 748.8 | 748.9 | 0.1 |
| AE | 23.323 | 609 | | 4,722 | 5.1 | 751.5 | 751.5 | 752.0 | 0.5 |
| AF | 23.593 | 628 | | 5,538 | 4.3 | 752.4 | 752.4 | 753.1 | 0.7 |
| AG | 23.799 | 409 | | 3,103 | 7.7 | 753.0 | 753.0 | 753.7 | 0.7 |
| AH | 23.938 | 484 | | 4,377 | 5.5 | 754.6 | 754.6 | 755.6 | 1.0 |
| AI | 24.154 | 387 | | 4,772 | 5.0 | 756.6 | 756.6 | 757.5 | 0.9 |
| AJ | 24.282 | 187 | | 2,488 | 9.6 | 756.8 | 756.8 | 757.8 | 1.0 |
| AK | 24.441 | 694 | | 7,165 | 3.3 | 759.6 | 759.6 | 760.4 | 0.8 |
| AL | 24.657 | 605 | | 6,327 | 3.8 | 760.1 | 760.1 | 761.0 | 0.9 |
| AM | 24.786 | 822 | | 8,657 | 2.8 | 760.5 | 760.5 | 761.4 | 0.9 |
| AN | 24.971 | 1,252 | | 11,856 | 2.0 | 760.7 | 760.7 | 761.6 | 0.9 |
| AO | 25.088 | 1,100 | | 10,483 | 2.3 | 760.8 | 760.8 | 761.7 | 0.9 |

[1]Miles above confluence with Walnut Creek

**Table 9**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

FRANKLIN COUNTY, OHIO
AND INCORPORATED AREAS

# FLOODWAY DATA

Little Walnut Creek

| FLOODING SOURCE | | FLOODWAY | | | | 1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD) | | | |
|---|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE | WIDTH (FEET) | WIDTH REDUCED FROM PRIOR STUDY | SECTION AREA (SQUARE FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE (FEET) |
| Marsh Run | | | | | | | | | |
| A | 0.078[1] | 72 | | 336 | 4.8 | 705.4 | 700.4[3] | 700.9 | 0.5 |
| B | 0.320[1] | 110 | | 393 | 4.1 | 705.9 | 705.2[3] | 705.5 | 0.3 |
| C | 0.539[1] | 79 | | 616 | 2.6 | 716.7 | 716.7 | 717.1 | 0.4 |
| D | 0.632[1] | 205 | | 1,274 | 1.3 | 717.0 | 717.0 | 717.3 | 0.3 |
| E | 0.948[1] | 162 | | 864 | 1.9 | 726.7 | 726.7 | 727.2 | 0.5 |
| F | 1.257[1] | 190 | 123[4] | 414 | 3.9 | 733.0 | 733.0 | 733.4 | 0.4 |
| G | 1.487[1] | 103 | 47[4] | 392 | 4.1 | 737.6 | 737.6 | 737.9 | 0.3 |
| H | 1.739[1] | 86 | | 287 | 5.6 | 748.3 | 748.3 | 748.3 | 0.0 |
| I | 1.874[1] | 173 | 58[4] | 1,133 | 1.4 | 752.7 | 752.7 | 753.2 | 0.5 |
| J | 1.999[1] | 76 | | 334 | 4.8 | 756.5 | 756.5 | 756.6 | 0.1 |
| K | 2.381[1] | 45 | | 152 | 10.5 | 766.7 | 766.7 | 766.7 | 0.0 |
| L | 2.583[1] | 83 | | 321 | 5.0 | 774.5 | 774.5 | 774.6 | 0.1 |
| M | 2.821[1] | 88 | | 265 | 6.0 | 781.5 | 781.5 | 781.5 | 0.0 |
| N | 2.993[1] | 85 | | 325 | 4.9 | 788.6 | 788.6 | 788.6 | 0.0 |
| O | 3.091[1] | 64 | | 268 | 6.0 | 790.1 | 790.1 | 790.5 | 0.4 |
| P | 3.191[1] | 71 | | 257 | 6.2 | 793.3 | 793.3 | 793.7 | 0.4 |
| Q | 3.292[1] | 79 | | 267 | 6.0 | 796.9 | 796.9 | 797.3 | 0.4 |
| R | 3.493[1] | 74 | | 347 | 4.6 | 802.0 | 802.0 | 802.4 | 0.4 |
| Martin Grove Ditch | | | | | | | | | |
| A | 9,255[2] | 29 | | 102 | 3.1 | 825.3 | 825.3 | 825.8 | 0.5 |
| B | 9.860[2] | 29 | | 152 | 2.1 | 834.6 | 834.6 | 835.1 | 0.5 |
| C | 10,810[2] | 12 | | 59 | 5.3 | 846.9 | 846.9 | 847.4 | 0.5 |

[1]Miles above confluence with Scioto Big Run [2]Feet above confluence with Blacklick Creek [3]Elevation without considering backwater effect from Scioto Big Run [4]See explanation in Section 4.2

**Table 9**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

FRANKLIN COUNTY, OHIO
AND INCORPORATED AREAS

# FLOODWAY DATA

Marsh Run, Martin Grove Ditch

| FLOODING SOURCE | | FLOODWAY | | | | 1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD) | | | |
|---|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE [1] | WIDTH (FEET) | WIDTH REDUCED FROM PRIOR STUDY | SECTION AREA (SQUARE FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE (FEET) |
| Mason Run | | | | | | | | | |
| A | 1,816 | 630 | | 1,570 | 1.9 | 739.2 | 739.2 | 739.7 | 0.5 |
| B | 2,735 | 245 | | 965 | 3.2 | 740.9 | 740.9 | 741.4 | 0.5 |
| C | 3,366 | 110 | | 988 | 3.1 | 747.9 | 747.9 | 747.9 | 0.0 |
| D | 4,219 | 140 | | 971 | 3.1 | 748.6 | 748.6 | 748.7 | 0.1 |
| E | 6,177 | 71 | | 595 | 5.1 | 755.5 | 755.5 | 755.6 | 0.1 |
| F | 8,143 | 280 | | 1,799 | 1.7 | 759.6 | 759.6 | 760.0 | 0.4 |
| G | 8,680 | 220 | 110[2] | 1,222 | 2.5 | 759.9 | 759.9 | 760.2 | 0.3 |
| H | 9,710 | 80 | | 707 | 3.0 | 763.5 | 763.5 | 763.8 | 0.3 |
| I | 10,288 | 520 | | 2,686 | 0.8 | 765.0 | 765.0 | 765.3 | 0.3 |
| J | 10,632 | 59 | | 603 | 3.6 | 767.1 | 767.1 | 767.4 | 0.3 |
| K-AG* | | | | | | | | | |

[1]Feet above confluence with Big Walnut Creek [2]See explanation in Section 4.2 *No floodway data computed for this reach

**Table 9**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

FRANKLIN COUNTY, OHIO
AND INCORPORATED AREAS

# FLOODWAY DATA

Mason Run

| FLOODING SOURCE | | FLOODWAY | | | | 1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD) | | | |
|---|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE [1] | WIDTH (FEET) | WIDTH REDUCED FROM PRIOR STUDY | SECTION AREA (SQUARE FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE (FEET) |
| McCoy Ditch | | | | | | | | | |
| AE | 12.022 | 366 | | 1,626 | 0.5 | 903.0 | 903.0 | 903.5 | 0.5 |
| AF | 12.552 | 48 | | 96 | 8.2 | 905.0 | 905.0 | 905.0 | 0.0 |
| AG | 12.820 | 69 | | 201 | 3.9 | 910.2 | 910.2 | 910.5 | 0.3 |

[1]Miles above confluence with Big Darby Creek

**Table 9**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

FRANKLIN COUNTY, OHIO
AND INCORPORATED AREAS

# FLOODWAY DATA

McCoy Ditch

| FLOODING SOURCE | | FLOODWAY | | | | 1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD) | | | |
|---|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE [1] | WIDTH (FEET) | WIDTH REDUCED FROM PRIOR STUDY | SECTION AREA (SQUARE FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE (FEET) |
| Molcomb Ditch | | | | | | | | | |
| A | 0 | 62 | | 276 | 3.0 | 819.2 | 819.2 | 819.7 | 0.5 |
| B | 410 | 51 | | 146 | 5.7 | 822.4 | 822.4 | 822.5 | 0.1 |
| C | 900 | 44 | | 171 | 4.9 | 827.6 | 827.6 | 827.7 | 0.1 |
| D | 1,400 | 83 | | 300 | 2.8 | 832.7 | 832.7 | 833.0 | 0.3 |
| E | 2,100 | 80 | | 255 | 3.3 | 839.7 | 839.7 | 840.1 | 0.4 |
| F | 2,605 | 65 | | 209 | 4.0 | 845.2 | 845.2 | 845.4 | 0.2 |
| G | 3,600 | 48 | | 150 | 5.2 | 853.8 | 853.8 | 854.1 | 0.3 |
| H | 4,200 | 65 | | 178 | 4.4 | 858.8 | 858.8 | 859.0 | 0.2 |
| I | 4,900 | 190 | | 351 | 2.2 | 864.1 | 864.1 | 864.5 | 0.4 |
| J | 5,300 | 200 | | 385 | 2.0 | 867.0 | 867.0 | 867.5 | 0.5 |
| K | 6,200 | 38 | | 172 | 4.6 | 872.3 | 872.3 | 872.4 | 0.1 |
| L | 6,765 | 50 | | 239 | 4.3 | 875.4 | 875.4 | 875.5 | 0.1 |
| M | 6,850 | 55 | | 354 | 2.9 | 877.5 | 877.5 | 878.0 | 0.5 |
| N | 7,340 | 55 | | 181 | 5.7 | 881.2 | 881.2 | 881.2 | 0.0 |
| O | 7,800 | 70 | | 277 | 3.7 | 884.4 | 884.4 | 884.8 | 0.4 |
| P | 8,250 | 70 | | 180 | 4.6 | 887.5 | 887.5 | 887.7 | 0.2 |
| Q | 8,645 | 100 | | 232 | 3.6 | 890.6 | 890.6 | 890.8 | 0.2 |
| R | 9,025 | 100 | | 239 | 3.5 | 892.9 | 892.9 | 893.4 | 0.5 |
| S | 9,730 | 100 | | 242 | 3.4 | 897.3 | 897.3 | 897.8 | 0.5 |
| T | 9,805 | 150 | | 1,024 | 0.8 | 901.8 | 901.8 | 902.3 | 0.5 |
| U | 10,195 | 150 | | 561 | 1.5 | 902.0 | 902.0 | 902.3 | 0.3 |
| V | 10,310 | 130 | | 692 | 1.2 | 905.9 | 905.9 | 906.4 | 0.5 |
| W | 10,680 | 110 | | 565 | 1.1 | 905.9 | 905.9 | 906.4 | 0.5 |
| X | 11,170 | 80 | | 239 | 2.6 | 906.0 | 906.0 | 906.5 | 0.5 |
| Y | 11,550 | 20 | | 87 | 7.2 | 907.0 | 907.0 | 907.4 | 0.4 |
| Z | 11,745 | 20 | | 76 | 8.2 | 908.6 | 908.6 | 909.1 | 0.5 |
| AA | 11,920 | 20 | | 71 | 8.9 | 911.1 | 911.1 | 911.1 | 0.0 |

[1]Feet above confluence with Tudor Ditch

**Table 9**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

FRANKLIN COUNTY, OHIO
AND INCORPORATED AREAS

# FLOODWAY DATA

Molcomb Ditch

| FLOODING SOURCE | | FLOODWAY | | | | 1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD) | | | |
|---|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE [1] | WIDTH (FEET) | WIDTH REDUCED FROM PRIOR STUDY | SECTION AREA (SQUARE FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE (FEET) |
| Mulberry Run | | | | | | | | | |
| H | 2.500 | 61 | | 461 | 2.8 | 768.8 | 768.8 | 768.9 | 0.1 |
| I | 2.661 | 88 | 63[2] | 164 | 7.8 | 774.0 | 774.0 | 774.0 | 0.0 |
| J | 3.074 | 76 | | 266 | 4.8 | 796.3 | 796.3 | 796.5 | 0.2 |
| K | 3.260 | 134 | | 325 | 4.0 | 805.1 | 805.1 | 805.2 | 0.1 |
| L | 3.278 | 148 | | 391 | 3.3 | 805.5 | 805.5 | 805.6 | 0.1 |
| M | 3.350 | 170 | | 832 | 1.5 | 811.3 | 811.3 | 811.8 | 0.5 |
| N | 3.410 | 85 | | 295 | 4.3 | 811.4 | 811.4 | 811.8 | 0.4 |
| O | 3.440 | 55 | | 190 | 3.2 | 813.5 | 813.5 | 813.5 | 0.0 |
| P | 3.660 | 55 | | 91 | 6.7 | 819.5 | 819.5 | 819.5 | 0.0 |
| R | 3.880 | 55 | | 152 | 4.0 | 824.9 | 824.9 | 825.3 | 0.4 |
| S | 3.980 | 30 | | 120 | 5.1 | 826.1 | 826.1 | 826.3 | 0.2 |
| T | 4.090 | 22 | | 83 | 7.3 | 828.4 | 828.4 | 828.5 | 0.1 |
| U | 4.220 | 35 | | 122 | 5.0 | 831.4 | 831.4 | 831.8 | 0.4 |

[1]Miles above confluence with Scioto Run [2]See explanation in Section 4.2

**Table 9**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

FRANKLIN COUNTY, OHIO
AND INCORPORATED AREAS

# FLOODWAY DATA

Mulberry Run

| FLOODING SOURCE | | FLOODWAY | | | | 1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD) | | | |
|---|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE [1] | WIDTH (FEET) | WIDTH REDUCED FROM PRIOR STUDY | SECTION AREA (SQUARE FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE (FEET) |
| North Fork Indian Run | | | | | | | | | |
| D | 2,270 | 131 | | 811 | 4.5 | 798.4 | 798.4 | 798.4 | 0.0 |
| E | 2,670 | 69 | | 280 | 9.7 | 804.9 | 804.9 | 804.9 | 0.0 |
| F | 3,200 | 89 | | 373 | 7.3 | 813.0 | 813.0 | 813.0 | 0.0 |
| G | 4,113 | 70 | | 245 | 11.0 | 831.5 | 831.5 | 831.5 | 0.0 |
| H | 4,680 | 77 | | 338 | 8.0 | 839.3 | 839.3 | 839.3 | 0.0 |
| I | 5,500 | 133 | | 548 | 4.9 | 853.8 | 853.8 | 853.8 | 0.0 |
| J | 6,580 | 200 | | 735 | 3.7 | 860.2 | 860.2 | 860.3 | 0.1 |
| K | 7,285 | 84 | | 627 | 4.3 | 865.8 | 865.8 | 865.8 | 0.0 |
| L | 8,390 | 130 | | 464 | 5.8 | 872.3 | 872.3 | 872.7 | 0.4 |
| M | 10,460 | 108 | | 517 | 5.2 | 882.9 | 882.9 | 882.9 | 0.0 |
| N | 12,160 | 195 | | 856 | 3.2 | 884.8 | 884.8 | 884.8 | 0.0 |
| O | 13,160 | 160 | | 794 | 3.4 | 888.2 | 888.2 | 888.2 | 0.0 |
| P | 14,400 | 198 | | 797 | 3.4 | 889.9 | 889.9 | 890.1 | 0.2 |
| Q | 15,400 | 180 | | 754 | 2.8 | 891.6 | 891.6 | 891.8 | 0.2 |
| R | 16,540 | 270 | | 984 | 2.1 | 894.9 | 894.9 | 895.0 | 0.1 |
| S | 17,700 | 93 | | 343 | 6.1 | 899.6 | 899.6 | 899.6 | 0.0 |
| T | 18,350 | 124 | | 513 | 4.1 | 902.7 | 902.7 | 902.8 | 0.1 |
| U | 18,530 | 153 | | 824 | 2.6 | 904.2 | 904.2 | 904.2 | 0.0 |
| V | 19,220 | 140 | | 429 | 4.9 | 908.2 | 908.2 | 908.2 | 0.0 |
| W | 19,920 | 100 | | 468 | 4.5 | 910.2 | 910.2 | 910.3 | 0.1 |
| X | 20,600 | 100 | | 560 | 3.8 | 912.2 | 912.2 | 912.2 | 0.0 |
| Y | 21,000 | 120 | | 648 | 3.2 | 912.6 | 912.6 | 912.8 | 0.2 |
| Z | 22,120 | 446 | | 1,432 | 1.1 | 915.7 | 915.7 | 915.7 | 0.0 |
| AA | 23,860 | 127 | | 299 | 5.3 | 917.1 | 917.1 | 917.1 | 0.0 |
| AB | 24,914 | 118 | | 388 | 4.1 | 919.5 | 919.5 | 919.6 | 0.1 |

[1]Feet above confluence with Scioto River [2]Elevation without considering backwater effect from Scioto River

**Table 9**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

FRANKLIN COUNTY, OHIO
AND INCORPORATED AREAS

# FLOODWAY DATA

North Fork Indian Run

| FLOODING SOURCE | | FLOODWAY | | | | 1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD) | | | |
|---|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE [1] | WIDTH (FEET) | WIDTH REDUCED FROM PRIOR STUDY | SECTION AREA (SQUARE FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE (FEET) |
| Olentangy River | | | | | | | | | |
| A | 0.064 | 285 | | 5,201 | 3.3 | 720.4 | 717.4[2] | 717.9 | 0.5 |
| B | 0.239 | 168 | | 3,043 | 5.7 | 720.4 | 717.5[2] | 718.0 | 0.5 |
| C | 0.390 | 416 | | 5,128 | 3.4 | 721.1 | 718.5[2] | 718.9 | 0.4 |
| D | 0.642 | 166 | | 3,006 | 5.8 | 721.4 | 718.8[2] | 719.3 | 0.5 |
| E | 0.765 | 136 | | 2,459 | 7.1 | 721.5 | 719.0[2] | 719.4 | 0.4 |
| F | 0.879 | 199 | | 3,456 | 5.0 | 722.2 | 719.7 | 720.1 | 0.4 |
| G | 1.112 | 228 | | 3,397 | 5.1 | 722.5 | 720.2 | 720.7 | 0.5 |
| H | 1.456 | 249 | | 4,228 | 4.1 | 723.1 | 721.1 | 721.6 | 0.5 |
| I | 1.605 | 241 | | 3,650 | 4.8 | 723.2 | 721.3 | 721.8 | 0.5 |
| J | 1.759 | 371 | | 5,369 | 3.2 | 723.5 | 721.7 | 722.2 | 0.5 |
| K | 1.860 | 501 | | 7,386 | 2.4 | 723.7 | 722.0 | 722.4 | 0.4 |
| L | 2.003 | 322 | | 4,735 | 3.7 | 723.8 | 722.1 | 722.5 | 0.4 |
| M | 2.081 | 237 | | 3,349 | 5.2 | 723.8 | 722.1 | 722.5 | 0.4 |
| N | 2.386 | 184 | | 2,642 | 6.6 | 724.4 | 723.0 | 723.4 | 0.4 |
| O | 2.650 | 346 | | 4,604 | 3.8 | 725.3 | 724.3 | 724.7 | 0.4 |
| P | 2.943 | 344 | | 4,357 | 4.0 | 725.7 | 724.7 | 725.2 | 0.5 |
| Q | 3.120 | 360 | | 5,092 | 3.4 | 726.0 | 725.1 | 725.6 | 0.5 |
| R | 3.510 | 392 | | 3,838 | 4.5 | 726.5 | 725.7 | 726.2 | 0.5 |
| S | 3.870 | 191 | | 2,438 | 7.1 | 728.1 | 727.7 | 728.0 | 0.3 |
| T | 3.958 | 774 | | 4,755 | 3.7 | 730.5 | 730.5 | 730.6 | 0.1 |
| U | 4.289 | 935 | | 4,328 | 4.0 | 731.3 | 731.3 | 731.4 | 0.1 |
| V | 4.395 | 277 | | 3,824 | 4.6 | 732.0 | 732.0 | 732.1 | 0.1 |
| W | 4.695 | 491 | | 4,253 | 4.1 | 732.7 | 732.7 | 732.8 | 0.1 |
| X | 4.907 | 154 | | 2,567 | 6.8 | 733.1 | 733.1 | 733.3 | 0.2 |
| Y | 5.020 | 248 | | 3,616 | 4.8 | 734.3 | 734.3 | 734.5 | 0.2 |
| Z | 5.502 | 468 | | 4,035 | 4.3 | 735.4 | 735.4 | 735.6 | 0.2 |

[1]Miles above confluence with Scioto River [2]Elevation without considering backwater effect from Scioto River

**Table 9**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

FRANKLIN COUNTY, OHIO
AND INCORPORATED AREAS

# FLOODWAY DATA

Olentangy River

| FLOODING SOURCE | | FLOODWAY | | | | 1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD) | | | |
|---|---|---|---|---|---|---|---|---|---|
| CROSS SECTION | DISTANCE [1] | WIDTH (FEET) | WIDTH REDUCED FROM PRIOR STUDY | SECTION AREA (SQUARE FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT FLOODWAY | WITH FLOODWAY | INCREASE (FEET) |
| Olentangy River | | | | | | | | | |
| AA | 5.824 | 677 | | 6,102 | 2.9 | 736.3 | 736.3 | 736.5 | 0.2 |
| AB | 6.088 | 1,091 | | 4,765 | 3.7 | 736.7 | 736.7 | 736.9 | 0.2 |
| AC | 6.379 | 776 | | 4,073 | 4.3 | 737.2 | 737.2 | 737.4 | 0.2 |
| AD | 6.978 | 586 | | 5,201 | 3.3 | 739.2 | 739.2 | 739.4 | 0.2 |
| AE | 7.320 | 729 | | 4,829 | 3.6 | 739.9 | 739.9 | 740.1 | 0.2 |
| AF | 7.610 | 620 | | 5,304 | 3.5 | 741.6 | 741.6 | 742.1 | 0.5 |
| AG | 7.890 | 600 | | 5,970 | 3.1 | 742.8 | 742.8 | 743.2 | 0.4 |
| AH | 8.252 | 344 | | 3,273 | 5.7 | 744.1 | 744.1 | 744.5 | 0.4 |
| AI | 8.400 | 273 | | 2,763 | 6.7 | 745.1 | 745.1 | 745.5 | 0.4 |
| AJ | 8.577 | 495 | | 5,127 | 3.6 | 746.7 | 746.7 | 747.1 | 0.4 |
| AK | 8.876 | 497 | | 3,763 | 4.9 | 748.1 | 748.1 | 748.5 | 0.4 |
| AL | 9.099 | 450 | | 4,329 | 4.3 | 749.6 | 749.6 | 750.0 | 0.4 |
| AM | 9.319 | 687 | | 6,227 | 3.0 | 750.8 | 750.8 | 751.1 | 0.3 |
| AN | 9.441 | 910 | | 8,061 | 2.3 | 751.4 | 751.4 | 751.7 | 0.3 |
| AO | 9.569 | 550 | | 5,228 | 3.5 | 751.6 | 751.6 | 751.9 | 0.3 |
| AP | 9.686 | 450 | | 4,685 | 3.9 | 752.4 | 752.4 | 752.4 | 0.0 |
| AQ | 10.046 | 640 | | 4,856 | 3.8 | 753.8 | 753.8 | 753.9 | 0.1 |
| AR | 10.360 | 477 | | 4,804 | 3.9 | 755.1 | 755.1 | 755.4 | 0.3 |
| AS | 10.728 | 484 | | 4,859 | 3.8 | 756.5 | 756.5 | 756.9 | 0.4 |
| AT | 11.461 | 363 | | 4,417 | 4.2 | 760.9 | 760.9 | 761.0 | 0.2 |
| AU | 11.815 | 650 | | 5,941 | 3.1 | 762.0 | 762.0 | 762.4 | 0.4 |
| AV | 12.116 | 580 | | 5,908 | 3.1 | 762.8 | 762.8 | 763.3 | 0.5 |
| AW | 12.464 | 805 | | 6,106 | 3.0 | 763.8 | 763.8 | 764.2 | 0.4 |
| AX | 12.706 | 750 | | 6,858 | 2.7 | 765.0 | 765.0 | 765.3 | 0.3 |
| AY | 12.947 | 404 | | 4,138 | 4.5 | 765.8 | 765.8 | 766.1 | 0.3 |

[1]Miles above confluence with Scioto River

**Table 9**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

FRANKLIN COUNTY, OHIO
AND INCORPORATED AREAS

# FLOODWAY DATA

Olentangy River