



# FLOOD INSURANCE STUDY

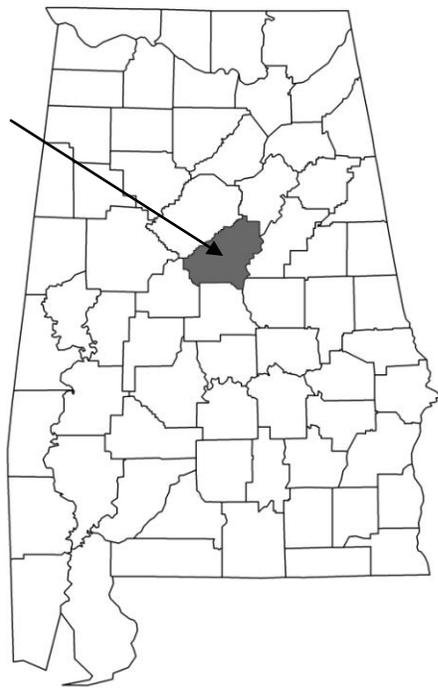


## SHELBY COUNTY, ALABAMA AND INCORPORATED AREAS Volume 1 of 3

COMMUNITY NAME	COMMUNITY NUMBER
ALABASTER, CITY OF	010192
BIRMINGHAM, CITY OF	010116
CALERA, CITY OF	010373
CHELSEA, CITY OF	010432
COLUMBIANA, CITY OF	010449
HARPERSVILLE, TOWN OF	010293
HELENA, CITY OF	010294
HOOVER, CITY OF	010123
INDIAN SPRINGS VILLAGE, TOWN OF	010430
*LEEDS, CITY OF	010125
MONTEVALLO, CITY OF	010349
PELHAM, CITY OF	010193
SHELBY COUNTY (UNINCORPORATED AREAS)	010191
VESTAVIA HILLS, CITY OF	010132
VINCENT, TOWN OF	010292
WESTOVER, TOWN OF	010451
WILSONVILLE, TOWN OF	010404
WILTON, TOWN OF	010405

\*Non-floodprone Community

Shelby County



**MAP REVISED  
FEBRUARY 20, 2013**

**NOTICE TO  
FLOOD INSURANCE STUDY USERS**

Communities participating in the National Flood Insurance Program (NFIP) have established repositories of flood hazard data for floodplain management and flood insurance purposes. This Flood Insurance Study (FIS) may not contain all data available within the repository. It is advisable to contact the community repository for any additional data.

Part or all of this FIS may be revised and republished at any time. In addition, part of this FIS may be revised by the Letter of Map Revision process, which does not involve republication or redistribution of the FIS. It is, therefore, the responsibility of the user to consult with community officials and to check the community repository to obtain the most current FIS components.

Initial Countywide FIS Effective Date: September 29, 2006

Revised Countywide FIS Date: February 20, 2013

TABLE OF CONTENTS – Volume 1

	<u>Page</u>
1.0 <u>INTRODUCTION</u>	1
1.1 Purpose of Study	1
1.2 Authority and Acknowledgement	2
1.3 Coordination	5
2.0 <u>AREA STUDIED</u>	6
2.1 Scope of Study	6
2.2 Community Description	10
2.3 Principal Flood Problems	11
2.4 Flood Protection Measures	13
3.0 <u>ENGINEERING METHODS</u>	13
3.1 Hydrologic Analyses	14
3.2 Hydraulic Analyses	30
3.3 Vertical Datum	34
4.0 <u>FLOODPLAIN MANAGEMENT APPLICATIONS</u>	35
4.1 Flood Boundaries	35
4.2 Floodways	36

FIGURES

Figure 1 – Floodway Schematic	38
-------------------------------	----

TABLE OF CONTENTS – Volume 1 (continued)

TABLES

Table 1 – Flooding Sources Studied by Detailed Method	6-7
Table 2 – Summary of Discharges	16-30
Table 3 – Floodway Data	39-100

TABLE OF CONTENTS – Volume 2

5.0	<u>INSURANCE APPLICATION</u>	101
6.0	<u>FLOOD INSURANCE RATE MAP</u>	101
7.0	<u>OTHER STUDIES</u>	102
8.0	<u>LOCATION OF DATA</u>	102
9.0	<u>REFERENCES AND BIBLIOGRAPHY</u>	105

TABLES

Table 4 – Community Map History	103-104
---------------------------------	---------

TABLE OF CONTENTS – Volume 2 (continued)

EXHIBITS

Exhibit 1 - Flood Profiles

Acton Creek	Panels 01P-02P
Bear Creek	Panels 03P-05P
Beaverdam Creek	Panels 06P-07P
Beeswax Creek	Panels 08P-09P
Beeswax Creek Tributary	Panels 10P-12P
Bishop Creek	Panels 13P-18P
Bolivar Creek	Panels 19P-20P
Buck Creek	Panels 21P-27P
Buxahatchee Creek	Panels 28P-30P
Buxahatchee Creek Tributary 1	Panels 31P-32P
Buxahatchee Creek Tributary 2	Panel 33P
Buxahatchee Creek Tributary 3	Panels 34P-35P
Buxahatchee Creek Tributary 4	Panels 36P-37P
Buxahatchee Creek Tributary 5	Panel 38P
Buxahatchee Creek Unnamed Tributary	Panel 39P
Cahaba River	Panels 40P-46P
Camp Branch	Panels 47P-53P
Coales Branch	Panels 54P-57P
Coosa River	Panel 58P
Dodd Branch	Panels 59P-60P
Dodd Branch Tributary 1	Panels 61P-62P
Dodd Branch Tributary 1.1	Panels 63P-64P
Dry Creek	Panel 65P
Four Mile Creek	Panels 66P-75P
Hargis Retreat Creek	Panels 76P-77P
Hogpen Creek	Panels 78P-80P
Kelly Creek	Panels 81P-84P
King Creek	Panel 85P

TABLE OF CONTENTS – Volume 3

EXHIBITS - continued

Exhibit 1 - Flood Profiles (continued)

Lee Branch	Panels 86P-88P
Lee Brook	Panel 89P-92P
Little Beeswax Creek	Panels 93P-96P
Little Beeswax Creek Tributary	Panels 97P-98P
Little Creek	Panels 99P-101P
Locust Creek	Panel 102P
Muddy Prong	Panels 103P-106P
North Fork Yellowleaf Creek	Panels 107P-121P
Peavine Creek	Panels 122P-126P
Prairie Brook	Panels 127P-128P
Shoal Creek	Panels 129P-131P
South Fork Yellowleaf Creek	Panels 132P-136P
Spencer Creek	Panels 137P-139P
Spring Creek Blue Spring Branch	
Tributary 2	Panels 140P-141P
Spring Creek in Montevallo	Panel 142P
Upper Spring Creek	Panel 143P
Walthall Branch	Panels 144P-145P
Waxahatchee Creek/Big Creek	Panels 146P-152P
Wildwood Creek	Panels 153P-154P
Wolf Creek	Panel 155P
Yellow Creek	Panels 156P-157P
Yellowleaf Creek	Panels 158P-165P

Exhibit 2 - Flood Insurance Rate Map Index  
Flood Insurance Rate Map

FLOOD INSURANCE STUDY  
SHELBY COUNTY, ALABAMA  
AND INCORPORATED AREAS

1.0 INTRODUCTION

1.1 Purpose of Study

This countywide format Flood Insurance Study (FIS) investigates the existence and severity of flood hazards in, or revises previous FISs/Flood Insurance Rate Maps (FIRMs) for, the geographic area of Shelby County, Alabama, including the City of Alabaster, the City of Birmingham, the City of Calera, the City of Chelsea, the City of Columbiana, the Town of Harpersville, the City of Helena, the City of Hoover, the Town of Indian Springs Village, the City of Leeds, the City of Montevallo, the City of Pelham, the City of Vestavia Hills, the Town of Vincent, the Town of Westover, the Town of Wilsonville, the Town of Wilton, and the unincorporated areas of Shelby County (hereinafter referred to collectively as Shelby County).

Please note that the City of Leeds is geographically located in Jefferson, Shelby, and St. Clair counties. The portion located in Shelby County has no Special Flood Hazard Areas.

Please note the Town of Vincent is geographically located in Shelby, St. Clair and Talladega Counties. The Town of Vincent is included in its entirety in the FIS report.

Please note the City of Calera is geographically located in Shelby and Chilton Counties. The City of Calera is included in its entirety in the FIS report.

Please note the City of Hoover is geographically located in Shelby and Jefferson Counties. The City of Hoover is included in its entirety in the Shelby and Jefferson County FIS reports.

Please note the City of Helena is geographically located in Shelby and Jefferson Counties. The City of Helena is included in its entirety in the Shelby and Jefferson County FIS reports.

Please note the City of Birmingham is geographically located in Shelby and Jefferson Counties. The City of Birmingham is included in its entirety in the Shelby and Jefferson County FIS reports.

This FIS aids in the administration of the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973. This FIS has developed

flood risk data for various areas of the county that will be used to establish actuarial flood insurance rates. This information will also be used by Shelby County to update existing floodplain regulations as part of the Regular Phase of the National Flood Insurance Program (NFIP), and will also be used 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 Acknowledgement

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

This FIS was prepared to include the unincorporated areas of, and incorporated communities within, Shelby County in a countywide format. For this revision, the hydrologic and hydraulics analyses for Acton Creek, Beaverdam Creek, Bishop Creek, Buck Creek, Coales Branch, Dodd Branch and tributaries, Hogpen Creek, Lee Branch, Lee Brook, Little Beeswax Creek, North Fork Yellowleaf Creek, Peavine Creek and Prairie Brook were performed by AMEC Earth and Environmental, Inc. and reviewed by Martin Engineering Company, Inc. for the Federal Emergency Management Agency (FEMA), under the State of Alabama Office of Water Resources Cooperating Technical Partner Agreement. This study was completed in February 2011. Floodplain boundaries were delineated using a digital elevation model surface created from Light Detection and Ranging (LiDAR) data provided by Shelby County Information Technology (IT) Services.

Information on the authority and acknowledgments for each jurisdiction included in the previous countywide FIS dated September 29, 2006 and various citywide FISs is shown below.

- Alabaster, City of: The hydrologic and hydraulic analyses from the FIS report dated December 15, 1980, were performed by Law Engineering Testing Company for the Federal Insurance Administration (FIA), under Contract No. H-4636. The study was completed in February 1980.
- Birmingham, City of: The hydrologic and hydraulic analyses for the FIS report dated September 16, 1980, were performed by BCM, for the FIA, under Contract No. H4034. The work was completed in March 1979. The hydrologic and hydraulic analyses for the FIS report dated September 18, 1987, were taken from the FIS report for the City of Brownsville as a result of its annexation. The hydrologic and hydraulic analyses for the FIS report dated January 17, 1990, were performed by Walter Schoel Engineering Company for the Federal Emergency Management Agency (FEMA). The hydraulic analyses for the FIS report dated January 2, 1992, were performed by Sain-South Engineering.
- Chelsea, City of: The hydrologic and hydraulic analyses from the FIS report dated March 16, 1982, were performed by Law Engineering Testing Company for FEMA, under Contract No. H-4636. The study was completed in March 1981.
- Helena, City of: The hydrologic and hydraulic analyses from the FIS report dated July 6, 1981, were performed by Law Engineering Testing Company for the Federal Emergency Management Agency (FEMA), under Contract No. H-4636. The study was completed in October 1979.
- Hoover, City of: The hydrologic and hydraulic analyses for the FIS report dated August 4, 1980, were performed by BCM, for the FIA, under Contract No. H-4034. The work was completed in August 1978.

Indian Springs Village, Town of:	The hydrologic and hydraulic analyses from the FIS report dated March 16, 1982, were performed by Law Engineering Testing Company for FEMA, under Contract No. H-4636. The study was completed in March 1981.
Leeds, City of:	The hydrologic and hydraulic analyses for the FIS report dated July 2, 1980, were performed by BCM, for the FIA, under Contract No. H-4034. The work was completed in August 1978.
Montevallo, City of:	The hydrologic and hydraulic analyses from the FIS report dated September 16, 1980, were performed by Law Engineering Testing Company for the FIA, under Contract No. H-4636. The study was completed in November 1979.
Pelham, City of:	The hydrologic and hydraulic analyses from the FIS report dated December 15, 1980, were performed by Law Engineering Testing Company for the FIA, under Contract No. H-4636. The study was completed in January 1980.
Shelby County (Unincorporated Areas):	The hydrologic and hydraulic analyses from the FIS report dated March 16, 1982, were performed by Law Engineering Testing Company for FEMA, under Contract No. H-4636. The study was completed in March 1981.
Vestavia Hills, City of:	The hydrologic and hydraulic analyses for the FIS report dated July 2, 1980, were performed by BCM, for the FIA, under Contract No. H-4034. The work was completed in August 1978.
Vincent, Town of:	The hydrologic and hydraulic analyses from the FIS report dated December 15, 1980, were performed by Law Engineering Testing Company for the FIA, under Contract No. H-4636. The study was completed in September

1979.

The authority and acknowledgements for the cities of Calera and Columbiana, and the towns of Harpersville, Westover, Wilsonville and Wilton are not available because no FIS reports were ever published for those communities.

Base map information for Shelby County and incorporated communities was provided in digital format by Shelby County IT Mapping Services. This information was photogrammetrically compiled from aerial photography dated 2007 and 2010.

The projection used in the preparation of this FIS was Universal Transverse Mercator Zone 16. The horizontal datum was North American Datum of 1983, GRS80 spheroid. 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 the FIRM.

### 1.3 Coordination

Consultation Coordination Officer's (CCO) meetings may be held for each jurisdiction in this countywide FIS. An initial CCO meeting is held typically with representatives of FEMA, the community, and the study contractor to explain the nature and purpose of an FIS and to identify the streams to be studied by detailed methods. A final CCO meeting is held typically with representatives of FEMA, the community, and the study contractor to review the results of the study.

The dates of the initial and final CCO meetings held for Shelby County and the incorporated communities within its boundaries are shown in the following Table.

<u>Community Name</u>	<u>Initial CCO Date</u>	<u>Final CCO Date</u>
Alabaster, City of	March 1978	July 29, 1980
Birmingham, City of	May-June 1976	February 13, 1980
Chelsea, City of	March 1978	October 19, 1981
Helena, City of	March 1, 1978	February 4, 1981
Hoover, City of	May-June 1976	February 1, 1980
Indian Springs Village, Town of	March 1978	October 19, 1981
Leeds, City of	May-June 1976	January 29, 1980
Montevallo, City of	March 1978	April 10, 1980

Pelham, City of	March 1978	July 29, 1980
Shelby County (Unincorporated Areas)	March 1978	October 19, 1981
Vestavia Hills, City of	May-June 1976	January 28, 1980
Vincent, Town of	March 1, 1978	July 29, 1980

For the September 29, 2006 countywide FIS, an initial CCO was held on September 18, 2003. This meeting was attended by representatives of Shelby County, Malcolm Pirnie, Inc. and the Alabama Office of Water Resources. There was no final meeting for the 2006 countywide FIS.

For this revision, an initial CCO meeting was held on July 8, 2009. This meeting was attended by representatives of Shelby County and incorporated communities; AMEC Environment and Infrastructure; and the Office of Water Resources (OWR). The results of the study were reviewed at the final CCO meeting held on October 6, 2011 and attended by representatives of Shelby County and incorporated communities; AMEC Environment and Infrastructure; and the Office of Water Resources (OWR). All problems raised at that meeting have been addressed in this study.

## 2.0 AREA STUDIED

### 2.1 Scope of Study

This FIS covers the geographic area of Shelby County, Alabama, including the incorporated communities listed in Section 1.1.

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

#### TABLE 1 - STREAMS STUDIED BY DETAILED METHODS

Acton Creek  
 Bear Creek  
 Beaverdam Creek  
 Beeswax Creek  
 Beeswax Creek Tributary  
 Bishop Creek  
 Bolivar Creek  
 Buck Creek  
 Buxahatchee Creek  
 Buxahatchee Creek Tributary 1  
 Buxahatchee Creek Tributary 2

Buxahatchee Creek Tributary 3  
Buxahatchee Creek Tributary 4  
Buxahatchee Creek Tributary 5  
Buxahatchee Creek Unnamed Tributary  
Cahaba River  
Camp Branch  
Coales Branch  
Coosa River  
Dodd Branch  
Dodd Branch Tributary 1  
Dodd Branch Tributary 1\_1  
Dry Branch  
Four Mile Creek  
Hargis Retreat Creek  
Hogpen Creek  
Kelly Creek  
King Creek  
Lee Branch  
Lee Brook  
Little Beeswax Creek  
Little Beeswax Creek Tributary  
Little Creek  
Locust Creek  
Muddy Prong  
North Fork Yellowleaf Creek  
Peavine Creek  
Prairie Brook  
Shoal Creek  
South Fork Yellowleaf Creek  
Spencer Creek  
Spring Creek/Blue Spring Branch/Tributary 2  
Spring Creek (in Montevallo)  
Upper Spring Creek  
Walthall Branch  
Waxahatchee Creek/Big Creek  
Wildwood Creek  
Wolf Creek  
Yellow Creek  
Yellowleaf Creek

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.

For the September 1, 2011 revision, limits of detailed study for the newly studied or revised streams are shown in the following tabulation:

<b><u>Stream</u></b>	<b><u>Limits of Revised or New Detailed Study</u></b>
Acton Creek	From its confluence with the Cahaba River to the upstream side of Caldwell Mill Road
Beaverdam Creek	From its confluence with the Cahaba River to approximately 400 feet downstream of Highway 17
Bishop Creek	From its confluence with Buck Creek to approximately 1,300 feet upstream of Surrey Lane
Buck Creek	From its confluence with the Cahaba River to approximately 0.9 miles upstream of County Road 340 (Ozley Road)
Coales Branch	From its confluence with Peavine Creek to approximately 1,500 feet upstream of Dow Street
Dodd Branch	From its confluence with the Cahaba River to approximately 800 feet upstream of Indian Lake Lane
Dodd Branch Tributary 1	From its confluence with Dodd Branch to approximately 1,300 feet upstream of Indian Lake Way
Dodd Branch Tributary 1_1	From its confluence with Dodd Branch Tributary 1 to approximately 400 feet upstream of Aaron Road
Hogpen Creek	From its confluence with Peavine Creek to approximately 1,500 feet upstream of Berry Lane
Lee Branch	From approximately 400 feet upstream of the mouth to approximately 350 feet upstream of Hugh Daniel Drive
Lee Brook	From its confluence with Prairie Brook to approximately 950 feet upstream of Wynwood Drive
Little Beeswax Creek	From approximately 2,100 feet above the mouth to approximately 2,800 feet upstream of County Road 61

North Fork Yellowleaf Creek	From approximately 1.3 miles upstream of Bear Creek Road to approximately 1.2 miles upstream of Highland Lakes Road
Peavine Creek	From its confluence with Buck Creek to approximately 1.7 miles upstream of County Road 334 (Dickerson Road)
Prairie Brook	From its confluence with Buck Creek to approximately 0.7 miles upstream of County Road 95

The February 20, 2013 revision incorporated three Letters of Map Revision (LOMRs) within Shelby County. The LOMR dated September 29, 2008 (Case No. 08-04-5953P), was issued by FEMA for the Cahaba River. The LOMR dated October 16, 2009 (Case No. 08-04-6211P), was issued by FEMA for Shoal Creek. The Shoal Creek LOMR extended the AE Zone upstream of the effective Limit of Detailed Study. The LOMR dated July 29, 2010 (Case No. 09-04-0261P), was issued by FEMA for Buxahatchee Creek, Buxahatchee Creek Tributary 1, Buxahatchee Creek Tributary 2, Buxahatchee Creek Tributary 3, Buxahatchee Creek Tributary 4, Buxahatchee Creek Tributary 5 and Buxahatchee Creek Unnamed Tributary.

The limits of detailed study for the Cahaba River, Shoal Creek, Buxahatchee Creek and its tributaries are described in the following tabulation:

<b><u>Stream</u></b>	<b><u>Limits of Revised or New Detailed Study</u></b>
Buxahatchee Creek	Approximately 1.7 miles downstream of I-65 to approximately 2,100 feet upstream of 16 <sup>th</sup> Street
Buxahatchee Creek Tributary 1	From its confluence with Buxahatchee Creek to approximately 3,000 feet upstream of the confluence with Buxahatchee Creek Tributary 2
Buxahatchee Creek Tributary 2	From its confluence with Buxahatchee Creek Tributary 1 to approximately 2,300 feet upstream of 4 <sup>th</sup> Avenue
Buxahatchee Creek Tributary 3	From its confluence with Buxahatchee Creek to approximately 150 feet upstream of State Highway 25
Buxahatchee Creek Tributary 4	From its confluence with Buxahatchee Creek to approximately 1,800 feet upstream of U.S. Route 31.

Buxahatchee Creek Tributary 5	From its confluence with Buxahatchee Creek Tributary 4 to approximately 1,500 feet upstream of the confluence with Buxahatchee Creek Tributary 4
Buxahatchee Creek Unnamed Tributary	From Cross-Section AD to approximately of the Shelby County boundary to approximately 0.6 mile upstream of Centerpoint Road
Buxahatchee Creek	From Cross-Section AD to approximately approximately 0.6 mile upstream of Centerpoint Road
Cahaba River	From approximately 2,000 feet downstream of Federal Highway 31 to approximately 1,600 feet downstream
Shoal Creek	Approximately 0.6 miles upstream of State Highway 119 to approximately 1.8 miles upstream of State Highway 119

As part of this revision, existing detailed study streams listed in Table 1 that were not newly studied or revised for this revision were redelineated using a digital elevation surface created from LiDAR data provided by Shelby County IT Services.

Approximate analyses were used to restudy those areas having existing flood hazards. The scope and methods of study were proposed to, and agreed upon, by FEMA and representatives of Shelby County, AMEC Earth & Environmental Inc., the Alabama Department of Economic and Community Affairs, Office of Water Resources, and the National Service Provider (NSP) - Michael Baker Corporation.

## 2.2 Community Description

Shelby County, Alabama, encompasses approximately 800 square miles in the central part of the state. It is bordered on the west by Bibb County, Alabama; on the northwest by Jefferson County, Alabama; on the northeast by St Clair County, Alabama; on the east by Talladega County, Alabama; on the southeast by Coosa County, Alabama; and on the south by Chilton County, Alabama. The 2010 census estimated population of Shelby County, Alabama, was reported to be 192,503.

Shelby County lies at the southern end of the Appalachian mountain range. Double Oak Mountain divides the county into the Coosa Valley to the east and the Cahaba Valley to the west.

Two of the state's major rivers run through the county: the Coosa River on the southeastern border and the Cahaba River in the north. Most of Shelby County drains southward to the Coosa River by Kelly, Yellowleaf and Waxahatchee Creeks, and their tributaries. Bishop and Buck Creeks drain the northern portion, emptying into the Cahaba River which flows southwesterly along the Jefferson County border.

The climate of Shelby County is humid subtropical, characterized by hot summers, mild winters and abundant rainfall. January sees average highs in the low to mid 50s degrees Fahrenheit (°F), with lows just above freezing. In July, temperatures are in the low 90s °F, with lows averaging around 70 °F and highs exceeding 90 °F. The average annual precipitation is approximately 55 inches and is relatively well-distributed throughout the year.

### 2.3 Principal Flood Problems

Flooding problems are widespread due to the number and nature of streams in Shelby County. Flooding is particularly prevalent along certain reaches of lower Yellowleaf Creek and tributaries of the Cahaba River. The potential for flood damage as a whole is minimal due to the lack of development along most of the county's studied streams.

#### The City of Alabaster

Flooding problems are primarily due to the overflow of Buck Creek. Two areas which historically experience flooding are where Buck Creek crosses under First Avenue West and Sixth Avenue Southwest. The floodplain between First Avenue West and Sixth Avenue Southwest ranges from about 300 to 900 feet in width. The potential for flood damage in many areas along Peavine Creek is not great due to the lack of present development. The areas surrounding Peavine Creek are primarily pasture and woodlands.

#### The City of Helena

Flooding problems are primarily due to the Cahaba River and Buck Creek. In many areas along Buck Creek, the floodplain is narrow due to the steepness of the stream valley. However, from the mouth of Roy Branch to a point approximately 1,000 feet downstream of the Main Street bridge, the floodplain widens. The floodplain in this area is generally bounded by CSX Transportation rail lines on both banks of the stream. At some points, the

floodplain widens to about 500 or 600 feet. The potential for flood damage in this area is limited primarily to the railroad facilities there because few structures are present in this area. The back-up of water behind the CSX Transportation crossing on Prairie Brook is also a potential source of flooding damage. Several structures along Prairie Brook in the vicinity of Elm Street are susceptible to shallow flooding. Further flooding damage from Prairie and Lee Brook is limited due to the lack of development in these areas. The potential for flood damage along the Cahaba River is minimal because the area is primarily undeveloped.

#### The City of Montevallo

Flooding problems are primarily due to the overflow of Shoal Creek. Shoal Creek flows through Montevallo from the northern corporate limits at Alabama Highway 119 to the southwestern corner of the city. The potential for flood damage in many areas along Shoal Creek is not great due to the lack of development. For example, areas upstream of Overland Road and downstream of the confluence with King Creek are primarily pasture and woodlands. In the reach between the confluence of King Creek and Orr Park, the potential for flood damages is greater due to some development in the floodplain. The floodplain between the dam and the Middle Street viaduct is generally narrow, ranging from 200 to 400 feet. Above Middle Street, the floodplain widens considerably with widths ranging from about 300 to 1,500 feet at Orr Park.

The largest floods in recent years occurred during March 29, 1977, and March 11, 1979.

There are recorded high water marks from both the 1977 and 1979 floods. Some of these marks were located on the Morgan Street bridge and the Middle Street viaduct. These marks serve as indicators of the hydraulic behavior of the stream in this area during flood stage. These high water marks were used as a basis of comparison in determining the flood profiles.

#### The City of Pelham

Flooding problems are primarily due to the overflow of Bishop Creek. The potential for flood damage along Bishop Creek is great due to development in the floodplain. Some areas of the Chandalar development and the Belle Vista and Green Park mobile home parks are particularly susceptible to flooding and property damage. In recent years, large floods occurred during April 15, 1976, and April 26-28, 1977. During the 1976 flood, roads into Chandalar and the mobile home parks were impassable due to the high water.

## Town of Vincent

Flooding problems are primarily due to the back-up of water behind the culvert where Spring Creek flows under the Norfolk Southern Railway approximately 300 feet downstream of the confluence of Spring Creek and Blue Spring Branch. During large floods, water backs up and floods pasture and crop land upstream of the Norfolk Southern Railway embankment. Other flooding problems in Vincent are due to low topography and poorly drained areas. After heavy rains, water stands in these low areas and drains slowly.

### 2.4 Flood Protection Measures

In general, there are no flood protection measures affecting Shelby County. However, the risk of severe flooding from the Coosa River has been greatly reduced due to the series of Alabama Power Company dams along the Coosa River from the Georgia-Alabama state line downstream to Wetumpka near Montgomery, Alabama. In the cities of Vincent and Helena, there are small lakes in the Spring Creek and Buck Creek drainage areas respectively, but their storage volumes are not large enough to affect flows from larger rainfall events.

## 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. Flood events of a magnitude which are expected to be equaled or exceeded once on the average during any 10-, 50-, 100-, and 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-, and 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 one year are considered. For example, the risk of having a flood which equals or exceeds the 100-year flood (one percent chance of annual occurrence) in any 50 year period is about 40 percent (four in 10), and for any 90 year period, the risk increases to about 60 percent (six in 10). The analyses reported here reflect flooding potentials based on conditions existing in the time of completion of this FIS. Maps and flood elevations will be amended periodically to reflect future changes.

### 3.1 Hydrologic Analyses

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

#### Pre-Countywide Analysis

Each incorporated community within, and the unincorporated areas of, Shelby County, with the exceptions of the Cities of Calera, Harpersville, Westover, Wilsonville, and Wilton and the City of Columbiana has a previously printed FIS report. The hydrologic analyses described in those reports have been compiled and are summarized below. Prior to this countywide FIS, the Shelby County portions of the Cities of Birmingham, Hoover, Leeds, and Vestavia Hills were not incorporated within Shelby County; those areas were addressed by the Shelby County (Unincorporated Areas) FIS.

Equations have been developed by Olin and Bingham (Olin and Bingham, 1977) for estimating peak flows for the 10-, 2-, and 0.2-percent annual chance floods on natural streams in Alabama. These flows were used on streams with drainage areas of 1 to 15 square miles. Flood frequency relationships developed by Hains (Hains, 1973) were used when the drainage area was between 25 and 800 square miles. When the watershed was between 15 and 25 square miles, peak flows were computed by combining the two methods using a weighted average based on the drainage area. The 0.2-percent annual chance flows were determined by extrapolating the 10-, 2-, and 1-percent annual chance peak flows using a least squares fit.

The Sauer Method (Golden, 1977) was used to adjust the natural flow to account for the effects of urbanization. This method relates the peak discharge for any return interval to the percentage of impervious area in the watershed and the average rainfall intensity ratio of the 10-, 2-, and 1-percent annual chance storms to the 50-percent annual chance storms.

Land use for each watershed was determined from aerial photos (Jack W. Berry & Associates, Inc., 1978), United States Geological Survey (USGS) quadrangles (USGS, various dates), and field inspection. The percent impervious area for any given residential or commercial land use was obtained from the Soil Conservation Service (SCS, Technical Release No. 55 (U.S. Department of Agriculture, 1975).

In the Town of Vincent, stream flow records were not available for Spring Creek or any of its tributaries. Therefore, flood flow frequency equations applicable to small streams in Alabama were used to determine the 10-, 2-, and 1-percent annual chance flood flows. These equations, developed by

Olin and Bingham (Olin, 1977), are based on the watershed drainage area and slope. Results of these equations were extrapolated using a least squares fit to provide estimates of the 0.2-percent annual chance flows.

#### February 20, 2013 Revision

Detailed hydrologic studies were conducted on the watersheds for Acton Creek, Buck Creek, Lee Branch, and Dodd Branch. The Acton Creek, Buck Creek, and Lee Branch watersheds were modeled using HEC-HMS Version 3.4. The Dodd Branch watershed was modeled using PCSWMM Version 3.8.809.

Basins were delineated using ArcHydro with an input of a 4-foot LiDAR digital elevation model (DEM) created by AMEC from LiDAR data obtained during 2009. The ArcHydro basins were reviewed and edited by engineers to better represent basin boundaries. Land use data was created using aerial imagery from years 2008 and 2009. Soils data were acquired from the NRCS Soil Data Mart. The soils data were classified into four hydrologic soil groups, which indicate general potential for infiltration of water into soil.

The United States Department of Agriculture (USDA) Soil Conservation Service (SCS) Curve Number method was used as the loss method. The landuse classification and hydrologic soil group were used to determine curve numbers. The curve number method is based on the description in SCS Technical Release 55 (TR55) titled *Urban Hydrology for Small Watersheds* published in June 1986. An antecedent moisture condition of II (AMC II) was assumed for the watersheds. Curve Numbers were adjusted based on basin slope as discussed in *Soil and Water Assessment Tool Theoretical Documentation* Version 2005.

The 24-hour 10-percent, 2-percent, and 1-percent annual chance rainfall depths were found in Technical Paper No. 40 (TP-40) titled *Rainfall Frequency Atlas of the Eastern United States for Duration from 30 Minutes to 24 Hours and Return Periods from 1- to 100- Years*. The 24-hour 0.2% annual chance rainfall depth was extrapolated using the 24-hour 1-, 2-, 5-, 10-, 25-, 50-, 100-, and 500-year events from TP-40. The rainfall distribution used for Shelby County was the SCS Type III 24-hour storm distribution based on the description in TR55.

The HEC-HMS models used the Clark Unit Hydrograph Transform. The time-of-concentration input was calculated using the guidance in TR55 and *Highway Hydrology* part of *Hydraulic Design Series No. 2, Second Edition* published in October 2002 by the Federal Highway Administration (FHWA). The HEC-HMS models used the Muskingum-Cunge Routing method with 8-point cross sections. The 8-point cross sections were

estimated using the 4-foot LiDAR DEM created by AMEC. The HEC-HMS models accounted for storage areas using elevation-area data and dam top and spillway data estimated from the 4-foot LiDAR DEM.

Dodd Branch, Dodd Branch Tributary 1 and Dodd Branch Tributary 1\_1 were modeled using PCSWMM. The study area was divided into 50 subcatchments. The average subcatchment area was 25 acres. Flow length was estimated as longest flow path for sheet and shallow flow. Subcatchment slope was calculated from the ground surface by creating a slope raster from the 4-foot LiDAR DEM. Curve numbers were generated using landuse data created by AMEC, soils data from the National Resources Conservation Service (NRCS), and the slope raster. Composite curve numbers (combining pervious and impervious areas) were first generated from the landuse and soils data. The composite curve numbers were converted to pervious curve numbers that represent the curve numbers of the only the pervious areas. The pervious curve numbers were then adjusted to account for watershed slope (*SWAT, Theoretical Documentation, Version 2005*). Percent impervious areas were determined based on landuse developed from aerial imagery. Junctions were created to represent outlets of culverts, and conduits were created to represent culverts and open channels. Culvert sizes were based on survey data and data provided by local municipalities. Weirs were used to represent actual weirs and road crossings. Two outlet structures are in the model. The structures are standpipes in reservoirs and are modeled using rating curves developed to represent the transition from weir flow to orifice flow.

North Fork Yellowleaf Creek and Little Beeswax Creek were analyzed by detailed regression methods. Basins were delineated for each stream, and the resulting drainage areas were input into the regression equations to find the peak flows for the 10-percent, 2-percent, 1-percent, and 0.2-percent annual chance flood events. The regression equations can be found in the USGS document SIR 2007-5204.

A summary of the drainage area-peak discharge relationships for all the streams studied by detailed methods is shown in Table 2, “Summary of Discharges.”

TABLE 2 – SUMMARY OF DISCHARGES

<u>FLOODING SOURCE AND LOCATION</u>	<u>DRAINAGE AREA (sq. miles)</u>	<u>PEAK DISCHARGES (cfs)</u>			
		<u>10-Percent Annual-Chance</u>	<u>2-Percent Annual-Chance</u>	<u>1-Percent Annual-Chance</u>	<u>0.2-Percent Annual-Chance</u>
ACTON CREEK					
At Indian Valley Road Approximately 530 feet downstream of Caldwell Mill Road	3.1	1,930	2,870	3,350	4,470
	2.2	1,770	2,560	2,970	3,890

TABLE 2 – SUMMARY OF DISCHARGES

<u>FLOODING SOURCE AND LOCATION</u>	<u>DRAINAGE AREA (sq. miles)</u>	<u>PEAK DISCHARGES (cfs)</u>			
		<u>10-Percent Annual-Chance</u>	<u>2-Percent Annual-Chance</u>	<u>1-Percent Annual-Chance</u>	<u>0.2-Percent Annual-Chance</u>
Approximately 370 downstream of Caldwell Mill Road	1.9	1,550	2,220	2,570	3,360
<b>ACTON CREEK</b> (continued)					
Approximately 320 feet downstream of Caldwell Mill Road	1.6	1,330	1,890	2,190	2,850
<b>BEAR CREEK</b>					
At mouth	39.0	5,430	8,950	10,650	13,910
Just upstream of confluence with Hurricane Branch	29.6	4,630	7,650	9,120	11,920
<b>BEAVERDAM CREEK</b>					
Just upstream of the confluence with the Cahaba River	14.2	4,410	6,320	7,150	9,180
Just upstream of Louisville and Nashville Railroad	13.0	4,250	6,080	6,870	8,810
Just upstream of Coalmont Road	12.4	4,170	5,950	6,730	8,620
Approximately 1,650 feet upstream of Coalmont Road	12.0	4,110	5,870	6,630	8,500
Approximately 0.6 mile upstream of Coalmont Road	11.9	4,100	5,860	6,620	8,480
Approximately 230 feet downstream of the confluence with Dry Creek I	10.6	3,860	5,510	6,220	7,970
Just upstream of the confluence with Dry Creek I	8.7	3,550	5,040	5,690	7,270
Just downstream of Highway 17	8.3	3,420	4,860	5,490	7,030
<b>BEE SWAX CREEK</b>					
At County Road 61	18.4	2,980	5,010	5,990	7,830

TABLE 2 – SUMMARY OF DISCHARGES

<u>FLOODING SOURCE AND LOCATION</u>	<u>DRAINAGE AREA (sq. miles)</u>	<u>PEAK DISCHARGES (cfs)</u>			
		<u>10-Percent Annual-Chance</u>	<u>2-Percent Annual-Chance</u>	<u>1-Percent Annual-Chance</u>	<u>0.2-Percent Annual-Chance</u>
Just upstream of confluence with Beeswax Creek Tributary	15.6	2,460	4,200	5,040	6,600
<b>BEESWAX CREEK TRIBUTARY</b>					
At mouth	1.7	690	1,000	1,150	1,470
<b>BISHOP CREEK</b>					
At mouth	27.0	5,320	8,010	9,440	12,880
At Bearden Road	26.4	5,280	7,970	9,390	12,800
<b>BISHOP CREEK (continued)</b>					
Approximately 0.6 mile downstream of Crosscreek Trail	25.8	5,250	7,940	9,350	12,760
At Chandalar Drive	24.9	5,190	7,850	9,250	12,630
At Pelham Parkway	23.6	5,460	8,140	9,590	12,980
At Interstate 65	22.5	5,370	8,000	9,410	12,720
Approximately 1,830 feet upstream of Woodward Drive	20.6	5,200	7,680	9,020	12,320
Approximately 0.4 mile upstream of Indian Trail	13.9	3,700	5,530	6,440	8,640
Approximately 0.5 mile downstream of Resting S Road	12.4	3,530	5,220	6,110	8,250
At Cahaba Valley Road	11.7	3,430	5,050	5,900	7,960
At County Highway 14	3.1	1,650	2,310	2,650	3,460
At Cahaba Valley Road	2.8	1,610	2,260	2,590	3,370
<b>BOLIVAR CREEK</b>					
At mouth	4.7	1,150	1,850	2,180	2,830
Just upstream of County Road 39	2.5	660	960	1,100	1,400
<b>BLUE SPRING BRANCH</b>					
At the confluence with Upper Spring Creek	6.7	1,680	2,600	3,010	3,900

TABLE 2 – SUMMARY OF DISCHARGES

<u>FLOODING SOURCE AND LOCATION</u>	<u>DRAINAGE AREA (sq. miles)</u>	<u>PEAK DISCHARGES (cfs)</u>			
		<u>10-Percent Annual-Chance</u>	<u>2-Percent Annual-Chance</u>	<u>1-Percent Annual-Chance</u>	<u>0.2-Percent Annual-Chance</u>
Just above the confluence with Tributary 1	5.2	1,460	2,220	2,570	3,310
<b>BUCK CREEK</b>					
At mouth	70.2	15,680	22,530	26,150	34,560
<b>BUCK CREEK (continued)</b>					
At Railroad	69.6	15,650	22,460	26,040	34,400
At Railroad	68.6	15,540	22,300	25,850	34,140
Approximately 220 feet upstream of Helena Road	68.3	15,510	22,260	25,810	34,080
Just downstream of the confluence with Prairie Brook	68.0	15,530	22,270	25,820	34,130
Just upstream the confluence with Prairie Brook	65.4	15,000	21,550	24,990	32,930
Just downstream of the confluence with Bishop Creek	64.0	14,880	21,350	24,750	32,610
Just upstream of the confluence with Bishop Creek	37.0	11,860	16,740	19,220	25,200
At Railroad	36.7	11,920	16,780	19,290	25,330
Just downstream of the confluence with Peavine Creek	35.2	11,610	16,320	18,770	24,740
Just upstream of the confluence with Peavine Creek	17.1	6,880	9,740	11,280	14,940
Approximately 0.6 mile upstream of Stonehaven Trail	16.1	6,830	9,650	11,170	14,790
At Industrial Road	15.0	7,110	10,040	11,580	15,300
At 1st Avenue	14.1	6,970	9,830	11,340	14,980
Approximately 0.6 mile downstream of Thompson Road	11.4	5,980	8,400	9,680	12,770
Approximately 1,280 feet upstream of Thompson Road	9.8	5,530	7,730	8,850	11,400

TABLE 2 – SUMMARY OF DISCHARGES

<u>FLOODING SOURCE AND LOCATION</u>	<u>DRAINAGE AREA (sq. miles)</u>	<u>PEAK DISCHARGES (cfs)</u>			
		<u>10-Percent Annual-Chance</u>	<u>2-Percent Annual-Chance</u>	<u>1-Percent Annual-Chance</u>	<u>0.2-Percent Annual-Chance</u>
At Highway 119	6.9	3,830	5,280	6,020	7,710
At County Road 26 Approximately 1,670 feet downstream of Interstate 65	6.1	3,200	4,420	5,050	6,480
<b>BUCK CREEK (continued)</b>					
At Interstate 65	4.4	1,990	2,760	3,150	4,040
At Railroad	4.4	1,990	2,760	3,150	4,040
At Highway 31 Approximately 0.9 mile upstream of Ozley Road	2.6	1,260	1,770	2,030	2,610
Approximately 1.1 miles upstream of Ozley Road	1.7	870	1,250	1,440	1,870
At Fultons Lake	0.9	430	630	730	950
	0.8	390	550	640	840
<b>BUXAHATCHEE CREEK</b>					
Approximately 1.7 miles downstream of I-65	15.71	4,085	5,955	6,820	9,025
Approximately 1,000 feet downstream of Buxahatchee Creek Tributary 3	11.63	3,525	5,130	5,885	7,770
Just upstream of I-65	9.56	3,095	4,500	5,165	6,815
Just upstream of U.S. Route 31	4.57	1,720	2,505	2,870	3,800
<b>BUXAHATCHEE CREEK TRIBUTARY 1</b>					
Just upstream of the confluence with Buxahatchee Creek	2.77	1,325	1,930	2,215	2,920
Approximately 300 feet upstream of railroad	2.47	1,250	1,815	2,085	2,835
Just downstream of I-65	0.47	290	445	515	685
<b>BUXAHATCHEE CREEK TRIBUTARY 2</b>					
Just upstream of the confluence with Buxahatchee Creek Tributary 1	1.70	1,060	1,540	1,770	2,325

TABLE 2 – SUMMARY OF DISCHARGES

<u>FLOODING SOURCE AND LOCATION</u>	<u>DRAINAGE AREA (sq. miles)</u>	<u>PEAK DISCHARGES (cfs)</u>			
		<u>10-Percent Annual-Chance</u>	<u>2-Percent Annual-Chance</u>	<u>1-Percent Annual-Chance</u>	<u>0.2-Percent Annual-Chance</u>
Just upstream of 4th Avenue	1.38	835	1,215	1,400	1,840
Just upstream of Whippoorwill Lane	0.77	350	535	620	825
<b>BUXAHATCHEE CREEK TRIBUTARY 3</b>					
Just upstream of the confluence with Buxahatchee Creek	2.01	1,025	1,490	1,710	2,260
<b>BUXAHATCHEE CREEK TRIBUTARY 3 (continued)</b>					
Approximately 700 feet downstream of County Road 306	1.52	740	1,085	1,240	1,645
Just upstream of State Highway 25	0.66	365	565	650	865
<b>BUXAHATCHEE CREEK TRIBUTARY 4</b>					
Just upstream of the confluence with Buxahatchee Creek	1.46	715	1,045	1,195	1,585
At the confluence with Buxahatchee Creek Tributary 5	0.68	420	615	700	930
<b>BUXAHATCHEE CREEK TRIBUTARY 5</b>					
Just upstream of the confluence with Buxahatchee Creek Tributary 4	0.40	315	460	530	700
<b>BUXAHATCHEE CREEK UNNAMED TRIBUTARY</b>					
Approximately 350 feet downstream of 21st Avenue	1.28	735	1,075	1,230	1,625
Just upstream of railroad	1.22	690	1,005	1,150	1,525
<b>CAHABA RIVER</b>					

TABLE 2 – SUMMARY OF DISCHARGES

<u>FLOODING SOURCE AND LOCATION</u>	<u>DRAINAGE AREA (sq. miles)</u>	<u>PEAK DISCHARGES (cfs)</u>			
		<u>10-Percent Annual-Chance</u>	<u>2-Percent Annual-Chance</u>	<u>1-Percent Annual-Chance</u>	<u>0.2-Percent Annual-Chance</u>
Just upstream of the confluence with Piney Wood Creek	369.0	21,240	36,210	44,100	57,260
<b>CAHABA RIVER</b>					
(continued)					
Approximately 2.1 miles downstream of the confluence with Trigger Creek	338.0	20,240	34,380	41,820	54,280
Just upstream of the confluence with Buck Creek	260.0	16,930	28,740	34,980	45,350
<b>CAMP BRANCH</b>					
At mouth	35.9	3,250	5,350	6,370	8,330
Just upstream of Norfolk Southern Railway bridge	21.0	2,510	4,240	5,090	6,670
<b>COALES BRANCH</b>					
At mouth	1.4	1,180	1,610	1,820	2,320
At Hidden Creek Parkway	1.1	980	1,330	1,500	1,900
Approximately 1,460 feet upstream of Dow Street	0.6	520	710	800	1,020
<b>DODD BRANCH</b>					
Just downstream of Lake Forest Circle	1.9	150	330	520	1,010
Just downstream of Riverchase Parkway West	1.6	270	450	660	1,160
Just downstream of Pond Dam	1.5	110	420	620	1,100
Just downstream of Baneberry Drive	0.5	110	140	150	180
<b>DODD BRANCH TRIBUTARY 1</b>					
Just downstream of Baneberry Drive	0.7	640	780	870	1,080
Just downstream of Greenway Drive	0.6	620	770	870	1,080

TABLE 2 – SUMMARY OF DISCHARGES

<u>FLOODING SOURCE AND LOCATION</u>	<u>DRAINAGE AREA (sq. miles)</u>	<u>PEAK DISCHARGES (cfs)</u>			
		<u>10-Percent Annual-Chance</u>	<u>2-Percent Annual-Chance</u>	<u>1-Percent Annual-Chance</u>	<u>0.2-Percent Annual-Chance</u>
Just downstream of Indian Lake Way	0.2	250	350	400	500
<b>DODD BRANCH TRIBUTARY 1_1</b>					
Approximately 170 feet upstream of Norridge Place	0.3	150	180	190	210
Just downstream of Beaver Creek Parkway	0.2	140	210	240	280
Approximately 150 feet downstream of Saddle Run Circle	0.1	110	180	190	220
<b>DODD BRANCH TRIBUTARY 1_1 (continued)</b>					
Just downstream of Aaron Road	0.1	80	120	140	170
<b>DRY CREEK</b>					
At mouth	13.4	2,810	4,400	5,130	6,650
<b>FOURMILE CREEK</b>					
At mouth	15.2	2,300	3,970	4,800	6,280
<b>HARGIS RETREAT CREEK</b>					
At mouth	2.8	1,070	1,530	1,730	2,210
<b>HOGPEN CREEK</b>					
At mouth	4.0	2,090	2,920	3,310	4,350
At Highway 52E	3.7	2,000	2,780	3,180	4,250
Approximately 810 feet upstream of Brookshire Lane	3.3	1,850	2,660	3,090	4,110
Approximately 0.4 mile upstream of Berry Lane	1.5	1,230	1,750	2,010	2,610
<b>KELLY CREEK</b>					
Just downstream of the confluence with Glade Branch	195.8	18,190	30,250	36,170	47,270
Just upstream of the confluence with Bear Creek	135.2	14,800	24,410	29,070	38,000
<b>KING CREEK</b>					

TABLE 2 – SUMMARY OF DISCHARGES

<u>FLOODING SOURCE AND LOCATION</u>	<u>DRAINAGE AREA (sq. miles)</u>	<u>PEAK DISCHARGES (cfs)</u>			
		<u>10-Percent Annual-Chance</u>	<u>2-Percent Annual-Chance</u>	<u>1-Percent Annual-Chance</u>	<u>0.2-Percent Annual-Chance</u>
At mouth	11.5	2,420	3,820	4,450	5,790
<b>LEE BRANCH</b>					
Convergence with Lake Purdy	3.3	2,300	3,260	3,790	4,900
Approximately 1,800 feet downstream of Lee Branch Lane	2.9	2,220	3,140	3,640	4,690
Approximately 400 feet upstream of Lee Branch Lane	2.7	2,200	3,110	3,630	4,670
At Greystone Road	2.3	2,090	2,960	3,390	4,240
Just downstream side of Hugh Daniel Drive (just downstream of unnamed Tributary)	2.0	1,780	2,540	2,900	3,700
Just downstream side of Hugh Daniel Drive (just upstream of unnamed Tributary)	1.1	1,100	1,480	1,650	1,980
<b>LEE BROOK</b>					
At mouth	0.9	1,120	1,500	1,690	2,110
At Tucker Road	0.9	1,040	1,390	1,570	1,950
At Highway 17	0.2	230	300	330	410
<b>LITTLE BEESWAX CREEK</b>					
Approximately 0.4 mile upstream of Beeswax Creek	9.8	2,690	4,470	5,280	7,270
Approximately 0.53 mile downstream of Highway 28	9.5	2,650	4,410	5,210	7,170
Just downstream of Highway 28	8.9	2,540	4,240	5,010	6,900
Approximately 1,800 feet upstream of Highway 28	8.3	2,440	4,070	4,810	6,630
Approximately 730 feet downstream of Highway 77 (easterly section)	7.8	2,350	3,920	4,640	6,400
Just upstream of Highway 77 (easterly section)	7.7	2,330	3,890	4,600	6,360

TABLE 2 – SUMMARY OF DISCHARGES

<u>FLOODING SOURCE AND LOCATION</u>	<u>DRAINAGE AREA (sq. miles)</u>	<u>PEAK DISCHARGES (cfs)</u>			
		<u>10-Percent Annual-Chance</u>	<u>2-Percent Annual-Chance</u>	<u>1-Percent Annual-Chance</u>	<u>0.2-Percent Annual-Chance</u>
LITTLE BEESWAX CREEK (continued)					
Approximately 1,800 feet upstream of Highway 77 (easterly section)	7.5	2,270	3,800	4,500	6,220
Approximately 1,750 feet downstream of Highway 77 (westerly section)	5.8	1,950	3,290	3,900	5,400
Just upstream of Highway 77 (westerly section)	5.8	1,940	3,270	3,880	5,370
Approximately 1,540 feet upstream of Highway 77 (westerly section)	5.7	1,930	3,250	3,850	5,340
Approximately 1,840 feet upstream of Highway 77 (westerly section)	4.8	1,720	2,900	3,450	4,800
Approximately 1,900 feet downstream of Highway 61	4.6	1,680	2,840	3,370	4,690
Approximately 18,700 feet downstream of Highway 61	3.5	1,410	2,390	2,850	3,980
Just upstream of Highway 61	3.3	1,360	2,320	2,760	3,860
Approximately 200 feet downstream of the confluence with Little Beeswax Creek Tributary	3.2	1,350	2,300	2,740	3,820
LITTLE BEESWAX CREEK TRIBUTARY					
At mouth	0.8	420	600	680	860
LITTLE CREEK					
At mouth	8.5	1,950	3,050	3,550	4,610
Just upstream of the confluence with Hargis Retreat Creek	4.3	1,310	1,960	2,240	2,890

TABLE 2 – SUMMARY OF DISCHARGES

<u>FLOODING SOURCE AND LOCATION</u>	<u>DRAINAGE AREA (sq. miles)</u>	<u>PEAK DISCHARGES (cfs)</u>			
		<u>10-Percent Annual-Chance</u>	<u>2-Percent Annual-Chance</u>	<u>1-Percent Annual-Chance</u>	<u>0.2-Percent Annual-Chance</u>
LOCUST CREEK Approximately 1 mile upstream of mouth	7.9	1,410	2,410	2,920	3,810
MUDDY PRONG At mouth	37.0	6,790	11,080	13,150	17,150
NORTH FORK YELLOWLEAF CREEK Just upstream of the confluence with South Fork Yellowleaf Creek	43.8	7,390	12,190	14,530	18,980
Just upstream of the confluence with Spencer Creek	26.5	5,370	8,940	10,710	13,990
Approximately 1.2 miles upstream of Bear Creek Road	8.9	3,430	4,910	5,550	7,130
Approximately 90 feet downstream of the confluence with Ivy Branch	8.3	3,270	4,680	5,300	6,810
Approximately 250 feet downstream of Highway 280	6.9	2,970	4,240	4,800	6,170
Just upstream of the confluence with North Fork Yellowleaf Creek Tributary 1	4.6	2,150	3,110	3,530	4,590
Approximately 720 feet upstream of the confluence with North Fork Yellowleaf Creek Tributary 1	4.6	2,150	3,100	3,530	4,580
Approximately 1,160 feet downstream of Dunnivant Valley Road	4.0	1,990	2,870	3,270	4,240
Just upstream of Dunnivant Valley Road	3.5	1,850	2,670	3,030	3,940
Approximately 1,540 feet upstream of Dunnivant Valley Road	3.4	1,840	2,650	3,010	3,910

TABLE 2 – SUMMARY OF DISCHARGES

<u>FLOODING SOURCE AND LOCATION</u>	<u>DRAINAGE AREA (sq. miles)</u>	<u>PEAK DISCHARGES (cfs)</u>			
		<u>10-Percent Annual-Chance</u>	<u>2-Percent Annual-Chance</u>	<u>1-Percent Annual-Chance</u>	<u>0.2-Percent Annual-Chance</u>
NORTH FORK YELLOWLEAF CREEK (continued)					
Approximately 650 feet downstream of Highland Lakes Road	3.0	1,630	2,360	2,690	3,510
Just upstream of Highland Lakes Road	2.7	1,490	2,170	2,470	3,240
Approximately 1,450 feet upstream of Highland Lakes Road	2.6	1,450	2,110	2,410	3,150
Approximately 840 feet downstream of Highland Village Bend	2.2	1,330	1,940	2,210	2,890
Just upstream of Highland Village Bend	2.1	1,310	1,900	2,170	2,840
Approximately 960 feet upstream of Highland Village Bend	2.0	1,300	1,880	2,150	2,810
Approximately 1,300 feet upstream of Highland Village Bend	1.6	1,170	1,690	1,930	2,520
PEAVINE CREEK					
At mouth	18.1	5,070	6,990	7,990	10,290
Just downstream of the confluence with Coales Branch	17.8	5,040	6,920	7,910	10,190
Just upstream of the confluence with Coales Branch	16.5	4,620	6,260	7,080	9,050
Just downstream of the confluence with Hogpen Creek	16.5	4,620	6,270	7,090	9,070
Just upstream of the confluence with Hogpen Creek	12.5	2,680	3,520	4,150	5,650
At Interstate 65	11.5	2,530	3,490	4,110	5,570
Approximately 0.9 mile upstream of Simmsville Road	9.5	2,240	3,320	3,870	5,170
Approximately 0.9 mile upstream of Weatherly Way	7.6	2,160	3,140	3,630	4,740

TABLE 2 – SUMMARY OF DISCHARGES

<u>FLOODING SOURCE AND LOCATION</u>	<u>DRAINAGE AREA (sq. miles)</u>	<u>PEAK DISCHARGES (cfs)</u>			
		<u>10-Percent Annual-Chance</u>	<u>2-Percent Annual-Chance</u>	<u>1-Percent Annual-Chance</u>	<u>0.2-Percent Annual-Chance</u>
<u>PEAVINE CREEK(continued)</u>					
At Highway 332 Approximately 0.5 mile upstream of Highway 332	6.9	2,110	3,010	3,470	4,530
At Railroad Approximately 0.5 mile upstream of Railroad	5.7	1,750	2,500	2,890	3,770
Approximately 1.5 miles upstream of Railroad	4.2	1,320	1,900	2,190	2,840
	1.8	630	930	1,070	1,410
	0.5	260	370	430	560
<u>PRAIRIE BROOK</u>					
At mouth Just downstream of the confluence with Lee Brook	2.5	2,320	3,170	3,580	4,520
Just upstream of the confluence with Lee Brook	2.2	2,050	2,790	3,150	3,950
Appoximately 0.7 mile upstream of the confluence with Lee Brook	1.3	1,020	1,390	1,570	1,990
	0.7	700	940	1,050	1,320
<u>SHOAL CREEK</u>					
At downstream corporate limits Just above the confluence with King Creek	58.2	5,060	8,800	10,770	14,040
Just downstream of Overland Road Just above the confluence with Spring Creek	45.9	4,400	7,620	9,330	12,150
Approximately 6.5 miles upstream of Norfolk Southern Railway Bridge	43.6	4,220	7,390	9,080	11,830
Approximately 7.6 miles upstream of Norfolk Southern Railway Bridge	14.1	2,500	4,110	4,880	6,360
	11.6	2,480	3,815	4,380	5,800
	9.2	2,125	3,265	3,755	4,970

TABLE 2 – SUMMARY OF DISCHARGES

<u>FLOODING SOURCE AND LOCATION</u>	<u>DRAINAGE AREA (sq. miles)</u>	<u>PEAK DISCHARGES (cfs)</u>			
		<u>10-Percent Annual-Chance</u>	<u>2-Percent Annual-Chance</u>	<u>1-Percent Annual-Chance</u>	<u>0.2-Percent Annual-Chance</u>
<b>SOUTH FORK YELLOWLEAF CREEK</b>					
Just upstream of the confluence with North Fork Yellowleaf Creek	44.6	5,230	8,840	10,640	13,930
Just downstream of the confluence with Salster Branch	25.0	4,300	6,950	8,200	10,710
<b>SPENCER CREEK</b>					
At mouth	6.6	1,520	2,440	2,870	3,720
Just upstream of the confluence with Charob Lake Creek	2.7	800	1,250	1,470	1,900
<b>SPRING CREEK (in Montavello)</b>					
At mouth	29.2	3,210	5,620	6,910	9,000
Just above the confluence with Dry Creek	15.9	2,610	4,360	5,190	6,790
<b>SPRING CREEK (in Vincent)</b>					
At U.S. Route 231 Just above the confluence with Blue Spring Branch	11.6	2,360	3,760	4,400	5,730
At pipeline crossing	3.5	1,010	1,560	1,820	2,350
<b>TRIBUTARY 2</b>					
At mouth	1.5	630	930	1,050	1,340
At pipeline crossing	1.0	500	700	800	1,010
<b>WALTHALL BRANCH</b>					
At mouth	5.4	1,130	1,900	2,270	2,960
<b>WAXAHATCHEE CREEK/BIG CREEK</b>					
At mouth	46.3	3,760	6,190	7,380	9,630
Just upstream of the confluence with Wolf Creek	18.0	2,550	4,300	5,160	6,750
At the confluence with Wildwood Creek	13.4	2,380	3,930	4,670	6,090

TABLE 2 – SUMMARY OF DISCHARGES

<u>FLOODING SOURCE AND LOCATION</u>	<u>DRAINAGE AREA (sq. miles)</u>	<u>PEAK DISCHARGES (cfs)</u>			
		<u>10-Percent Annual-Chance</u>	<u>2-Percent Annual-Chance</u>	<u>1-Percent Annual-Chance</u>	<u>0.2-Percent Annual-Chance</u>
WILDWOOD CREEK At mouth	4.3	1,300	1,980	2,290	2,940
WOLF CREEK At mouth	12.3	2,210	3,660	4,350	5,680
YELLOW CREEK At mouth	0.5	300	430	490	620
YELLOWLEAF CREEK At Norfolk Southern Railway bridge	179.0	13,630	22,490	26,780	35,000

### 3.2 Hydraulic Analyses

Analyses of the hydraulic characteristics of flooding from the sources studied were carried out to provide estimates of the elevations of floods of the selected recurrence intervals. Users should be aware that flood elevations shown on the FIRM represent rounded whole-foot elevations and may not exactly reflect the elevations shown on the Flood Profiles or in the Floodway Data tables in the FIS report. For construction and/or floodplain management purposes, users are encouraged to use the flood elevation data presented in this FIS in conjunction with the data shown on the FIRM.

#### Pre-countywide Analyses

Each incorporated community within, and the unincorporated areas of, Shelby County, with the exceptions of the Cities of Calera, Harpersville, Westover, Wilsonville, and Wilton and the City of Columbiana, has a previously printed FIS report. The hydraulic analyses described in those reports have been compiled and are summarized below.

Cross sections for backwater analyses of the county study streams were obtained from the negatives of aerial photographs taken in March 1978 at a scale of 1"=800'. The below-water sections were checked to obtain elevation data and structural geometry.

Water-surface elevations for floods of the selected recurrence intervals were computed using the United States Army Corps of Engineers (USACE)

Hydrologic Engineering Center (HEC) HEC-2 step-backwater computer program (USACE, 1976).

Coordination was maintained with Betz Converse Murdoch, the study contractor for the Jefferson County study. Law Engineering made efforts to match elevations previously determined for the Cahaba River by the Jefferson County study. Elevations conflicted approximately seven feet near the county lines. A sensitivity analysis of Manning's "n" values, discharges, cross sections, channel slope, and contraction-expansion coefficients was conducted to determine the cause of discrepancy. Discharge frequencies were also extended in time for USGS gages at the City of Acton (#02423500) and the City of Helena (#02423555) to determine stage-discharge relationships. The final results consisted of raising Manning's "n" values and extending cross sections to agree with the Jefferson County study.

Cross sections for the backwater analyses of the City of Helena streams were obtained from aerial photographs taken in March 1978 at a negative scale of 1"=800'. The below-water sections were obtained by field measurement.

The starting water-surface elevations for the City of Helena streams were calculated using the slope-area method, independent of any downstream backwater effects. Water surface elevations near the mouth of tributary streams are frequently influenced by backwater effects from the main stream. The backwater water-surface elevation of the main stream was superimposed on the tributary stream profile upstream to the point where the two profiles crossed. This composite profile appears as the final profile for the tributary.

Flood elevations in the City of Montevallo may be raised by debris blockage of the streams in the study area.

The detail study streams in the Town of Vincent were modeled continuously from downstream to upstream based on drainage area. The main stream for modeling purposes was considered the stream with the larger drainage area at a stream confluence. The main stream in the City of Vincent model consisted of Spring Creek/Blue Spring Branch/Tributary 2. The upper portion of Spring Creek (above the confluence with Blue Spring Branch), was considered a tributary to the main stream. Starting water-surface elevations for the main stream were computed using the slope-area method. Starting water-surface elevations for the upper portion of Spring Creek were computed independently of the backwater effects of the main stream using the slope-area method. The backwater elevation of the main stream near the mouth of Blue Spring Branch was superimposed on the upper Spring Creek profile upstream to the point where the two profiles crossed.

Flood profiles were drawn showing computed water-surface elevations for floods of the selected recurrence intervals.

#### February 20, 2013 Revision

As part of this revision, Acton Creek, Beaverdam Creek, Bishop Creek, Buck Creek, Coales Branch, Dodd Branch, Dodd Branch Tributary 1, Dodd Branch Tributary 1\_1, Hogpen Creek, Lee Branch, Lee Brook, Little Beeswax Creek, North Fork Yellowleaf Creek, Peavine Creek and Prairie Brook were studied by detailed hydraulic methods. Dodd Branch and its tributaries were studied using PCSWMM software. The remaining streams were studied using HEC-RAS Version 4.1 software.

Geometric data for the models studied in HEC-RAS were compiled using a combination of survey data and the 4-foot LiDAR DEM. All structure geometry was based on survey data. In general cross section geometry incorporated survey data for the channel and banks and utilized the DEM data outside of the banks. At cross sections where survey data was not available, the nearest upstream and downstream survey data was used to linearly interpolate the minimum channel elevation.

Model inputs associated with cross sections were estimated using guidance provided in the HEC-RAS *Hydraulic Reference Guide* that is provided with the software. In general, expansion and contraction coefficients were set to 0.3 and 0.1, respectively, at cross sections not associated with structures. At structure cross sections 2, 3, and 4 expansion and contraction coefficients were typically set to 0.5 and 0.3, respectively. In general, ineffective flow areas were placed based on a 1 to 3 expansion and 1 to 1 contraction of the floodplain.

Manning's values were estimated based on review of aerial imagery and site photos, and using the HEC-RAS *Hydraulic Reference Guide*. In general, throughout the county channel Manning's values ranged from 0.035 to 0.085 and overbank Manning's values ranged from 0.03 to 0.19.

Normal depth slope was used as the downstream boundary condition for all models except Acton Creek and North Fork Yellowleaf Creek. Acton Creek's downstream boundary condition is set as a known water surface elevation to the backwater of the Cahaba River. The downstream extent of the revised detailed study for North Fork Yellowleaf Creek starts at approximately 1.3 miles upstream of Bear Creek Road. The downstream boundary condition is set as a known water surface elevation based on the North Fork Yellowleaf Creek HEC2 model dated February 4, 1981.

Dodd Branch, Dodd Branch Tributary 1 and Dodd Branch Tributary 1\_1 were modeled using PCSWMM. See the Dodd Branch discussion in the

Hydrology section of this FIS for more details on modeling methodology and inputs.

Floodway analysis was performed using Method 1 in the HEC-RAS Encroachment Editor. Encroachments were placed to optimize a combination of the floodway width and surcharge. The target floodway surcharge for each cross section is 1.0 foot. The surcharge range for the models is 0.0 to 1.0 foot. Floodways were not developed for Dodd Branch, Dodd Branch Tributary 1 and Dodd Branch Tributary 1\_1.

All qualifying bench marks within a given jurisdiction that are cataloged by the National Geodetic Survey (NGS) and entered into the National Spatial Reference System (NSRS) as First or Second Order Vertical and have a vertical stability classification of A, B, or C are shown and labeled on the FIRM with their 6-character NSRS Permanent Identifier.

Bench marks cataloged by the NGS and entered into the NSRS vary widely in vertical stability classification. NSRS vertical stability classifications are as follows:

- Stability A: Monuments of the most reliable nature, expected to hold position/elevation well (e.g., mounted in bedrock)
- Stability B: Monuments which generally hold their position/elevation well (e.g., concrete bridge abutment)
- Stability C: Monuments which may be affected by surface ground movements (e.g., concrete monument below frost line)
- Stability D: Mark of questionable or unknown vertical stability (e.g., concrete monument above frost line, or steel witness post)

In addition to NSRS bench marks, the FIRM may also show vertical control monuments established by a local jurisdiction; these monuments will be shown on the FIRM with the appropriate designations. Local monuments will only be placed on the FIRM if the community has requested that they be included, and if the monuments meet the aforementioned NSRS inclusion criteria.

To obtain current elevation, description, and/or location information for bench marks shown on the FIRM for this jurisdiction, please contact the Information Services Branch of the NGS at (301) 713-3242, or visit their Web site at [www.ngs.noaa.gov](http://www.ngs.noaa.gov).

It is important to note that 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 Technical Support Data Notebook associated with this FIS and FIRM. Interested individuals may contact FEMA to access this data.

### 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 used for newly created or revised FIS reports and FIRMs was the National Geodetic Vertical Datum of 1929 (NGVD). With the completion of the North American Vertical Datum of 1988 (NAVD), many FIS reports and FIRMs are now prepared using NAVD as the referenced vertical datum.

Flood elevations shown in this FIS report and on the FIRM are referenced to the NAVD. These flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. For information regarding conversion between the NGVD and NAVD, visit the National Geodetic Survey website at [www.ngs.noaa.gov](http://www.ngs.noaa.gov), or contact the National Geodetic Survey at the following address:

Spatial Reference System Division  
NGS Information Services  
NOAA, N/NGS12  
National Geodetic Survey  
SSMC-3, #9202  
1315 East-West Highway  
Silver Spring, Maryland 20910-3282  
(301) 713-3242

Prior versions of the FIS report and FIRM were referenced to NGVD29. When a datum conversion is effected for an FIS report and FIRM, the Flood Profiles, base flood elevations (BFEs) and ERMs reflect the new datum values. To compare structure and ground elevations to 1-percent-annual-chance (100-year) flood elevations shown in the FIS and on the FIRM, the subject structure and ground elevations must be referenced to the new datum values.

As noted above, the elevations shown in the FIS report and on the FIRM for Shelby County are referenced to NAVD88. Ground, structure, and flood elevations may be compared and/or referenced to NGVD29 by applying a standard conversion factor.

The conversion factor for Shelby County from NGVD29 to NAVD88 is 0.08.

The BFEs shown on the FIRM represent whole-foot rounded values. For example, a BFE of 102.4 will appear as 102 on the FIRM and 102.6 will appear as 103. Therefore, users that wish to convert the elevations in this FIS to NGVD29 should apply the stated conversion factor(s) to elevations shown on the Flood Profiles and supporting data tables in the FIS report, which are shown at a minimum to the nearest 0.1 foot.

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 Technical Support Data Notebook associated with the FIS report and FIRM for this community. Interested individuals may contact FEMA to access these data.

#### 4.0 FLOOD PLAIN MANAGEMENT APPLICATIONS

The NFIP encourages State and local governments to adopt sound floodplain management programs. To assist in this endeavor, each FIS provides 100-year floodplain data, which may include a combination of the following: 10-, 50-, 100-, and 500-year (10-, 2-, 1-, and 0.2-percent-annual-chance) flood elevations; delineations of the 100-year and 500-year floodplains; and 100-year floodway. This information is presented on the FIRM and in many components of the FIS, including Flood Profiles, Floodway Data tables, and Summary of Stillwater Elevation tables. Users should reference the data presented in the FIS as well as additional information that may be available at the local community 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 (100-year) flood has been adopted by FEMA as the base flood for floodplain management purposes. The 0.2-percent annual chance (500-year) flood is employed to indicate additional areas of flood risk in the county. For the streams studied in detail, the 100- and 500-year floodplains have been delineated using the flood elevations determined at each cross section.

For the September 29, 2006 revision, the boundaries were interpolated between cross sections using topographic maps at scales of 1: 12,000, 1:4,800, 1:6,000, with a contour interval of 4 feet (Jack W. Berry & Associates, Inc., 1979)

For this revision, the boundaries were interpolated between cross sections using a digital elevation surface derived from LiDAR provided by the Shelby County IT Mapping Services.

The 1- and 0.2-percent-annual-chance floodplain boundaries are shown on the FIRM (Exhibit 2). On this map, the 1-percent-annual-chance floodplain boundary corresponds to the boundary of the areas of special flood hazards (Zones A and AE), 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 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 Federal standards limit such increases to 1.0 foot, provided that hazardous velocities are not produced. The floodways in this FIS 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 floodways presented in this FIS 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 floodway boundaries were interpolated. The results of the floodway computations are tabulated for selected cross sections (Table 3). The computed floodways are shown on the FIRM (Exhibit 2). In cases where the

floodway and 1-percent-annual-chance floodplain boundaries are either close together or collinear, only the floodway boundary is shown.

Portions of the floodways for the Cahaba River extend beyond the county boundary.

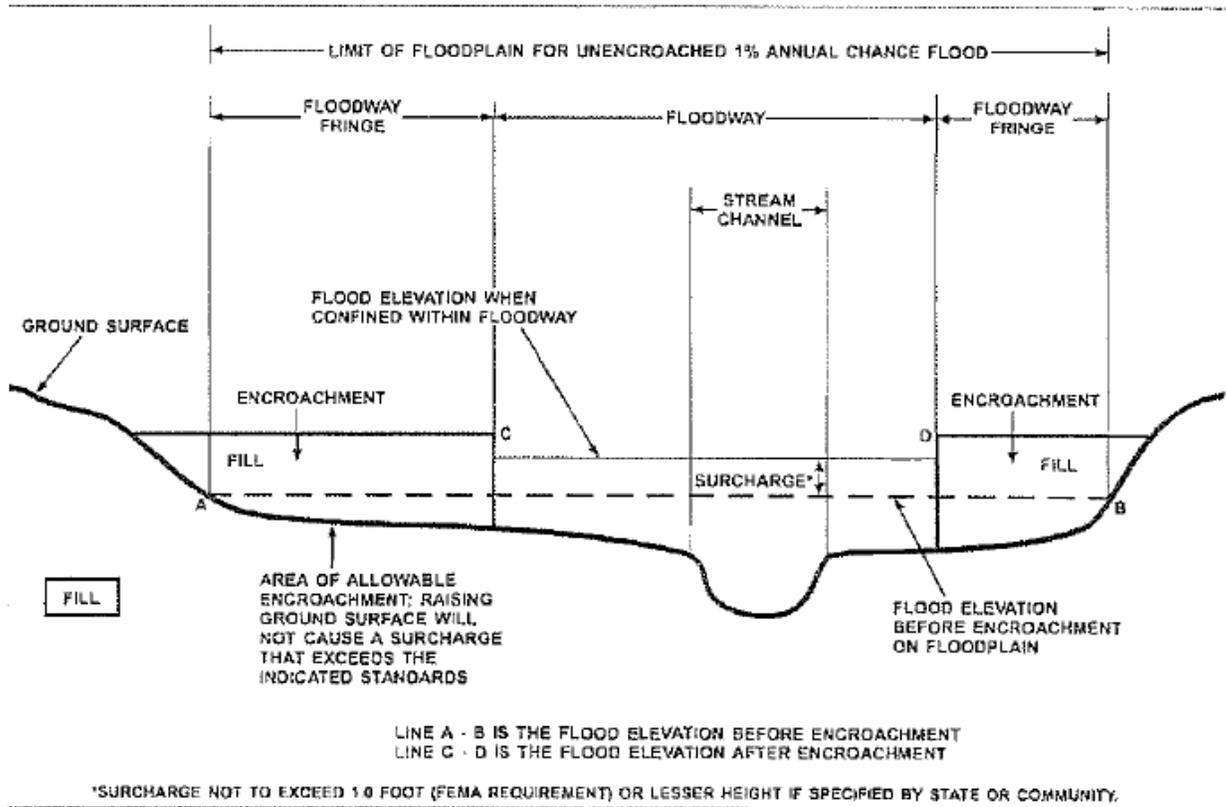
Along streams where floodways have not been computed, the community must ensure that the cumulative effect of development in the floodplain will not cause more than a 1.0-foot increase in the base flood elevations at any point within the community. No floodway was computed for Dodd Branch, Dodd Branch Tributary 1 or Dodd Branch Tributary 1\_1.

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 3, "Floodway Data". 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 receiving water body. Therefore, "Without Floodway" elevations presented in Table 3 for certain downstream cross sections of Acton Creek, Beaverdam Creek, Bishop Creek, Bolivar Creek, Buck Creek, Buxahatchee Creek Tributary 3, Buxahatchee Creek Tributary 4, Camp Branch, Four Mile Creek, King Creek, Little Creek, Muddy Prong, Peavine Creek, Prairie Brook, Spencer Creek, Spring Creek (in Montavello), Upper Spring Creek, Wildwood Creek, Wolf Creek and Yellow Creek are lower than the regulatory flood elevations in that area, which must take into account the 1-percent-annual-chance flooding due to backwater from other sources.

The area between the floodway and 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 by 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.

FIGURE 1 – FLOODWAY SCHEMATIC



FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Acton Creek								
A	1,178	586	4,719	0.7	428.0 <sup>2</sup>	428.0	428.0	0.0
B	2,587	196	2,060	1.6	428.0 <sup>2</sup>	428.0	428.0	0.0
C	3,251	187	1,938	1.7	428.1	428.1	428.1	0.0
D	3,982	427	3,560	0.9	428.2	428.2	428.2	0.0
E	5,410	295	2,665	1.3	428.2	428.2	428.2	0.0
F	6,644	282	2,534	1.3	428.2	428.2	428.2	0.0
G	8,482	219	1,585	2.1	434.3	434.3	434.3	0.0
H	9,917	98	936	3.6	435.4	435.4	435.4	0.0
I	11,709	100	598	5.6	439.6	439.6	439.9	0.3
J	15,062	86	523	5.7	451.9	451.9	452.2	0.3
K	18,050	69	476	4.6	462.7	462.7	462.7	0.0
L	18,746	104	1,176	1.9	471.9	471.9	472.8	0.9

<sup>1</sup>Feet above confluence with Cahaba River

<sup>2</sup>Controlled by backwater effects from Cahaba River

<b>TABLE 3</b>	<b>FEDERAL EMERGENCY MANAGEMENT AGENCY</b>	<b>FLOODWAY DATA</b>
	<b>SHELBY COUNTY, AL AND INCORPORATED AREAS</b>	
		<b>ACTON CREEK</b>

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY <sup>2</sup>	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Bear Creek								
A	400	249	2,805	3.8	463.6	446.6	447.6	1.0
B	3,000	1,337	9,714	1.1	463.6	447.9	448.9	1.0
C	5,700	1,286	11,702	0.9	463.6	448.3	449.3	1.0
D	8,800	994	5,371	2.0	463.6	449.0	449.9	0.9
E	13,820	721	4,520	2.3	463.6	452.5	453.5	1.0
F	15,650	676	5,459	1.9	463.6	453.6	454.6	1.0
G	16,350	787	7,310	1.4	463.6	454.0	455.0	1.0
H	18,160	956	6,367	1.6	463.6	454.8	455.8	1.0
I	24,760	2,033	6,507	1.4	463.6	458.2	459.2	1.0
J	27,260	1,619	7,728	1.2	463.6	459.4	460.4	1.0
K	28,610	2,082	12,057	0.8	463.6	460.5	461.5	1.0
L	32,010	1,192	5,775	1.6	463.6	461.3	462.1	0.8
M	37,010	1,570	10,317	0.8	463.6	462.5	463.5	1.0

<sup>1</sup>Feet above confluence with Kelly Creek

<sup>2</sup>Controlled by backwater effects of Kelly Creek

**TABLE 3**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SHELBY COUNTY, AL  
AND INCORPORATED AREAS**

**FLOODWAY DATA**

**BEAR CREEK**

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Beaverdam Creek								
A	14,415	73	873	7.6	394.0 <sup>2</sup>	392.4	392.9	0.5
B	15,271	76	806	8.2	394.4	394.4	394.8	0.4
C	16,658	73	734	9.0	399.0	399.0	399.2	0.2
D	17,418	106	1,032	6.4	402.0	402.0	402.1	0.1
E	18,393	69	735	9.0	404.6	404.6	404.8	0.2
F	19,472	67	704	9.4	408.5	408.5	408.6	0.1
G	20,970	89	860	7.2	413.7	413.7	413.9	0.2
H	22,090	78	739	8.4	417.8	417.8	418.0	0.2
I	22,753	78	856	7.3	420.8	420.8	420.9	0.1

<sup>1</sup>Feet above confluence with Cahaba River

<sup>2</sup>Controlled by backwater effects of Cahaba River

<b>TABLE 3</b>	<b>FEDERAL EMERGENCY MANAGEMENT AGENCY</b>	<b>FLOODWAY DATA</b>
	<b>SHELBY COUNTY, AL AND INCORPORATED AREAS</b>	
		<b>BEAVERDAM CREEK</b>

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Beeswax Creek								
A	210	94	690	7.3	408.7	408.7	408.9	0.2
B	1,130	600	3,301	1.5	411.9	411.9	412.9	1.0
C	3,000	82	618	8.1	416.6	416.6	416.9	0.3
D	4,010	163	841	6.0	423.2	423.2	424.2	1.0
E	5,390	385	2,192	2.3	427.7	427.7	428.4	0.7
F	6,900	709	3,015	1.6	429.2	429.2	430.2	1.0
G	8,320	597	2,506	2.0	431.4	431.4	432.0	0.6
H	9,300	480	2,996	1.6	434.8	434.8	435.8	1.0
I	10,440	383	2,230	2.2	435.5	435.5	436.5	1.0
J	12,270	514	3,107	1.6	436.7	436.7	437.7	1.0
K	14,470	268	1,135	4.3	438.8	438.8	439.5	0.7
L	16,120	516	2,976	1.6	441.8	441.8	442.8	1.0
M	18,470	355	2,046	2.2	444.1	444.1	445.1	1.0

<sup>1</sup>Feet above County Route 61

**TABLE 3**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SHELBY COUNTY, AL  
AND INCORPORATED AREAS**

**FLOODWAY DATA**

**BEESWAX CREEK**

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Beeswax Creek Tributary								
A	2,000	163	552	2.1	431.1	431.1	432.1	1.0
B	4,100	129	311	3.7	443.4	443.4	444.4	1.0
C	5,930	24	137	4.8	463.0	463.0	463.7	0.7
D	7,230	17	43	9.3	489.3	489.3	489.3	0.0

<sup>1</sup>Feet above confluence with Beeswax Creek

**TABLE 3**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SHELBY COUNTY, AL  
AND INCORPORATED AREAS**

**FLOODWAY DATA**

**BEESWAX CREEK TRIBUTARY**

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Bishop Creek								
A	327	104	1,007	9.4	423.3 <sup>2</sup>	415.2	415.3	0.1
B	521	114	1,253	7.5	423.3 <sup>2</sup>	420.5	420.5	0.0
C	929	98	1,166	8.1	423.3 <sup>2</sup>	421.4	421.4	0.0
D	1,883	135	1,367	6.9	423.5	423.5	423.5	0.0
E	2,758	120	1,317	7.2	425.6	425.6	425.6	0.0
F	4,312	120	1,235	7.6	430.0	430.0	430.1	0.1
G	5,614	187	1,694	5.5	432.8	432.8	433.0	0.2
H	7,554	424	3,860	2.4	436.7	436.7	437.2	0.5
I	9,687	429	3,178	3.0	438.1	438.1	438.9	0.8
J	11,364	422	2,883	3.2	440.1	440.1	440.8	0.7
K	13,192	218	1,650	5.7	443.2	443.2	444.2	1.0
L	14,783	272	2,564	3.6	447.7	447.7	448.2	0.5
M	16,766	176	2,283	4.1	450.2	450.2	450.9	0.7
N	18,477	822	6,850	1.4	451.1	451.1	452.1	1.0
O	22,273	438	2,169	4.4	452.5	452.5	453.5	1.0
P	24,897	173	1,730	5.5	459.2	459.2	459.5	0.3
Q	25,084	196	2,599	3.7	460.6	460.6	460.8	0.2
R	30,010	118	1,554	6.1	463.5	463.5	464.1	0.6
S	30,443	117	2,310	4.1	470.4	470.4	470.9	0.5
T	34,734	682	6,326	1.4	472.2	472.2	473.1	0.9
U	36,996	536	3,821	2.4	474.1	474.1	475.0	0.9

<sup>1</sup>Feet above confluence with Buck Creek

<sup>2</sup>Controlled by backwater effect of Buck Creek

**TABLE 3**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SHELBY COUNTY, AL  
AND INCORPORATED AREAS**

**FLOODWAY DATA**

**BISHOP CREEK**

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Bishop Creek								
V	41,818	334	2,044	3.2	479.7	479.7	480.3	0.6
W	43,568	240	1,675	3.8	482.8	482.8	483.1	0.3
X	46,168	158	1,304	4.7	488.0	488.0	488.2	0.2
Y	48,653	324	3,042	2.0	490.4	490.4	491.1	0.7
Z	51,764	372	2,639	2.2	492.1	492.1	493.1	1.0
AA	53,422	81	601	9.8	494.9	494.9	495.7	0.8
AB	55,794	289	2,434	2.4	500.4	500.4	501.0	0.6
AC	57,500	355	2,993	2.0	501.7	501.7	502.5	0.8
AD	60,796	366	2,090	1.3	504.4	504.4	505.3	0.9
AE	63,830	157	777	3.4	508.0	508.0	508.4	0.4
AF	68,184	206	1,604	1.7	521.4	521.4	522.1	0.7
AG	69,562	203	1,070	2.5	522.6	522.6	523.4	0.8
AH	71,370	283	988	2.6	526.0	526.0	526.9	0.9

<sup>1</sup>Feet above confluence with Buck Creek

**TABLE 3**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SHELBY COUNTY, AL  
AND INCORPORATED AREAS**

**FLOODWAY DATA**

**BISHOP CREEK**

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Bolivar Creek								
A	750	680	3,123	0.7	495.5 <sup>2</sup>	490.6	491.6	1.0
B	1,450	501	2,139	1.0	495.5 <sup>2</sup>	490.8	491.8	1.0
C	4,530	376	1,622	1.2	495.7	495.7	496.6	0.9
D	5,980	101	602	3.1	498.0	498.0	498.8	0.8
E	8,830	297	1,320	1.4	502.4	502.4	503.2	0.8
F	10,680	323	929	1.7	504.5	504.5	505.5	1.0
G	11,930	43	343	4.3	511.1	511.1	512.1	1.0

<sup>1</sup>Feet above confluence with South Fork Yellowleaf Creek

<sup>2</sup>Controlled by backwater effects of South Fork Yellowleaf Creek

**TABLE 3**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SHELBY COUNTY, AL  
AND INCORPORATED AREAS**

**FLOODWAY DATA**

**BOLIVAR CREEK**

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Buck Creek								
A	3,295	318	4,799	5.4	411.0 <sup>2</sup>	400.4	400.7	0.3
B	7,136	125	2,645	9.8	411.0 <sup>2</sup>	404.1	404.4	0.3
C	9,408	309	6,012	4.3	411.0 <sup>2</sup>	410.4	410.7	0.3
D	9,722	363	4,862	5.3	411.3	411.3	411.6	0.3
E	11,912	162	2,854	8.7	414.2	414.2	414.4	0.2
F	14,413	135	2,494	9.9	420.2	420.2	420.6	0.4
G	16,770	200	2,871	6.5	424.0	424.0	424.6	0.6
H	19,265	144	2,546	7.4	429.0	429.0	429.6	0.6
I	21,986	117	2,200	8.5	434.9	434.9	435.5	0.6
J	24,609	393	4,207	4.5	438.9	438.9	439.7	0.8
K	27,688	210	3,080	3.7	442.0	442.0	443.0	1.0
L	30,817	269	4,226	2.7	444.0	444.0	444.9	0.9
M	35,369	132	1,523	7.4	451.5	451.5	451.6	0.1
N	38,004	496	3,130	3.6	456.2	456.2	456.8	0.6
O	40,972	572	4,871	2.3	457.7	457.7	458.5	0.8
P	42,823	688	3,390	3.4	459.5	459.5	460.3	0.8
Q	46,590	169	1,864	6.1	465.0	465.0	465.3	0.3
R	47,850	399	3,843	3.0	467.1	467.1	467.7	0.6
S	51,222	630	4,163	2.7	469.2	469.2	470.1	0.9
T	53,769	260	1,844	5.3	473.7	473.7	473.9	0.2
U	55,410	425	3,543	2.7	476.8	476.8	477.6	0.8
V	56,527	701	5,469	1.8	478.0	478.0	478.9	0.9

<sup>1</sup>Feet above confluence with Cahaba River

<sup>2</sup>Controlled by backwater effects of Cahaba River

**TABLE 3**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SHELBY COUNTY, AL  
AND INCORPORATED AREAS**

**FLOODWAY DATA**

**BUCK CREEK**

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Buck Creek								
W	58,458	206	1,845	4.8	480.0	480.0	480.7	0.7
X	58,617	201	2,174	4.1	481.9	481.9	482.3	0.4
Y	61,653	392	1,963	3.1	483.6	483.6	484.4	0.8
Z	63,466	187	1,667	3.6	491.4	491.4	491.6	0.2
AA	64,614	173	1,469	3.4	493.0	493.0	493.2	0.2
AB	65,491	293	1,393	3.6	494.8	494.8	495.2	0.4
AC	66,860	235	1,895	2.7	498.8	498.8	499.0	0.2
AD	68,209	175	1,083	4.7	501.1	501.1	501.8	0.7
AE	70,662	245	1,967	2.0	509.6	509.6	510.1	0.5
AF	73,141	78	530	5.9	516.9	516.9	517.5	0.6
AG	73,456	78	826	3.8	521.3	521.3	521.7	0.4
AH	75,370	137	922	3.4	525.6	525.6	525.6	0.0
AI	76,481	168	857	2.4	528.3	528.3	528.8	0.5
AJ	76,980	90	455	4.5	529.4	529.4	529.8	0.4
AK	77,201	90	453	4.5	532.3	532.3	532.6	0.3
AL	78,309	139	535	3.8	534.5	534.5	534.9	0.4
AM	78,418	66	399	5.1	536.7	536.7	536.9	0.2
AN	80,014	167	530	2.7	543.3	543.3	544.1	0.8
AO	81,633	47	242	6.0	553.0	553.0	553.1	0.1
AP	81,694	80	517	2.8	558.2	558.2	558.6	0.4
AQ	82,636	44	205	7.0	560.7	560.7	560.8	0.1
AR	83,113	117	225	6.4	567.2	567.2	567.2	0.0

<sup>1</sup>Feet above confluence with Cahaba River

**TABLE 3**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SHELBY COUNTY, AL  
AND INCORPORATED AREAS**

**FLOODWAY DATA**

**BUCK CREEK**

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Buxahatchee Creek								
A	15,271	323	2,664	2.6	475.8	475.8	476.8	1.0
B	17,024	361	3,199	2.1	479.1	479.1	480.0	0.9
C	19,206	478	2,780	2.2	480.5	480.5	481.3	0.8
D	20,375	605	3,802	1.6	482.4	482.4	483.1	0.7
E	22,744	205	1,926	3.1	487.4	487.4	488.1	0.7
F	23,985	345	3,833	1.4	489.2	489.2	489.9	0.7
G	24,712	369	4,463	1.3	490.8	490.8	491.5	0.7
H	26,437	268	1,795	2.6	491.3	491.3	492.0	0.7
I	28,418	351	2,380	1.2	494.4	494.4	495.3	0.9
J	29,563	108	1,364	3.7	496.2	496.2	496.7	0.5
K	30,074	360	2,593	1.1	497.7	497.7	498.7	1.0
L	30,715	1,095	7,757	0.3	499.9	499.9	500.8	0.9
M	31,338	831	5,693	0.4	499.9	499.9	500.8	0.9
N	31,908	481	2,845	0.8	500.1	500.1	501.1	1.0
O	33,832	149	474	4.8	501.7	501.7	502.7	1.0

<sup>1</sup>Feet above confluence with Watson Creek

**TABLE 3**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SHELBY COUNTY, AL  
AND INCORPORATED AREAS**

**FLOODWAY DATA**

**BUXAHATCHEE CREEK**

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Buxahatchee Creek Tributary 1								
A	1,520	406	1,640	1.3	496.1	496.1	496.8	0.7
B	1,977	168	803	2.7	498.4	498.4	499.0	0.6
C	2,418	296	1,944	1.1	501.0	501.0	501.5	0.5
D	3,452	900	3,076	0.7	501.6	501.6	502.0	0.4
E	4,152	630	3,174	0.7	503.6	503.6	504.4	0.8
F	5,711	118	238	2.6	504.3	504.3	504.9	0.6
G	6,644	97	239	2.2	509.2	509.2	509.7	0.5
H	7,382	18	60	8.6	512.5	512.5	512.8	0.3

<sup>1</sup>Feet above confluence with Buxahatchee Creek

**TABLE 3**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SHELBY COUNTY, AL  
AND INCORPORATED AREAS**

**FLOODWAY DATA**

**BUXAHATCHEE CREEK TRIBUTARY 1**

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Buxahatchee Creek Tributary 2								
A	766	197	470	3.0	504.4	504.4	504.4	0.0
B	2,111	174	601	2.4	506.9	506.9	507.6	0.7
C	2,997	268	784	1.8	511.0	511.0	511.7	0.7
D	3,770	170	683	2.1	512.7	512.7	513.2	0.5
E	5,561	16	125	5.0	520.1	520.1	520.5	0.4

<sup>1</sup>Feet above confluence with Buxahatchee Creek Tributary 1

**TABLE  
3**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SHELBY COUNTY, AL  
AND INCORPORATED AREAS**

**FLOODWAY DATA**

**BUXAHATCHEE CREEK TRIBUTARY 2**

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Buxahatchee Creek Tributary 3								
A	292	372	1,896	0.8	488.9 <sup>2</sup>	485.2	486.2	1.0
B	627	333	1,191	1.3	488.9 <sup>2</sup>	485.3	486.2	0.9
C	1,042	140	459	3.3	488.9 <sup>2</sup>	485.3	486.3	1.0
D	1,740	110	309	4.9	488.9 <sup>2</sup>	486.9	487.0	0.1
E	2,528	382	2,608	0.5	495.4	495.4	495.4	0.0
F	3,712	130	529	2.4	495.4	495.4	495.4	0.0
G	5,039	66	264	4.2	497.1	497.1	497.9	0.8
H	5,560	241	958	1.2	501.5	501.5	501.5	0.0
I	6,945	140	547	1.2	505.3	505.3	506.3	1.0
J	7,827	457	1,106	0.6	508.6	508.6	509.5	0.9
K	8,216	21	68	9.5	511.0	511.0	511.0	0.0

<sup>1</sup>Feet above confluence with Buxahatchee Creek

<sup>2</sup>Controlled by backwater effects of Buxahatchee Creek

**TABLE 3**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SHELBY COUNTY, AL  
AND INCORPORATED AREAS**

**FLOODWAY DATA**

**BUXAHATCHEE CREEK TRIBUTARY 3**

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Buxahatchee Creek Tributary 4								
A	2,563	205	973	1.2	491.0 <sup>2</sup>	489.3	490.2	0.9
B	3,834	124	503	2.3	491.2	491.2	492.0	0.8
C	4,515	121	450	2.2	493.1	493.1	494.0	0.9
D	6,003	104	384	2.2	500.7	500.7	501.7	1.0
E	6,855	47	183	4.6	503.3	503.3	504.0	0.7
F	7,292	56	228	3.7	504.9	504.9	505.9	1.0
G	8,207	48	159	4.4	508.4	508.4	509.1	0.7

<sup>1</sup>Feet above confluence with Buxahatchee Creek

<sup>2</sup>Controlled by backwater effects of Buxahatchee Creek

**TABLE 3**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SHELBY COUNTY, AL  
AND INCORPORATED AREAS**

**FLOODWAY DATA**

**BUXAHATCHEE CREEK TRIBUTARY 4**

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Buxahatchee Creek Tributary 5								
A	664	47	172	3.1	508.5	508.5	508.9	0.4
B	1,034	17	71	7.4	510.4	510.4	511.1	0.7
C	1,503	34	162	3.3	512.7	512.7	513.4	0.7

<sup>1</sup>Feet above confluence with Buxahatchee Creek Tributary 4

<b>TABLE 3</b>	<b>FEDERAL EMERGENCY MANAGEMENT AGENCY</b>	<b>FLOODWAY DATA</b>
	<b>SHELBY COUNTY, AL AND INCORPORATED AREAS</b>	
		<b>BUXAHATCHEE CREEK TRIBUTARY 5</b>

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Buxahatchee Creek Unnamed Tributary								
A	1,043	392	1,498	0.1	500.5	500.5	501.3	0.8
B	2,015	182	700	1.8	502.8	502.8	503.6	0.7
C	2,776	120	439	2.6	504.5	504.5	505.4	0.9
D	3,495	32	384	4.4	510.0	510.0	510.3	0.3

<sup>1</sup>Feet above confluence with Buxahatchee Creek

**TABLE 3**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SHELBY COUNTY, AL  
AND INCORPORATED AREAS**

**FLOODWAY DATA**

**BUXAHATCHEE CREEK UNNAMED TRIBUTARY**

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Cahaba River								
A	108.02	314	10,297	4.5	352.7	352.7	353.7	1.0
B	108.22	305	9,844	4.8	352.9	352.9	353.9	1.0
C	108.55	720	15,566	3.0	353.8	353.8	354.8	1.0
D	108.85	286	8,496	5.5	354.4	354.4	355.3	0.9
E	109.38	325	8,803	5.3	356.5	356.5	357.4	0.9
F	109.64	312	9,196	5.1	357.7	357.7	358.6	0.9
G	109.87	384	9,775	4.8	358.7	358.7	359.6	0.9
H	110.10	348	9,833	4.8	359.9	359.9	360.8	0.9
I	110.51	359	10,022	4.7	361.6	361.6	362.5	0.9
J	110.85	282	8,798	5.3	362.8	362.8	363.7	0.9
K	111.17	423	12,620	3.7	364.1	364.1	365.0	0.9
L	111.56	467	15,341	3.1	365.3	365.3	366.3	1.0
M	112.05	272	8,903	5.3	366.4	366.4	367.4	1.0
N	112.40	260	9,239	5.1	367.9	367.9	368.9	1.0
O	112.83	366	11,937	3.9	369.4	369.4	370.4	1.0
P	112.86	369	11,988	3.9	369.6	369.6	370.6	1.0
Q	112.87	369	12,004	3.9	369.6	369.6	370.6	1.0
R	113.33	401	13,180	3.3	370.8	370.8	371.8	1.0
S	113.90	380	10,594	4.2	372.1	372.1	373.1	1.0
T	114.18	370	10,707	4.1	373.1	373.1	374.1	1.0
U	114.76	355	11,522	3.8	374.8	374.8	375.7	0.9

<sup>1</sup>Miles above confluence with Alabama River

**TABLE 3**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SHELBY COUNTY, AL  
AND INCORPORATED AREAS**

**FLOODWAY DATA**

**CAHABA RIVER**

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Cahaba River								
V	114.98	388	12,202	3.6	375.2	375.2	376.1	0.9
W	115.39	387	11,795	3.7	376.3	376.3	377.2	0.9
X	115.69	732	20,869	2.1	377.0	377.0	377.9	0.9
Y	116.22	328	10,517	4.2	377.7	377.7	378.6	0.9
Z	116.79	401	12,088	3.6	379.6	379.6	380.5	0.9
AA	117.30	459	12,983	3.4	380.8	380.8	381.7	0.9
AB	117.83	393	12,057	3.6	382.0	382.0	382.9	0.9
AC	118.28	368	12,088	3.6	383.0	383.0	383.8	0.8
AD	118.87	520	15,900	2.7	384.2	384.2	385.0	0.8
AE	119.45	653	17,089	2.5	385.2	385.2	386.0	0.8
AF	120.23	386	11,765	3.7	386.7	386.7	387.5	0.8
AG	120.61	610	16,709	2.6	387.6	387.6	388.4	0.8
AH	121.25	335	11,136	3.9	388.6	388.6	389.4	0.8
AI	121.76	371	10,322	4.2	389.7	389.7	390.5	0.8
AJ	122.37	477	14,052	3.1	391.3	391.3	392.3	1.0
AK	123.11	341	12,349	3.5	392.7	392.7	393.7	1.0
AL	123.70	678	18,555	2.3	394.0	394.0	395.0	1.0
AM	124.12	846	21,669	1.9	394.6	394.6	395.6	1.0
AN	124.53	404	13,642	3.1	395.2	395.2	396.2	1.0
AO	124.79	481	13,500	3.1	395.7	395.7	396.6	0.9
AP	125.62	514	13,864	3.0	397.9	397.9	398.8	0.9

<sup>1</sup>Miles above confluence with Alabama River

**TABLE 3**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SHELBY COUNTY, AL  
AND INCORPORATED AREAS**

**FLOODWAY DATA**

**CAHABA RIVER**

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Cahaba River								
AQ	126.14	390	11,372	3.7	399.3	399.3	400.2	0.9
AR	126.58	364	10,763	3.9	400.7	400.7	401.6	0.9
AS	126.93	346	11,095	3.8	401.9	401.9	402.8	0.9
AT	127.08	368	11,535	3.6	402.3	402.3	403.2	0.9
AU	127.12	369	11,140	3.8	402.7	402.7	403.6	0.9
AV	127.52	899	15,825	2.6	403.4	403.4	404.3	0.9
AW	127.90	423	12,199	3.4	404.2	404.2	405.0	0.8
AX	128.15	452	13,812	3.0	404.9	404.9	405.7	0.8
AY	128.59	486	13,823	3.0	405.7	405.7	406.6	0.9
AZ	128.76	391	12,108	3.5	406.1	406.1	406.9	0.8
BA	128.80	395	12,028	3.5	406.2	406.2	407.1	0.9
BB	129.21	383	11,764	3.6	407.3	407.3	408.2	0.9
BC	129.81	1,090	23,182	1.8	408.7	408.7	409.6	0.9
BD	130.28	577	14,326	2.9	409.6	409.6	410.5	0.9
BE	130.67	327	11,340	3.7	410.7	410.7	411.6	0.9
BF	130.70	323	11,233	3.7	410.8	410.8	411.7	0.9
BG	131.13	350	11,444	3.1	412.1	412.1	413.0	0.9
BH	131.43	437	12,500	2.8	412.8	412.8	413.7	0.9
BI	131.89	469	12,171	2.9	414.0	414.0	414.9	0.9
BJ	132.33	492	13,207	2.6	415.2	415.2	416.1	0.9
BK	132.59	403	12,345	2.8	415.7	415.7	416.5	0.8

<sup>1</sup>Miles above confluence with Alabama River

**TABLE 3**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SHELBY COUNTY, AL  
AND INCORPORATED AREAS**

**FLOODWAY DATA**

**CAHABA RIVER**

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Cahaba River								
BL	132.93	659	19,481	1.8	416.4	416.4	417.3	0.9
BM	133.04	552	16,952	2.1	416.5	416.5	417.4	0.9
BN	134.44	415/51 <sup>2</sup>	12,603	2.7	419.4	419.4	420.4	1.0
BO	134.88	498 <sup>3</sup>	12,903	2.6	420.5	420.5	421.5	1.0
BP	136.24	568	13,937	2.3	423.7	423.7	424.7	1.0
BQ	136.52	678/309 <sup>2</sup>	20,601	1.6	424.4	424.4	425.4	1.0
BR	136.83	845	22,512	1.4	424.7	424.7	425.7	1.0
BS	139.28	862/601 <sup>2</sup>	15,724	2.0	427.4	427.4	428.4	1.0
BT	140.67	475	11,174	2.8	429.9	429.9	430.9	1.0
BU	141.49	871/780 <sup>2</sup>	23,931	1.3	430.7	430.7	431.7	1.0
BV	144.15	736/350 <sup>2</sup>	12,740	2.4	433.9	433.9	434.8	0.9
BW	146.03	603	13,740	2.2	437.9	437.9	438.5	0.6

<sup>1</sup>Miles above confluence with Alabama River

<sup>2</sup>Total width/Width within County

<sup>3</sup>Outside Shelby County limits

**TABLE 3**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SHELBY COUNTY, AL  
AND INCORPORATED AREAS**

**FLOODWAY DATA**

**CAHABA RIVER**

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Camp Branch								
A	100	391	2,153	3.0	429.6 <sup>2</sup>	427.0	428.0	1.0
B	4,140	765	3,294	1.9	430.6	430.6	431.5	0.9
C	5,990	426	2,279	2.5	432.6	432.6	433.6	1.0
D	6,470	411	2,622	2.2	433.9	433.9	434.6	0.7
E	8,340	138	866	6.6	436.0	436.0	436.9	0.9
F	9,840	115	1,107	5.2	440.1	440.1	441.1	1.0
G	12,450	150	921	6.2	446.1	446.1	447.1	1.0
H	14,890	111	1,048	5.4	452.9	452.9	453.9	1.0
I	16,610	102	914	6.2	456.0	456.0	456.8	0.8
J	18,000	111	761	7.5	459.2	459.2	460.1	0.9
K	20,800	119	1,247	4.6	467.6	467.6	468.6	1.0
L	23,660	89	794	7.2	473.1	473.1	473.8	0.7
M	24,940	94	909	6.3	476.3	476.3	477.3	1.0
N	26,120	104	873	6.2	478.8	478.8	479.8	1.0
O	27,950	587	4,457	1.2	480.7	480.7	481.7	1.0
P	30,280	672	5,048	1.1	481.3	481.3	482.2	0.9
Q	30,860	93	795	6.8	481.9	481.9	482.6	0.7
R	31,715	418	3,250	1.7	484.7	484.7	485.6	0.9
S	32,240	342	2,652	2.0	485.3	485.3	486.1	0.8
T	34,400	227	1,291	4.2	490.1	490.1	490.9	0.8
U	36,700	164	1,497	3.4	495.1	495.1	496.1	1.0

<sup>1</sup>Feet above confluence with Waxahatchee Creek

<sup>2</sup>Controlled by backwater effects of Waxahatchee Creek

**TABLE 3**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SHELBY COUNTY, AL  
AND INCORPORATED AREAS**

**FLOODWAY DATA**

**CAMP BRANCH**

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Camp Branch								
V	38,900	632	3,964	1.3	496.9	496.9	497.7	0.8
W	42,400	505	2,449	2.1	498.6	498.6	499.3	0.7
X	44,750	339	2,236	2.3	500.4	500.4	501.2	0.8
Y	45,075	270	1,862	2.7	500.9	500.9	501.7	0.8
Z	48,385	259	1,285	3.8	507.5	507.5	508.3	0.8
AA	50,565	459	2,920	1.7	510.7	510.7	511.7	1.0
AB	53,725	143	785	6.2	515.5	515.5	516.3	0.8
AC	54,885	221	1,548	3.2	519.4	519.4	520.4	1.0
AD	55,057	230	1,861	2.6	522.5	522.5	523.0	0.5
AE	55,847	310	2,190	2.2	524.2	524.2	524.9	0.7
AF	57,997	501	2,351	2.1	527.3	527.3	528.3	1.0
AG	60,547	276	1,806	2.7	531.9	531.9	532.6	0.7
AH	61,817	241	1,408	2.7	534.5	534.5	535.5	1.0
AI	63,857	547	2,708	1.3	537.6	537.6	538.4	0.8
AJ	65,827	358	1,370	2.5	538.3	538.3	539.3	1.0
AK	68,327	104	458	7.6	541.2	541.2	542.2	1.0
AL	68,857	189	787	4.4	543.3	543.3	544.2	0.9
AM	70,927	107	629	2.2	547.4	547.4	548.4	1.0
AN	74,187	120	544	2.5	551.9	551.9	552.8	0.9
AO	76,577	146	561	2.0	556.0	556.0	557.0	1.0
AP	78,757	68	250	4.5	560.5	560.5	561.3	0.8
AQ	82,257	159	481	1.5	569.5	569.5	570.5	1.0

<sup>1</sup>Feet above confluence with Waxahatchee Creek

**TABLE 3**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SHELBY COUNTY, AL  
AND INCORPORATED AREAS**

**FLOODWAY DATA**

**CAMP BRANCH**

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Coales Branch								
A	306	205	2,152	0.9	443.8	443.8	444.7	0.9
B	1,944	280	1,821	1.0	443.8	443.8	444.8	1.0
C	3,052	55	300	5.0	447.2	447.2	447.6	0.4
D	3,874	48	346	4.3	453.3	453.3	454.1	0.8
E	4,777	89	341	4.4	457.3	457.3	458.0	0.7
F	5,391	53	290	5.2	461.8	461.8	462.1	0.3
G	6,026	35	182	8.2	464.4	464.4	464.7	0.3
H	6,984	66	323	4.6	475.1	475.1	475.2	0.1
I	7,747	40	167	4.8	478.4	478.4	478.9	0.5
J	8,488	48	266	3.0	483.9	483.9	484.8	0.9
K	9,320	61	173	4.6	490.4	490.4	490.4	0.0
L	9,909	53	212	3.8	494.4	494.4	495.1	0.7

<sup>1</sup>Feet above confluence with Peavine Creek

<b>TABLE 3</b>	<b>FEDERAL EMERGENCY MANAGEMENT AGENCY</b>	<b>FLOODWAY DATA</b>
	<b>SHELBY COUNTY, AL AND INCORPORATED AREAS</b>	
		<b>COALES BRANCH</b>

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Dry Creek								
A	200	140	750	6.8	416.2	416.2	417.2	1.0
B	850	110	610	8.4	421.5	421.5	422.2	0.7
C	1,980	160	730	7.0	428.4	428.4	429.1	0.7

<sup>1</sup>Feet above confluence with Spring Creek

<b>TABLE 3</b>	<b>FEDERAL EMERGENCY MANAGEMENT AGENCY</b>	<b>FLOODWAY DATA</b>
	<b>SHELBY COUNTY, AL AND INCORPORATED AREAS</b>	
		<b>DRY CREEK</b>

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Four Mile Creek								
A	3,100	635	3,851	1.2	408.7 <sup>2</sup>	404.3	405.3	1.0
B	5,290	460	2,238	2.1	408.7 <sup>2</sup>	405.8	406.8	1.0
C	5,810	311	2,215	2.2	408.7 <sup>2</sup>	407.9	408.5	0.6
D	7,690	390	1,826	2.6	410.1	410.1	411.1	1.0
E	8,560	289	1,854	2.6	412.4	412.4	413.4	1.0
F	9,980	229	1,499	3.2	416.0	416.0	417.0	1.0
G	11,390	199	1,365	3.3	420.0	420.0	420.9	0.9
H	12,560	229	1,607	2.8	422.2	422.2	423.2	1.0
I	13,730	464	3,105	1.4	423.5	423.5	424.4	0.9
J	18,450	469	2,768	1.6	425.2	425.2	426.2	1.0
K	19,810	429	2,131	2.1	426.7	426.7	427.5	0.8
L	22,810	1,036	3,061	1.3	429.7	429.7	430.7	1.0
M	25,760	402	2,157	1.9	432.5	432.5	433.5	1.0
N	27,580	675	2,217	1.5	433.8	433.8	434.8	1.0
O	30,580	274	1,083	3.2	436.0	436.0	437.0	1.0
P	33,070	427	1,950	1.8	441.4	441.4	442.1	1.0
Q	34,480	457	2,001	1.5	442.4	442.4	443.4	1.0
R	36,210	458	1,890	1.6	443.8	443.8	444.8	1.0
S	38,580	206	1,093	2.4	446.9	446.9	447.9	1.0
T	41,340	278	999	2.0	449.6	449.6	450.6	1.0
U	43,190	237	471	3.4	451.6	451.6	452.5	0.9

<sup>1</sup>Feet above confluence with Yellowleaf Creek

<sup>2</sup>Controlled by backwater effects of Yellowleaf Creek

**T  
A  
B  
L  
E  
3**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SHELBY COUNTY, AL  
AND INCORPORATED AREAS**

**FLOODWAY DATA**

**FOUR MILE CREEK**

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Four Mile Creek								
V	45,910	415	1,265	1.3	457.0	457.0	457.7	0.7
W	46,900	1,300	3,090	0.5	460.1	460.1	461.1	1.0
X	48,460	110	427	3.2	462.8	462.8	463.8	1.0
Y	50,820	85	359	3.8	467.2	467.2	468.2	1.0
Z	52,310	161	617	1.8	470.9	470.9	471.8	0.9
AA	53,960	69	284	3.9	474.7	474.7	475.7	1.0
AB	54,460	53	297	3.8	476.4	476.4	477.2	0.8
AC	55,030	27	138	7.6	477.6	477.6	478.6	1.0
AD	55,470	104	466	2.2	480.5	480.5	481.5	1.0
AE	56,630	96	421	2.5	487.3	487.3	488.3	1.0
AF	57,710	23	122	7.9	492.2	492.2	493.0	0.8
AG	58,330	91	329	1.5	495.5	495.5	496.5	1.0
AH	59,170	15	56	5.2	501.5	501.5	502.2	0.7

<sup>1</sup>Feet above confluence with Yellowleaf Creek

**TABLE 3**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SHELBY COUNTY, AL  
AND INCORPORATED AREAS**

**FLOODWAY DATA**

**FOUR MILE CREEK**

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Hargis Retreat Creek								
A	1,680	23	190	9.1	484.8	484.8	485.7	0.9
B	2,570	30	277	6.2	492.3	492.3	493.3	1.0
C	3,620	105	948	1.8	499.9	499.9	500.6	0.7
D	5,040	350	2,472	0.6	501.2	501.2	502.2	1.0
E	6,340	103	539	2.9	504.1	504.1	505.0	0.9
F	6,900	177	1,376	1.1	507.2	507.2	508.0	0.8
G	8,540	166	808	1.9	509.5	509.5	510.5	1.0
H	10,310	97	620	2.0	512.1	512.1	513.1	1.0

<sup>1</sup>Feet above confluence with Little Creek

<b>TABLE 3</b>	<b>FEDERAL EMERGENCY MANAGEMENT AGENCY</b>	<b>FLOODWAY DATA</b>
	<b>SHELBY COUNTY, AL AND INCORPORATED AREAS</b>	
		<b>HARGIS RETREAT CREEK</b>

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Hogpen Creek								
A	1,093	83	1,093	2.9	453.5	453.5	454.3	0.8
B	1,654	83	1,181	2.7	458.0	458.0	458.6	0.6
C	1,988	117	1,231	2.6	458.0	458.0	459.0	1.0
D	2,583	72	577	5.5	458.8	458.8	459.7	0.9
E	2,939	74	993	3.2	467.6	467.6	468.1	0.5
F	3,307	127	1,353	2.4	467.8	467.8	468.3	0.5
G	4,126	284	2,060	1.5	468.2	468.2	469.0	0.8
H	5,142	140	924	3.4	468.9	468.9	469.7	0.8
I	5,806	314	1,038	3.0	470.9	470.9	471.4	0.5
J	7,183	198	873	3.5	474.7	474.7	475.4	0.7
K	7,366	197	1,210	2.6	478.0	478.0	478.4	0.4
L	8,465	151	905	3.4	479.2	479.2	480.1	0.9
M	9,375	140	634	4.9	482.5	482.5	483.4	0.9
N	9,964	248	1,113	2.8	486.8	486.8	487.7	0.9
O	11,122	155	797	3.9	490.2	490.2	491.0	0.8
P	11,603	220	920	3.4	493.2	493.2	493.6	0.4
Q	12,082	256	461	4.4	495.9	495.9	496.3	0.4
R	12,661	155	770	2.6	499.1	499.1	499.9	0.8
S	13,356	150	449	4.5	500.6	500.6	501.3	0.7
T	14,294	118	616	3.3	505.7	505.7	506.4	0.7
U	15,698	111	609	3.3	510.4	510.4	511.2	0.8

<sup>1</sup>Feet above confluence with Peavine Creek

**TABLE 3**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SHELBY COUNTY, AL  
AND INCORPORATED AREAS**

**FLOODWAY DATA**

**HOGPEN CREEK**

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Kelly Creek								
A	300	2,485	38,645	0.9	431.7	431.7	432.7	1.0
B	2,170	1,085	18,224	2.0	432.0	432.0	433.0	1.0
C	3,250	1,632	23,933	1.5	433.3	433.3	434.3	1.0
D	4,820	1,398	23,968	1.5	433.4	433.4	434.4	1.0
E	7,700	1,945	30,421	1.2	433.6	433.6	434.6	1.0
F	8,810	2,246	31,081	1.2	433.8	433.8	434.8	1.0
G	9,780	1,916	24,523	1.5	433.9	433.9	434.9	1.0
H	11,000	1,508	17,268	2.1	434.2	434.2	435.2	1.0
I	13,820	871	13,317	2.7	435.0	435.0	436.0	1.0
J	15,060	694	10,760	3.4	435.7	435.7	436.7	1.0
K	17,100	1,893	24,975	1.4	436.5	436.5	437.5	1.0
L	19,400	1,593	13,984	2.6	437.2	437.2	438.2	1.0
M	20,130	1,088	12,839	2.8	437.9	437.9	438.9	1.0
N	21,840	1,542	13,186	2.6	439.3	439.3	440.3	1.0
O	22,820	796	8,512	4.1	440.5	440.5	441.3	0.8
P	24,050	933	10,341	3.4	443.0	443.0	443.9	0.9
Q	25,560	478	6,779	5.1	444.7	444.7	445.7	1.0
R	27,260	1,062	12,379	2.8	446.8	446.8	447.8	1.0
S	28,860	526	6,603	5.3	448.5	448.5	449.4	0.9
T	30,570	264	5,902	5.9	451.1	451.1	452.1	1.0
U	32,800	253	6,167	5.6	453.5	453.5	454.5	1.0

<sup>1</sup>Feet above Shelby County limits

**TABLE 3**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SHELBY COUNTY, AL  
AND INCORPORATED AREAS**

**FLOODWAY DATA**

**KELLY CREEK**

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Kelly Creek								
V	34,020	572	11,645	3.0	454.9	454.9	455.9	1.0
W	35,200	763	16,021	2.2	455.5	455.5	456.5	1.0
X	36,230	986	19,538	1.8	455.8	455.8	456.8	1.0
Y	37,610	680	14,608	2.4	456.2	456.2	457.2	1.0
Z	39,210	1,739	34,059	1.0	456.7	456.7	457.7	1.0
AA	40,590	407	8,320	4.2	457.0	457.0	457.9	0.9
AB	42,190	214	5,303	6.5	458.3	458.3	459.3	1.0
AC	43,320	224	5,506	6.3	459.7	459.7	460.7	1.0
AD	45,300	212	5,849	5.9	462.1	462.1	463.1	1.0
AE	46,500	206	5,912	4.9	463.4	463.4	464.4	1.0

<sup>1</sup>Feet above Shelby County limits

**TABLE 3**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SHELBY COUNTY, AL  
AND INCORPORATED AREAS**

**FLOODWAY DATA**

**KELLY CREEK**

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
King Creek								
A	350	530	1,380	3.2	384.9 <sup>2</sup>	382.6	383.6	1.0
B	1,130	390	1,090	4.1	384.9 <sup>2</sup>	383.5	384.3	0.8
C	1,610	210	960	4.6	385.5	385.5	386.4	0.9
D	2,610	60	530	8.2	387.2	387.2	388.0	0.8

<sup>1</sup>Feet above confluence with Shoal Creek

<sup>2</sup>Controlled by backwater effects of Shoal Creek

**TABLE  
3**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SHELBY COUNTY, AL  
AND INCORPORATED AREAS**

**FLOODWAY DATA**

**KING CREEK**

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Lee Branch								
A	421	295	1,197	3.2	552.5	552.5	552.5	0.0
B	2,474	253	1,272	3.0	555.3	555.3	555.7	0.4
C	4,788	200	1,025	3.6	560.2	560.2	561.0	0.8
D	6,282	133	1,186	3.1	565.1	565.1	565.9	0.8
E	6,998	280	1,466	2.5	568.9	568.9	569.8	0.9
F	7,969	384	1,797	2.0	571.9	571.9	572.8	0.9
G	9,400	400	1,413	2.4	575.8	575.8	576.7	0.9
H	10,923	66	539	6.3	582.6	582.6	583.4	0.8
I	11,282	270	2,682	1.3	589.5	589.5	590.2	0.7
J	13,067	149	669	4.3	594.5	594.5	594.8	0.3
K	14,318	45	402	4.1	603.5	603.5	604.3	0.8
L	14,490	54	477	3.5	608.2	608.2	608.6	0.4
M	14,800	40	164	10.0	608.4	608.4	608.4	0.0

<sup>1</sup>Feet above confluence with Little Cahaba River

**TABLE  
3**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SHELBY COUNTY, AL  
AND INCORPORATED AREAS**

**FLOODWAY DATA**

**LEE BRANCH**

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Lee Brook								
A	1,008	91	369	4.6	419.5	419.5	420.5	1.0
B	1,735	70	283	5.6	425.6	425.6	426.3	0.7
C	1,813	70	391	4.0	426.9	426.9	427.8	0.9
D	2,038	74	227	6.9	428.6	428.6	429.0	0.3
E	2,193	337	3,553	0.4	437.3	437.3	437.9	0.6
F	2,941	132	523	3.0	437.4	437.4	437.9	0.5
G	4,098	90	304	5.2	441.9	441.9	442.1	0.2
H	5,009	30	135	2.5	445.2	445.2	446.0	0.8
I	5,054	30	172	1.9	447.0	447.0	447.4	0.4
J	6,138	34	85	3.9	453.0	453.0	453.0	0.0
K	7,109	23	64	5.2	460.2	460.2	460.2	0.0
L	8,018	27	102	3.2	467.2	467.2	467.3	0.1
M	8,113	39	144	2.3	468.9	468.9	468.9	0.0
N	8,745	27	82	4.0	473.8	473.8	473.8	0.1
O	9,016	30	42	7.8	477.0	477.0	477.1	0.0

<sup>1</sup>Feet above confluence with Prairie Brook

**TABLE 3**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SHELBY COUNTY, AL  
AND INCORPORATED AREAS**

**FLOODWAY DATA**

**LEE BROOK**

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Little Beeswax Creek								
A	2,134	512	4,227	1.3	404.1	404.1	404.8	0.7
B	4,376	305	2,012	2.5	405.2	405.2	406.1	0.9
C	5,281	792	3,889	1.3	406.2	406.2	406.9	0.7
D	6,695	59	423	11.8	407.4	407.4	407.5	0.1
E	7,271	732	4,161	1.2	411.1	411.1	411.9	0.8
F	9,479	365	1,301	3.7	412.4	412.4	413.0	0.6
G	10,711	335	1,417	3.3	415.0	415.0	415.7	0.7
H	12,247	357	1,408	3.3	418.0	418.0	419.0	1.0
I	12,888	736	2,591	1.8	419.3	419.3	420.2	0.9
J	13,804	536	1,804	2.5	420.9	420.9	421.3	0.4
K	15,324	450	1,491	2.6	424.7	424.7	425.7	1.0
L	16,548	290	1,296	3.0	429.5	429.5	430.4	0.9
M	17,385	233	1,653	2.3	434.7	434.7	435.5	0.8
N	18,282	399	1,922	2.0	435.4	435.4	436.3	0.9
O	19,565	258	894	3.9	438.2	438.2	439.0	0.8
P	21,872	332	1,197	2.4	446.7	446.7	447.7	1.0
Q	23,125	143	533	5.1	451.3	451.3	451.8	0.5
R	23,310	55	410	6.7	452.0	452.0	452.5	0.5
S	24,123	289	1,171	2.3	454.6	454.6	455.3	0.7
T	25,185	56	356	7.7	458.8	458.8	458.8	0.0

<sup>1</sup>Feet above confluence with Beeswax Creek

<b>TABLE 3</b>	<b>FEDERAL EMERGENCY MANAGEMENT AGENCY</b>	<b>FLOODWAY DATA</b>
	<b>SHELBY COUNTY, AL AND INCORPORATED AREAS</b>	
		<b>LITTLE BEESWAX CREEK</b>

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Little Beeswax Creek Tributary								
A	1,174	70	229	3.0	466.0	466.0	467.0	1.0
B	2,220	39	112	6.1	478.5	478.5	479.2	0.7
C	3,300	52	153	4.4	487.5	487.5	488.3	0.8
D	3,940	162	670	0.9	495.2	495.2	495.2	0.0
E	5,590	19	71	5.8	507.9	507.9	508.5	0.6
F	7,290	25	77	3.5	522.1	522.1	522.8	0.7
G	8,690	15	44	4.6	541.6	541.6	542.3	0.7

<sup>1</sup>Feet above confluence with Little Beeswax Creek

<b>TABLE 3</b>	<b>FEDERAL EMERGENCY MANAGEMENT AGENCY</b>	<b>FLOODWAY DATA</b>
	<b>SHELBY COUNTY, AL AND INCORPORATED AREAS</b>	
		<b>LITTLE BEESWAX CREEK TRIBUTARY</b>

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Little Creek								
A	1,310	380	2,151	1.7	470.4 <sup>2</sup>	459.3	460.3	1.0
B	3,820	506	2,279	1.6	470.4 <sup>2</sup>	462.2	463.2	1.0
C	6,140	406	1,971	1.8	470.4 <sup>2</sup>	464.9	465.9	1.0
D	9,850	432	2,052	1.7	470.4 <sup>2</sup>	469.4	470.4	1.0
E	14,090	390	2,020	1.8	474.7	474.7	475.7	1.0
F	15,505	352	3,612	1.0	480.7	480.7	481.5	0.8
G	18,605	261	2,091	1.5	481.2	481.2	482.2	1.0
H	20,225	449	2,720	0.8	482.0	482.0	483.0	1.0
I	22,685	204	925	2.4	483.6	483.6	484.4	0.8
J	25,635	349	1,379	1.6	487.3	487.3	488.0	0.7
K	26,845	251	839	2.7	489.5	489.5	490.5	1.0
L	27,835	585	5,015	0.4	496.6	496.6	497.6	1.0
M	29,825	208	1,077	1.6	500.6	500.6	501.4	0.8
N	30,945	129	549	3.1	502.7	502.7	503.7	1.0
O	32,205	22	237	7.1	509.0	509.0	509.9	0.9
P	33,155	385	1,969	0.5	511.3	511.3	512.3	1.0
Q	35,205	29	192	5.2	523.7	523.7	524.6	0.9

<sup>1</sup>Feet above confluence with North Fork Yellowleaf Creek

<sup>2</sup>Controlled by backwater effects of North Fork Yellowleaf Creek

**TABLE 3**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SHELBY COUNTY, AL  
AND INCORPORATED AREAS**

**FLOODWAY DATA**

**LITTLE CREEK**

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Locust Creek								
A	10,320	87	1,401	2.1	419.4	419.4	420.3	0.9
B	12,400	1,007	11,006	0.3	419.4	419.4	420.4	1.0
C	14,660	703	5,782	0.5	419.4	419.4	420.4	1.0

<sup>1</sup>Feet above confluence with Coosa River

**TABLE 3**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SHELBY COUNTY, AL  
AND INCORPORATED AREAS**

**FLOODWAY DATA**

**LOCUST CREEK**

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Muddy Prong								
A	1,660	793	6,723	2.0	432.9 <sup>2</sup>	431.4	432.3	0.9
B	3,950	447	3,711	3.5	433.1	433.1	434.0	0.9
C	6,060	713	5,559	2.0	435.9	435.9	436.9	1.0
D	8,580	568	3,281	3.4	438.4	438.4	439.2	0.8
E	9,640	429	4,521	2.5	443.2	443.2	443.9	0.7
F	11,500	555	4,883	2.3	444.2	444.2	445.1	0.9
G	13,680	259	1,847	6.0	446.3	446.3	447.3	1.0
H	15,820	436	5,663	2.0	456.7	456.7	457.5	0.8
I	16,820	262	3,355	3.3	457.1	457.1	457.9	0.8
J	20,170	382	4,620	2.4	459.4	459.4	460.4	1.0
K	21,840	1,351	15,630	0.5	461.7	461.7	462.5	0.8
L	25,990	730	7,647	1.0	461.8	461.8	462.7	0.9
M	29,210	322	3,294	2.3	462.8	462.8	463.6	0.8
N	30,830	545	5,768	1.2	464.7	464.7	465.7	1.0
O	33,260	1,053	9,297	0.7	465.0	465.0	466.0	1.0
P	34,810	628	4,719	1.5	465.4	465.4	466.4	1.0
Q	36,310	769	4,589	1.5	466.3	466.3	467.3	1.0
R	39,520	755	3,550	2.0	468.9	468.9	469.8	0.9
S	41,950	411	2,619	2.1	471.8	471.8	472.7	0.9
T	45,190	908	6,279	0.9	475.2	475.2	476.2	1.0
U	46,960	839	5,882	0.9	475.6	475.6	476.6	1.0
V	48,360	495	3,266	1.7	476.3	476.3	477.3	1.0

<sup>1</sup>Feet above confluence with Yellowleaf Creek

<sup>2</sup>Controlled by backwater effects of Yellowleaf Creek

<b>TABLE 3</b>	<b>FEDERAL EMERGENCY MANAGEMENT AGENCY</b>	<b>FLOODWAY DATA</b>
	<b>SHELBY COUNTY, AL AND INCORPORATED AREAS</b>	
		<b>MUDDY PRONG</b>

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
North Fork Yellowleaf Creek								
A	2,900	1,160	8,537	1.7	461.5	461.5	462.5	1.0
B	6,720	796	7,064	2.1	463.6	463.6	464.5	0.9
C	7,670	307	2,754	5.3	464.8	464.8	465.8	1.0
D	10,170	510	6,156	2.4	468.1	468.1	469.1	1.0
E	11,280	441	5,700	2.5	469.0	469.0	469.9	0.9
F	16,110	817	8,222	1.8	471.5	471.5	472.5	1.0
G	17,780	438	6,182	2.3	472.3	472.3	473.3	1.0
H	21,080	375	5,950	2.1	473.7	473.7	474.6	0.9
I	25,080	733	8,396	1.3	474.4	474.4	475.4	1.0
J	27,020	245	2,582	4.1	475.1	475.1	476.1	1.0
K	28,780	114	1,755	6.1	480.2	480.2	481.1	0.9
L	30,840	535	6,772	1.6	482.8	482.8	483.8	1.0
M	31,540	192	3,109	3.4	482.9	482.9	483.9	1.0
N	32,050	309	4,640	2.3	483.8	483.8	484.8	1.0
O	33,040	128	2,015	5.3	484.5	484.5	485.4	0.9
P	34,590	152	2,490	4.3	487.2	487.2	488.2	1.0
Q	35,240	157	2,673	4.0	488.1	488.1	489.0	0.9
R	36,490	409	6,521	1.6	489.0	489.0	490.0	1.0
S	37,210	400	6,220	1.6	489.2	489.2	490.2	1.0
T	41,180	320	3,782	2.7	490.2	490.2	491.2	1.0
U	42,890	409	4,924	2.1	491.3	491.3	492.3	1.0

<sup>1</sup>Feet above confluence with Yellowleaf Creek

<b>TABLE 3</b>	<b>FEDERAL EMERGENCY MANAGEMENT AGENCY</b>	<b>FLOODWAY DATA</b>
	<b>SHELBY COUNTY, AL AND INCORPORATED AREAS</b>	
		<b>NORTH FORK YELLOWLEAF CREEK</b>

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
North Fork Yellowleaf Creek								
V	44,380	92	1,554	6.6	494.6	494.6	495.2	0.6
W	46,050	170	2,676	3.5	497.7	497.7	498.6	0.9
X	49,490	206	2,762	3.4	500.9	500.9	501.9	1.0
Y	50,840	52	667	13.9	521.6	521.6	522.4	0.8
Z	51,960	99	1,509	5.3	530.1	530.1	531.1	1.0
AA	54,310	273	3,241	1.8	531.8	531.8	532.8	1.0
AB	55,940	569	3,996	1.5	532.7	532.7	533.6	0.9
AC	58,535	43	424	8.6	546.1	546.1	547.1	1.0
AD	60,925	74	428	8.5	574.0	574.0	575.0	1.0
AE	61,475	222	793	7.0	583.1	583.1	583.5	0.4
AF	62,749	64	403	13.8	609.9	609.9	610.1	0.2
AG	63,906	44	336	15.8	642.9	642.9	642.8	0.0
AH	65,336	34	330	16.1	679.9	679.9	679.9	0.0
AI	65,638	74	803	6.0	685.1	685.1	685.2	0.1
AJ	66,019	69	917	5.2	687.4	687.4	687.4	0.0
AK	69,385	120	733	4.8	696.2	696.2	696.8	0.6
AL	71,424	151	1,293	2.5	701.7	701.7	702.6	0.9
AM	73,267	43	275	11.9	710.4	710.4	710.8	0.4
AN	74,306	81	579	5.7	717.0	717.0	717.5	0.5
AO	76,005	84	834	3.6	726.0	726.0	726.0	0.0
AP	77,778	94	561	5.4	729.8	729.8	730.6	0.8

<sup>1</sup>Feet above confluence with Yellowleaf Creek

**TABLE 3**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SHELBY COUNTY, AL  
AND INCORPORATED AREAS**

**FLOODWAY DATA**

**NORTH FORK YELLOWLEAF CREEK**

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
North Fork Yellowleaf Creek								
AQ	80,665	110	644	4.2	753.5	753.5	754.1	0.6
AR	82,709	93	442	5.6	762.9	762.9	762.9	0.0
AS	85,160	185	817	2.7	771.8	771.8	772.5	0.7
AT	87,674	211	1,317	1.7	779.9	779.9	780.3	0.4
AU	89,276	125	567	3.4	783.0	783.0	783.8	0.8

<sup>1</sup> Feet above confluence with Yellowleaf Creek

**TABLE 3**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SHELBY COUNTY, AL  
AND INCORPORATED AREAS**

**FLOODWAY DATA**

**NORTH FORK YELLOWLEAF CREEK**

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Peavine Creek								
A	1,297	338	2,875	2.8	441.2 <sup>2</sup>	439.4	439.4	0.0
B	2,189	274	2,346	3.4	441.2 <sup>2</sup>	440.5	440.7	0.2
C	3,525	105	1,092	6.5	443.0	443.0	443.7	0.7
D	5,606	281	2,429	1.7	448.2	448.2	449.1	0.9
E	9,739	261	1,491	2.8	452.6	452.6	453.4	0.8
F	11,984	123	896	4.6	456.3	456.3	457.3	1.0
G	12,251	123	1,002	4.1	457.7	457.7	458.4	0.7
H	14,454	189	1,415	2.9	461.5	461.5	462.0	0.5
I	17,227	416	2,022	1.9	466.8	466.8	467.7	0.9
J	21,440	354	1,595	2.4	474.9	474.9	475.9	1.0
K	24,799	208	896	4.3	480.0	480.0	480.7	0.7
L	26,463	76	839	4.6	483.6	483.6	484.5	0.9
M	26,563	75	918	4.2	485.3	485.3	486.3	1.0
N	28,262	694	4,157	0.9	486.5	486.5	487.4	0.9
O	33,536	373	1,954	1.9	491.6	491.6	492.6	1.0
P	36,027	190	1,099	3.2	497.8	497.8	498.7	0.9
Q	37,989	62	696	5.0	503.9	503.9	504.8	0.9
R	38,889	312	2,787	1.3	505.0	505.0	505.8	0.8
S	39,874	429	2,858	1.0	505.3	505.3	506.1	0.8
T	41,948	204	1,405	2.1	506.9	506.9	507.9	1.0

<sup>1</sup>Feet above confluence with Buck Creek

<sup>2</sup>Controlled by backwater effects of Buck Creek

**TABLE 3**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SHELBY COUNTY, AL  
AND INCORPORATED AREAS**

**FLOODWAY DATA**

**PEAVINE CREEK**

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Peavine Creek								
U	44,218	150	901	2.4	510.8	510.8	511.3	0.5
V	45,662	130	573	3.8	514.2	514.2	515.0	0.8
W	46,710	178	760	2.9	516.0	516.0	516.7	0.7
X	47,932	38	351	6.2	519.3	519.3	520.2	0.9
Y	48,034	42	740	3.0	530.6	530.6	530.6	0.0
Z	52,468	40	157	6.8	532.5	532.5	533.2	0.7
AA	52,543	51	301	3.6	536.6	536.6	536.6	0.0
AB	53,784	39	211	5.1	539.3	539.3	540.1	0.8
AC	55,032	55	212	5.0	547.6	547.6	547.6	0.0
AD	56,617	86	327	3.3	558.0	558.0	558.8	0.8
AE	58,016	84	309	1.4	564.5	564.5	565.3	0.8
AF	58,562	26	80	5.4	566.7	566.7	567.1	0.4
AG	59,259	35	114	3.8	570.8	570.8	571.2	0.4
AH	60,357	30	102	4.2	576.8	576.8	576.9	0.1

<sup>1</sup>Feet above confluence with Buck Creek

<b>TABLE 3</b>	<b>FEDERAL EMERGENCY MANAGEMENT AGENCY</b>	<b>FLOODWAY DATA</b>
	<b>SHELBY COUNTY, AL AND INCORPORATED AREAS</b>	
		<b>PEAVINE CREEK</b>

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Prairie Brook								
A	438	565	448	7.0	414.0 <sup>2</sup>	404.8	404.9	0.1
B	2,466	567	4,642	0.7	416.9	416.9	417.9	1.0
C	3,415	424	2,526	1.3	417.0	417.0	418.0	1.0
D	3,705	575	3,598	0.4	417.2	417.2	418.2	1.0
E	4,684	212	565	2.8	418.0	418.0	418.7	0.7
F	5,157	214	660	2.4	420.0	420.0	420.9	0.9
G	6,315	123	490	2.1	425.4	425.4	426.1	0.7
H	7,593	107	235	4.5	430.0	430.0	430.5	0.5

<sup>1</sup>Feet above confluence with Buck Creek

<sup>2</sup>Controlled by backwater effects of Buck Creek

**TABLE 3**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SHELBY COUNTY, AL  
AND INCORPORATED AREAS**

**FLOODWAY DATA**

**PRAIRIE BROOK**

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Shoal Creek								
A	5,300	810	5,350	2.0	382.5	382.5	383.5	1.0
B	7,800	800	5,200	2.1	382.9	382.9	383.9	1.0
C	9,300	690	4,160	2.6	383.3	383.3	384.2	0.9
D	10,260	490	2,620	4.1	383.7	383.7	384.6	0.9
E	12,180	230	1,670	5.6	385.8	385.8	386.6	0.8
F	12,670	80	980	9.5	386.5	386.5	387.4	0.9
G	12,850	100	1,120	8.3	387.3	387.3	388.2	0.9
H	13,500	120	1,000	9.4	389.0	389.0	389.9	0.9
I	13,790	220	840	11.1	392.2	392.2	392.2	0.0
J	14,270	210	1,340	7.0	394.1	394.1	394.1	0.0
K	14,440	210	1,430	6.5	394.9	394.9	395.0	0.1
L	14,960	90	1,040	9.0	396.6	396.6	396.8	0.2
M	15,190	90	1,160	8.1	397.7	397.7	398.3	0.6
N	15,370	240	2,480	3.8	398.8	398.8	399.6	0.8
O	15,690	190	2,110	4.4	399.5	399.5	400.3	0.8
P	16,790	460	4,390	2.1	400.9	400.9	401.8	0.9
Q	18,460	160	1,280	7.3	402.4	402.4	403.3	0.9
R	19,810	630	3,740	2.5	405.2	405.2	406.1	0.9
S	21,400	190	1,430	6.4	407.1	407.1	408.0	0.9
T	22,180	230	1,820	5.0	409.0	409.0	410.0	1.0
U	22,340	310	2,700	3.4	411.1	411.1	412.1	1.0

<sup>1</sup>Feet above Norfolk Southern Railway Bridge

<b>TABLE 3</b>	<b>FEDERAL EMERGENCY MANAGEMENT AGENCY</b>	<b>FLOODWAY DATA</b>
	<b>SHELBY COUNTY, AL AND INCORPORATED AREAS</b>	
		<b>SHOAL CREEK</b>

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Shoal Creek								
V	23,110	210	2,190	4.1	411.7	411.7	412.6	0.9
W	23,960	360	2,400	2.0	412.6	412.6	413.6	1.0
X	25,080	80	600	8.1	412.7	412.7	413.6	0.9
Y	27,280	120	880	5.6	419.5	419.5	420.4	0.9
Z	29,040	290	1,630	2.9	421.5	421.5	422.4	0.9
AA	30,890	260	1,400	3.4	422.9	422.9	423.5	0.6
AB	34,290	55	540	8.1	431.7	431.7	432.4	0.7
AC	35,545	118	821	4.8	434.6	434.6	435.5	0.8
AD	36,435	48	338	11.7	436.5	436.5	437.5	0.9
AE	37,650	66	738	5.4	443.8	443.8	444.7	0.8
AF	38,935	53	585	6.8	446.2	446.2	447.0	0.8
AG	40,375	170	1,190	3.2	450.0	450.0	450.8	0.8

<sup>1</sup>Feet above Norfolk Southern Railway Bridge

**TABLE 3**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SHELBY COUNTY, AL  
AND INCORPORATED AREAS**

**FLOODWAY DATA**

**SHOAL CREEK**

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
South Fork Yellowleaf Creek								
A	800	490	6,073	1.8	460.7	460.7	461.7	1.0
B	4,400	1,091	10,335	1.0	461.4	461.4	462.4	1.0
C	5,220	835	8,848	1.2	462.2	462.2	463.2	1.0
D	7,310	872	7,666	1.4	462.6	462.6	463.6	1.0
E	9,270	499	3,416	3.0	463.2	463.2	464.2	1.0
F	10,670	294	2,159	4.7	465.7	465.7	466.7	1.0
G	12,850	1,086	10,644	1.0	467.3	467.3	468.3	1.0
H	15,100	933	8,823	1.2	467.7	467.7	468.7	1.0
I	18,150	656	4,978	2.0	468.5	468.5	469.5	1.0
J	20,300	807	8,445	1.2	472.6	472.6	473.6	1.0
K	23,150	1,076	11,233	0.9	473.0	473.0	473.9	0.9
L	26,500	2,020	17,596	0.5	473.3	473.3	474.2	0.9
M	31,050	1,782	10,594	0.8	473.6	473.6	474.5	0.9
N	34,180	1,057	5,926	1.5	474.7	474.7	475.6	0.9
O	36,220	1,401	10,160	0.9	477.2	477.2	478.2	1.0
P	38,320	851	4,352	2.0	477.9	477.9	478.8	0.9
Q	40,120	841	8,133	1.1	478.8	478.8	479.7	0.9
R	44,270	1,432	10,112	0.9	479.4	479.4	480.3	0.9
S	45,670	419	3,139	2.8	480.0	480.0	480.9	0.9
T	49,420	1,217	6,700	1.3	482.7	482.7	483.7	1.0
U	51,170	1,260	5,981	1.4	483.9	483.9	484.9	1.0

<sup>1</sup>Feet above confluence with Yellowleaf Creek

**TABLE 3**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SHELBY COUNTY, AL  
AND INCORPORATED AREAS**

**FLOODWAY DATA**

**SOUTH FORK YELLOWLEAF CREEK**

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
South Fork Yellowleaf Creek								
V	53,670	534	3,003	2.7	486.8	486.8	487.7	0.9
W	55,070	561	4,739	1.7	491.2	491.2	492.2	1.0
X	57,770	537	4,513	1.8	492.6	492.6	493.6	1.0
Y	59,570	342	3,378	2.4	493.9	493.9	494.8	0.9
Z	59,970	345	3,479	2.4	494.5	494.5	495.5	1.0

<sup>1</sup>Feet above confluence with Yellowleaf Creek

<b>TABLE 3</b>	<b>FEDERAL EMERGENCY MANAGEMENT AGENCY</b>	<b>FLOODWAY DATA</b>
	<b>SHELBY COUNTY, AL AND INCORPORATED AREAS</b>	
		<b>SOUTH FORK YELLOWLEAF CREEK</b>

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Spencer Creek								
A	900	280	1,330	2.2	473.6 <sup>2</sup>	461.3	462.3	1.0
B	3,090	212	1,125	2.6	473.9	473.9	474.7	0.8
C	4,280	740	7,804	0.4	474.1	474.1	474.9	0.8
D	8,580	128	562	5.1	476.9	476.9	477.8	0.9
E	10,770	168	1,212	1.2	480.8	480.8	481.8	1.0
F	13,750	68	282	5.2	483.5	483.5	484.3	0.8
G	17,390	191	828	1.8	493.2	493.2	494.2	1.0
H	20,490	30	150	6.7	504.5	504.5	505.3	0.8
I	22,950	103	570	1.8	511.8	511.8	512.8	1.0
J	24,290	97	501	2.0	516.5	516.5	517.5	1.0
K	24,860	208	861	1.2	520.6	520.6	521.4	0.8
L	27,360	62	353	2.0	529.8	529.8	530.8	1.0
M	29,540	15	59	8.3	540.5	540.5	540.8	0.3
N	30,890	41	195	2.5	548.8	548.8	549.8	1.0
O	31,235	192	1,043	0.5	554.2	554.2	555.2	1.0
P	31,970	18	94	2.7	557.6	557.6	558.6	1.0
Q	32,830	176	2,227	0.1	582.3	582.3	583.3	1.0
R	34,010	57	225	1.1	582.3	582.3	583.3	1.0

<sup>1</sup>Feet above confluence with North Fork Yellowleaf Creek

<sup>2</sup>Controlled by backwater effects of North Fork Yellowleaf Creek

**TABLE 3**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SHELBY COUNTY, AL  
AND INCORPORATED AREAS**

**FLOODWAY DATA**

**SPENCER CREEK**

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Spring Creek/Blue Spring Branch/Tributary 2								
A	60	170	1,370	3.4	422.2	422.2	423.1	0.9
B	2,140	90	650	6.7	422.9	422.9	423.3	0.4
C	3,310	230	3,910	1.1	437.7	437.7	438.2	0.5
D	5,100	530	5,730	0.5	437.8	437.8	438.3	0.5
E	6,970	210	1,270	2.0	437.9	437.9	438.5	0.6
F	8,560	90	460	5.6	442.1	442.1	442.7	0.6
G	10,680	70	460	5.2	451.2	451.2	451.8	0.6
H	11,430	200	750	1.4	453.8	453.8	454.4	0.6
I	13,620	150	590	1.8	468.5	468.5	469.0	0.5
J	17,710	80	250	3.2	497.0	497.0	497.7	0.7
K	20,750	40	170	4.8	520.9	520.9	521.8	0.9

<sup>1</sup>Feet above U.S. Highway 231

<b>TABLE 3</b>	<b>FEDERAL EMERGENCY MANAGEMENT AGENCY</b>	<b>FLOODWAY DATA</b>
	<b>SHELBY COUNTY, AL AND INCORPORATED AREAS</b>	
		<b>SPRING CREEK/BLUE SPRING BRANCH/TRIBUTARY 2</b>

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Spring Creek (in Montevallo)								
A	870	240	1,270	5.5	412.4 <sup>2</sup>	411.7	412.4	0.7
B	2,400	290	970	5.4	415.8	415.8	416.3	0.5
C	3,250	160	970	5.4	419.3	419.3	420.0	0.7
D	3,410	250	1,650	3.1	421.1	421.1	422.0	0.9
E	3,890	120	890	5.8	421.4	421.4	422.2	0.8
F	4,480	230	1,550	3.3	422.8	422.8	423.7	0.9
G	5,210	150	800	6.5	423.9	423.9	424.5	0.6
H	6,510	260	1,780	2.9	428.5	428.5	429.4	0.9

<sup>1</sup>Feet above confluence with Shoal Creek

<sup>2</sup>Controlled by backwater effects of Shoal Creek

**TABLE  
3**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SHELBY COUNTY, AL  
AND INCORPORATED AREAS**

**FLOODWAY DATA**

**SPRING CREEK (IN MONTEVALLO)**

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Upper Spring Creek								
A	830	180	760	2.4	437.6 <sup>2</sup>	426.8	427.5	0.7
B	2,760	670	1,270	1.4	437.6 <sup>2</sup>	430.7	431.2	0.5
C	3,010	190	820	2.2	437.6 <sup>2</sup>	434.5	435.1	0.6
D	4,190	190	570	3.2	437.8	437.8	438.4	0.6

<sup>1</sup>Feet above confluence with Spring Creek/Blue Spring Branch

<sup>2</sup>Controlled by backwater effects of Spring Creek/Blue Spring Branch

**TABLE 3**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SHELBY COUNTY, AL  
AND INCORPORATED AREAS**

**FLOODWAY DATA**

**UPPER SPRING CREEK**

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Walthall Branch								
A	3,760	176	536	3.0	408.9	408.9	409.9	1.0
B	6,080	98	329	4.8	415.7	415.7	416.6	0.9
C	6,790	335	1,356	1.2	419.2	419.2	420.1	0.9
D	8,020	126	397	3.2	421.6	421.6	422.6	1.0
E	8,770	296	1,110	1.0	424.6	424.6	425.6	1.0
F	10,830	237	871	1.5	427.6	427.6	428.5	0.9
G	13,030	495	2,043	0.6	428.9	428.9	429.8	0.9
H	15,070	109	456	1.7	431.3	431.3	432.2	0.9
I	16,540	118	395	1.9	435.4	435.4	436.4	1.0
J	18,490	117	353	1.8	443.1	443.1	444.1	1.0

<sup>1</sup>Feet above State Highway 76 bridge

<b>TABLE 3</b>	<b>FEDERAL EMERGENCY MANAGEMENT AGENCY</b>	<b>FLOODWAY DATA</b>
	<b>SHELBY COUNTY, AL AND INCORPORATED AREAS</b>	
		<b>WALTHALL BRANCH</b>

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Waxahatchee Creek/ Big Creek								
A	1,000	102	1,289	5.7	430.7	430.7	431.7	1.0
B	3,030	91	1,224	6.0	432.7	432.7	433.6	0.9
C	3,950	202	2,318	3.2	433.7	433.7	434.7	1.0
D	4,370	247	1,775	4.2	433.8	433.8	434.7	0.9
E	4,670	238	1,680	4.4	434.1	434.1	435.1	1.0
F	5,070	104	1,577	4.7	434.7	434.7	435.6	0.9
G	5,270	187	1,655	4.5	434.7	434.7	435.6	0.9
H	7,960	549	1,561	4.7	438.8	438.8	439.7	0.9
I	10,730	199	1,538	4.8	445.3	445.3	446.3	1.0
J	11,900	183	1,822	4.0	447.4	447.4	448.3	0.9
K	16,100	294	2,334	3.2	452.5	452.5	453.4	0.9
L	18,600	153	1,434	5.1	456.4	456.4	457.4	1.0
M	20,310	303	2,443	3.0	459.1	459.1	460.0	0.9
N	22,510	211	1,837	4.0	461.1	461.1	462.0	0.9
O	25,060	304	2,492	3.0	463.3	463.3	464.3	1.0
P	26,420	328	2,520	2.9	464.4	464.4	465.4	1.0
Q	27,650	341	2,494	3.0	465.3	465.3	466.3	1.0
R	29,850	290	1,871	3.7	467.3	467.3	468.3	1.0
S	31,110	261	1,717	4.0	468.4	468.4	469.4	1.0
T	31,460	199	1,329	5.1	468.7	468.7	469.5	0.8
U	32,630	240	1,672	4.1	471.1	471.1	472.1	1.0

<sup>1</sup>Feet above confluence with Camp Branch

**TABLE 3**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SHELBY COUNTY, AL  
AND INCORPORATED AREAS**

**FLOODWAY DATA**

**WAXAHATCHEE CREEK/BIG CREEK**

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Waxahatchee Creek/ Big Creek								
V	33,860	316	2,085	3.3	473.3	473.3	474.2	0.9
W	34,960	417	4,217	1.6	474.3	474.3	475.2	0.9
X	36,410	270	2,102	3.1	475.7	475.7	476.4	0.7
Y	36,690	260	2,009	3.3	475.9	475.9	476.7	0.8
Z	37,990	362	3,375	1.9	477.1	477.1	478.1	1.0
AA	40,190	566	3,617	1.8	478.5	478.5	479.4	0.9
AB	41,390	551	3,781	1.7	479.7	479.7	480.5	0.8
AC	43,490	394	2,612	2.5	480.2	480.2	481.1	0.9
AD	44,690	281	2,380	2.8	481.3	481.3	482.3	1.0
AE	46,470	589	3,847	1.6	482.7	482.7	483.6	0.9
AF	48,440	627	1,766	2.9	484.8	484.8	485.6	0.8
AG	50,560	507	2,929	1.8	488.1	488.1	489.1	1.0
AH	52,860	361	1,849	2.8	491.1	491.1	492.1	1.0
AI	53,750	325	1,909	2.7	492.7	492.7	493.7	1.0
AJ	55,750	273	1,579	3.3	497.8	497.8	498.8	1.0
AK	57,850	217	1,301	4.0	504.8	504.8	505.7	0.9
AL	59,160	263	2,083	2.4	507.4	507.4	508.4	1.0
AM	59,990	433	3,239	1.5	508.1	508.1	509.1	1.0
AN	62,290	487	3,062	1.6	509.3	509.3	510.3	1.0
AO	64,840	324	1,681	2.9	511.7	511.7	512.7	1.0
AP	67,550	465	2,715	1.8	515.8	515.8	516.8	1.0
AQ	69,830	360/576 <sup>2</sup>	2,350	2.0	517.9	517.9	518.9	1.0

<sup>1</sup>Feet above confluence with Camp Branch

<sup>2</sup>Width/Width width including Wildwood Creek floodway

<b>TABLE 3</b>	<b>FEDERAL EMERGENCY MANAGEMENT AGENCY</b>	<b>FLOODWAY DATA</b>
	<b>SHELBY COUNTY, AL AND INCORPORATED AREAS</b>	
		<b>WAXAHATCHEE CREEK/BIG CREEK</b>

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Wildwood Creek								
A	240	145	943	2.4	518.5 <sup>2</sup>	518.0	519.0	1.0
B	2,680	343	1,793	1.3	522.0	522.0	523.0	1.0
C	5,050	123	397	2.0	529.7	529.7	530.7	1.0
D	6,550	65	237	3.4	540.9	540.9	541.9	1.0
E	8,140	37	146	5.0	552.5	552.5	553.5	1.0

<sup>1</sup>Feet above confluence with Big Creek

<sup>2</sup>Controlled by backwater effects of Big Creek

**TABLE 3**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SHELBY COUNTY, AL  
AND INCORPORATED AREAS**

**FLOODWAY DATA**

**WILDWOOD CREEK**

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Wolf Creek								
A	470	181	931	4.7	483.4 <sup>2</sup>	479.2	480.2	1.0
B	1,170	91	611	7.1	483.4 <sup>2</sup>	483.1	483.2	0.1
C	2,370	289	1,569	2.8	486.9	486.9	487.9	1.0
D	3,850	186	1,498	2.9	489.2	489.2	490.2	1.0
E	6,050	462	3,134	1.3	490.9	490.9	491.9	1.0

<sup>1</sup>Feet above confluence with Waxahatchee Creek/Big Creek

<sup>2</sup>Controlled by backwater effects of Waxahatchee Creek/Big Creek

**TABLE 3**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SHELBY COUNTY, AL  
AND INCORPORATED AREAS**

**FLOODWAY DATA**

**WOLF CREEK**

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Yellow Creek								
A	180	49	176	2.8	495.5 <sup>2</sup>	482.1	483.1	1.0
B	2,630	52	160	2.6	497.9	497.9	498.8	0.9
C	4,350	12	50	6.4	514.0	514.0	515.0	1.0
D	5,720	13	45	3.5	530.4	530.4	531.2	0.8
E	7,530	13	17	2.9	547.8	547.8	547.8	0.0

<sup>1</sup>Feet above confluence with North Fork Yellowleaf Creek

<sup>2</sup>Controlled by backwater effects of North Fork Yellowleaf Creek

**TABLE 3**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SHELBY COUNTY, AL  
AND INCORPORATED AREAS**

**FLOODWAY DATA**

**YELLOW CREEK**

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Yellowleaf Creek								
A	10,875	982	9,069	3.0	407.1	407.1	408.1	1.0
B	11,040	1,181	10,617	2.5	407.3	407.3	408.3	1.0
C	12,000	654	8,531	3.1	407.9	407.9	408.7	0.8
D	12,840	1,393	18,040	1.5	408.4	408.4	409.3	0.9
E	14,920	2,564	26,188	1.0	408.8	408.8	409.7	0.9
F	19,900	2,524	21,249	1.2	409.4	409.4	410.3	0.9
G	20,620	2,560	21,677	1.2	409.5	409.5	410.5	1.0
H	21,320	1,780	14,470	1.8	409.6	409.6	410.5	0.9
I	23,230	1,467	14,560	1.8	410.0	410.0	411.0	1.0
J	24,940	1,716	13,234	1.9	410.1	410.1	411.1	1.0
K	27,110	2,068	12,164	2.0	410.6	410.6	411.6	1.0
L	29,120	2,939	28,000	0.9	411.2	411.2	412.2	1.0
M	32,180	1,684	16,016	1.5	411.9	411.9	412.9	1.0
N	32,870	2,109	14,641	1.6	412.2	412.2	413.1	0.9
O	34,730	1,602	14,874	1.6	413.3	413.3	414.2	0.9
P	36,060	1,334	13,002	1.8	413.9	413.9	414.8	0.9
Q	37,420	683	6,402	3.7	414.6	414.6	415.5	0.9
R	38,590	1,051	7,476	3.2	415.7	415.7	416.7	1.0
S	39,800	938	7,472	3.2	417.7	417.7	418.3	0.6
T	41,180	1,839	13,504	1.8	418.6	418.6	419.5	0.9
U	42,380	1,676	8,408	2.8	419.4	419.4	420.1	0.7

<sup>1</sup>Feet above confluence with Coosa River

<b>TABLE 3</b>	<b>FEDERAL EMERGENCY MANAGEMENT AGENCY</b>	<b>FLOODWAY DATA</b>
	<b>SHELBY COUNTY, AL AND INCORPORATED AREAS</b>	
		<b>YELLOWLEAF CREEK</b>

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Yellowleaf Creek								
V	44,650	1,334	11,282	2.1	421.8	421.8	422.7	0.9
W	46,770	1,416	10,276	2.3	423.6	423.6	424.6	1.0
X	49,040	440	4,524	5.3	425.8	425.8	426.5	0.7
Y	50,470	432	5,359	4.5	428.3	428.3	429.1	0.8
Z	51,540	1,498	14,766	1.6	429.9	429.9	430.8	0.9
AA	56,110	1,481	13,047	1.8	432.1	432.1	432.7	0.6
AB	58,800	265	2,825	6.6	434.2	434.2	434.6	0.4
AC	61,020	784	7,860	2.4	437.5	437.5	438.5	1.0
AD	62,440	457	5,859	3.2	438.4	438.4	439.3	0.9
AE	63,740	317	4,371	4.3	439.4	439.4	440.4	1.0
AF	65,850	417	4,856	3.9	441.7	441.7	442.7	1.0
AG	67,590	385	4,969	3.8	443.9	443.9	444.8	0.9
AH	69,490	637	8,225	2.3	445.6	445.6	446.6	1.0
AI	71,110	1,047	12,107	1.5	446.4	446.4	447.4	1.0
AJ	73,660	747	9,554	2.0	447.3	447.3	448.3	1.0
AK	75,110	855	7,824	2.4	448.0	448.0	448.9	0.9
AL	75,580	832	6,514	2.9	448.2	448.2	449.2	1.0
AM	77,550	622	7,298	2.6	449.8	449.8	450.7	0.9
AN	80,510	1,334	7,179	2.6	452.3	452.3	453.3	1.0
AO	83,870	1,841	17,606	1.1	454.0	454.0	455.0	1.0
AP	85,720	1,588	16,117	1.2	454.4	454.4	455.4	1.0

<sup>1</sup>Feet above confluence with Coosa River

<b>TABLE 3</b>	<b>FEDERAL EMERGENCY MANAGEMENT AGENCY</b>	<b>FLOODWAY DATA</b>
	<b>SHELBY COUNTY, AL AND INCORPORATED AREAS</b>	
		<b>YELLOWLEAF CREEK</b>

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Yellowleaf Creek								
AQ	88,180	769	8,529	2.2	454.9	454.9	455.9	1.0
AR	88,880	2,028	18,563	1.0	455.2	455.2	456.2	1.0
AS	91,050	2,038	12,726	1.4	455.3	455.3	456.3	1.0
AT	92,550	1,667	11,837	1.6	455.7	455.7	456.6	0.9
AU	94,360	833	7,652	2.4	456.5	456.5	457.5	1.0
AV	96,910	1,911	25,404	0.7	457.0	457.0	457.9	0.9
AW	100,020	668	8,285	2.2	457.1	457.1	458.0	0.9
AX	101,780	784	9,973	1.8	457.8	457.8	458.7	0.9
AY	103,850	1,084	10,454	1.8	458.6	458.6	459.5	0.9
AZ	105,920	1,506	13,797	1.3	459.4	459.4	460.3	0.9
BA	106,830	923	9,154	2.0	459.8	459.8	460.8	1.0

<sup>1</sup>Feet above confluence with Coosa River

**TABLE 3**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**SHELBY COUNTY, AL  
AND INCORPORATED AREAS**

**FLOODWAY DATA**

**YELLOWLEAF CREEK**