

DOUGLAS COUNTY, GEORGIA AND INCORPORATED AREAS

Community Name

AUSTELL, CITY OF DOUGLAS COUNTY (UNINCORPORATED AREAS) DOUGLASVILLE, CITY OF

Community Number

130054 130306 130305



Revised: March 4, 2013



Federal Emergency Management Agency

FLOOD INSURANCE STUDY NUMBER 13097CV001B

NOTICE TO FLOOD INSURANCE STUDY USERS

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

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

Initial Countywide FIS Effective Date: August 18, 2009

Revised Countywide FIS Date: March 4, 2013

TABLE OF CONTENTS

VOLUME I

1.0	INTRODUCTION
	1.1 Purpose of Study1
	1.2 Authority and Acknowledgments 1
	1.3 Coordination
2.0	AREA STUDIED
	2.1 Scope of Study
	2.2 Community Description
	2.3 Principal Flood Problems
	2.4 Flood Protection Measures
3.0	ENGINEERING METHODS
	3.1 Hydrologic Analyses
	3.2 Hydraulic Analyses
	3.3 Vertical Datum
4.0	FLOODPLAIN MANAGEMENT APPLICATIONS
	4.1 Floodplain Boundaries
	4.2 Floodways
5.0	INSURANCE APPLICATIONS
6.0	FLOOD INSURANCE RATE MAP
7.0	OTHER STUDIES
8.0	LOCATION OF DATA
9.0	BIBLIOGRAPHY AND REFERENCES

TABLE OF CONTENTS (Continued)

VOLUME I (Continued)

FIGURES

Figure 1 – Floodway Schematic	149)
-------------------------------	-----	---

TABLES

Table 1 – Streams Studied by Detailed Methods	5
Table 2 – Streams Studied by Detailed Methods in August 18, 1992 Initial Countywide Revision.	7
Table 3 – Streams Studied by Limited Detailed Methods in the Initial Countywide Revision	8
Table 4 – Streams Studied by Detailed Methods for this County	10
Table 5 – Summary of Discharges	19
Table 6 – Summary of Stillwater Elevations	39
Table 7 – Manning's "n" Values	42
Table 8 – Vertical Datum Conversion	46
Table 9 – Floodway Data	49
Table 10 – Community Map History 1	51

VOLUME II

EXHIBITS

Exhibit 1 - Flood Profiles

1 10	Jod Fromes		
	Alexander Branch	Panels	01P-04P
	Alexander Branch Tributary A	Panel	05P
	Alexander Branch Tributary B	Panel	06P
	Amber Creek	Panels	07P-10P
	Amber Creek Tributary A	Panels	11P-12P
	Anneewakee Creek	Panels	13P-39P
	Anneewakee Creek Tributary A	Panels	40P-41P
	Anneewakee Creek Tributary B	Panel	42P
	Anneewakee Creek Tributary C	Panel	43P
	Anneewakee Creek Tributary D	Panel	44P
	Anneewakee Creek Tributary E	Panels	45P-46P
	Anneewakee Creek Tributary F	Panels	47P-48P
	Anneewakee Creek Tributary G	Panels	49P-50P
	Anneewakee Creek Tributary H	Panel	51P
	Anneewakee Creek Tributary I	Panel	52P
	Anneewakee Creek Tributary J	Panels	53P-54P
	Anneewakee Creek Tributary K	Panels	55P-56P
	Anneewakee Creek Tributary L	Panel	57P
	Arbor Branch	Panels	58P-62P
	Arbor Branch Tributary A	Panel	63P
	Austin Creek	Panels	64P-67P

VOLUME II (Continued)

EXHIBITS (Continued)

Exhibit 1 - Flood Profiles (Continued)

Baldwin Creek Panels 68P-75P Baldwin Creek Tributary A Panels 76P-77P Bear Creek Panels 78P-94P Bear Creek Tributary A Panel 95P Bear Creek Tributary B Panel 96P Bear Creek Tributary C Panel 97P Bear Creek Tributary D Panel 98P Bear Creek Tributary E Panel 99P

VOLUME III

EXHIBITS (Continued)

Exhibit 1 - Flood Profiles (Continued) Bear Creek Tributary F Panels 100P-101P Bear Creek Tributary G Panels 102P-103P Beaver Creek Panels 104P-106P Beaver Creek Tributary A Panel 107P Bomar Branch Panels 108P-110P Camp Branch Panels 111P-112P Camp Branch Tributary A Panels 113P Chapel Farms Creek Panels 114P-116P Chapel Farms Creek Tributary A Panel 117P Chattahoochee River Panels 118P-121P Coursey Creek Panels 122P-124P Crooked Creek Panels 125P-132P Crooked Creek Tributary A Panels 133P-134P Crooked Creek Tributary B Panel 135P Crooked Creek Tributary C Panel 136P Crooked Creek Tributary D Panels 137P-138P **Crossing Branch** Panels 139P-141P Dog River Panel 142P Dorsett Creek Panels 143P-146P Panels 147P-149P Dry Creek Dry Creek Tributary A Panels 150P-151P Dry Creek Tributary B Panel 152P Dry Creek Tributary C Panel 153P Farm Branch Panels 154P-155P Farm Branch Tributary A Panels 156P-157P

VOLUME III (Continued)

EXHIBITS (Continued)

Exhibit 1	- Flood Profiles ((Continued)

Gordon Creek **Gothards Creek** Gothards Creek Tributary 1 Gothards Creek Tributary 2 Gothards Creek Tributary 2.1 Gothards Creek Tributary 3 Gothards Creek Tributary 3.1 Gothards Creek Tributary 3.2 Gothards Creek Tributary 4 Gothards Creek Tributary 4.1 Gothards Creek Tributary 4.1.1 Gothards Creek Tributary 6 **Gothards Creek Tributary 8** Gothards Creek Tributary 8.1 Gothards Creek Tributary 9 Gothards Creek Tributary 10 Gothards Creek Tributary 11 Gothards Creek Tributary 11.1 Gothards Creek Tributary 11.2 Gothards Creek Tributary 11.3 Gothards Creek Tributary 12 Gothards Creek Tributary 15

Panel 158P Panels 159P-168P Panel 169P Panels 170P-171P Panel 172P Panels 173P-175P Panels 176P-177P Panel 178P Panel 179P Panel 180P Panel 181P Panel 182P Panels 183P-187P Panel 188P Panel 189P Panel 190P Panels 191P-194P Panel 195P Panel 196P Panel 197P Panel 198P Panel 199P

VOLUME IV

EXHIBITS (Continued)

Exhibit 1 - Flood Profiles (Continued)	
Hickory Creek	Panels 200P-203P
Hickory Creek Tributary A	Panel 204P
Hickory Creek Tributary B	Panels 205P-206P
Hickory Creek Tributary C	Panels 207P-208P
Hickory Creek Tributary D	Panel 209P
Hickory Creek Tributary E	Panels 210P-211P
Huey Creek	Panels 212P-215P
Huey Creek Tributary 1	Panels 216P-220P
Huey Creek Tributary 1.1	Panel 221P
Huey Creek Tributary 2	Panel 222P
Huey Creek Tributary 3	Panel 223P
Hurricane Creek	Panels 224P-230P

VOLUME IV (Continued)

EXHIBITS (Continued)

Exhibit 1 - Flood Profiles (Continued) Hurricane Creek Tributary A Hurricane Creek Tributary B Hurricane Creek Tributary C Hurricane Creek Tributary D Hurricane Creek Tributary E Knollwood Branch Knollwood Branch Tributary A Kraft Creek Kraft Creek Tributary A Lion Branch Lion Branch Tributary A Lion Branch Tributary B Little Anneewakee Creek Little Anneewakee Creek Tributary A Little Anneewakee Creek Tributary B Little Anneewakee Creek Tributary C Little Anneewakee Creek Tributary D Little Anneewakee Creek Tributary E Little Bear Creek Little Bear Creek Tributary A Little Bear Creek Tributary B Little Bear Creek Tributary C Little Bear Creek Tributary D Little Bear Creek Tributary E Little Bear Creek Tributary F Little Hurricane Creek

Panels 231P-232P Panel 233P Panel 234P Panels 235P-236P Panels 237P-238P Panels 239P-243P Panel 244P Panel 245P Panel 246P Panels 247P-251P Panel 252P Panel 253P Panels 254P-261P Panels 262P-264P Panel 265P Panel 266P Panels 267P-268P Panel 269P Panels 270P-283P Panels 284P-286P Panel 287P Panels 288P-289P Panels 290P-291P Panels 292P-294P Panel 295P Panels 296P-298P

VOLUME V

EXHIBITS (Continued)

Exhibit 1 - Flood Profiles (Continued)	
Little Hurricane Creek Tributary A	Panels 299P-300P
Margie Branch	Panels 301P-303P
Margie Branch Tributary A	Panel 304P
Mill Creek	Panels 305P-307P
Mill Creek Tributary 1	Panels 308P-309P
Miller Creek	Panel 310P
Miller Creek Tributary A	Panel 311P

VOLUME V (Continued)

EXHIBITS (Continued)

Exhibit 1 - Flood Profiles (Continued) Mobley Creek Mobley Creek Tributary 5 Mobley Creek Tributary 6 Mobley Creek Tributary 7 Mud Creek Palmer Branch Palmer Branch Tributary A Palmer Branch Tributary B Palmer Branch Tributary C Panther Creek Panther Creek Tributary A Park Creek Pine Creek **Pinewood Branch** Pinewood Branch Tributary A Shell Creek **Shoals Branch** Shoals Branch Tributary A Shoals Branch Tributary B Simon Creek Slater Mill Creek Slater Mill Creek Tributary A Slater Mill Creek Tributary B Spivey Branch Spivey Branch Tributary A Spivey Branch Tributary B Sweetwater Creek Sweetwater Creek Tributary A Sweetwater Creek Tributary B Sweetwater Creek Tributary C Sweetwater Creek Tributary D Sweetwater Creek Tributary E Sweetwater Creek Tributary F Sweetwater Creek Tributary G

Panels 312P-314P Panel 315P Panels 316P-317P Panels 318P-320P Panels 321P-322P Panels 323P-325P Panels 326P-327P Panels 328P-329P Panels 330P-331P Panels 332P-335P Panel 336P Panels 337P-338P Panel 339P Panel 340P Panels 341P-342P Panels 343P-345P Panels 346P-350P Panels 351P-352P Panel 353P Panels 354P-357P Panels 358P-361P Panels 362P-365P Panels 366P-367P Panels 368P-369P Panels 370P-371P Panel 372P Panels 373P-383P(a) Panels 384P-385P Panels 386P-387P Panel 388P Panels 389P-392P Panels 393P-395P Panels 396P-397P Panels 398P-400P

VOLUME VI

EXHIBITS (Continued)

Exhibit 1 - Flood Profiles (Continued)

Sweetwater Creek Tributary H Sweetwater Creek Tributary I Sweetwater Creek Tributary J Sweetwater Creek Tributary K Sweetwater Creek Tributary L Sweetwater Creek Tributary L.2 Sweetwater Creek Tributary L.3 Sweetwater Creek Tributary L.3.1 Tanyard Branch Tanyard Branch Tributary A Tiger Creek Tiger Creek Tributary A Town Branch Tributary 1 to Northern Lake Tributary 2 to Northern Lake Tyree Branch Unnamed Tributary to Southern Lake Waterfall Branch Zion Branch

Panels 401P-402P Panel 403P Panels 404P-406P Panel 407P Panels 408P-410P Panels 411P-412P Panels 413P-414P Panel 415P Panels 416P-422P Panels 423P-424P Panels 425P-428P Panel 429P Panel 430P Panel 431P Panel 432P Panels 433P-435P Panel 436P Panel 437P Panels 438P-441P

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

FLOOD INSURANCE STUDY DOUGLAS COUNTY, GEORGIA AND INCORPORATED AREAS

1.0 INTRODUCTION

1.1 Purpose of Study

This Flood Insurance Study (FIS) revises and updates information on the existence and severity of flood hazards in the geographic area of Douglas County, including the Cities of Austell and Douglasville and the unincorporated areas of Douglas County (referred to collectively herein as Douglas County), and aids in the administration of the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973. This study has developed flood-risk data for various areas of the community that will be used to establish actuarial flood insurance rates and to assist the community in its efforts to promote sound floodplain management. Minimum floodplain management requirements for participation in the National Flood Insurance Program (NFIP) are set forth in the Code of Federal Regulations at 44 CFR, 60.3.

Please note that the City of Austell is geographically located in Douglas County and Cobb County. Only the portion of the City of Austell that lie in Douglas County are included in this FIS report. The City of Villa Rica is located geographically in Douglas County and Carroll County. The City of Villa Rica is not included in this FIS report. See the separately printed FIS reports and Flood Insurance Rate Maps (FIRMs) for flood hazard information for this community.

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 Federal Emergency Management Agency (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 Acknowledgments

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

Precountywide Analyses

(Unincorporated Areas):

Douglas County

Information on the authority and acknowledgements for each jurisdiction included in this countywide FIS, as compiled from their previously printed FIS reports, is shown below:

The hydrologic and hydraulic analyses for the July 2, 1979, FIS report (FIA, 1979) were performed by Roy F. Weston, Inc., for the Federal Insurance Administration (FIA), under Contract No. H-4048, The work was completed in January 1978.

The hydrologic and hydraulic analyses for the Chattahoochee River between State Highway 92 (River Mile 282) and State Highway 141 (River Mile 331) for the March 15, 1984, FIS report (FEMA, 1984) were performed by the U.S. Army Corps of Engineers (USACE), Mobile District (USACE, 1981), and the U.S. Geological Survey (USGS) in Atlanta.

August 18, 2009 Initial Countywide FIS Report

The hydrologic and hydraulic analyses for the Anneewakee Creek and Bear Creek Basins, and the limited detailed analyses for Beaver Creek, Huey Creek, Huey Creek Tributary A, Margie Branch, Miller Creek, Miller Creek Tributary A, and Pinewood Branch were conducted by Jordan, Jones & Goulding, Inc., in the City of Norcross, Georgia, under contract and consultation with the Douglasville-Douglas County Water & Sewer Authority (WSA) in the City of Douglasville, Georgia (Jordan, Jones & Goulding, Inc., 2007a and 2007b). The work was completed in February 2007.

The limited detailed hydrologic and hydraulic analyses for Keaton Creek Tributary 1 and Keaton Creek Tributary 2 in the initial countywide FIS report (FEMA, 2009) were performed by the Georgia Department of Natural Resources (DNR) under Contract Number EMA-2005-CA-5211 with FEMA. The work was completed in April 2006.

Detailed analyses for Douglas County Watershed Reservoir, Sweetwater Creek, and Town Branch were redelineated based on more accurate topography by the Georgia DNR.

Detailed analyses for Gothards Creek and Sweetwater Creek were taken from the FIS for Paulding County, Georgia and Incorporated Areas (FEMA, 2006). The hydrologic and hydraulic analyses were prepared by Roy F. Weston, Inc., for the FIA, under Contract No. H-3798. The work was completed in April 1977.

All streams that were not redelineated or newly studied were checked against available topography and floodplains were adjusted where necessary by the Georgia DNR.

This Countywide Revision

The hydrologic and hydraulic analyses for this study were performed by Atkins, Dewberry, and Jacobs for FEMA, under Contract No. GA DNR-EPD MAS FY09.09. Project Order No. 100015064 . The work was completed in May 2011.

The hydrologic and hydraulic analyses for the Hurricane Creek and Sweetwater Creek basins were performed by Jacobs. The hydrologic and hydraulic analyses for the Gothards Creek basin and Sweetwater Creek Tributary L were performed by Atkins. Also, the hydrologic analysis for the Chattahoochee River was performed by Dewberry while the hydraulic analysis was performed by Atkins.

Base map information shown on the Flood Insurance Rate Map (FIRM) was provided in digital format by Douglas County GIS Department at a scale of 1":100', from aerial photography dated 2007 or later. The projection used in the preparation of this map is State Plane Georgia West, and the horizontal datum used is North American Datum of 1983 (NAD83), GRS80 Spheroid.

1.3 Coordination

An initial meeting is held with representatives from FEMA, the community, and the study contractor to explain the nature and purpose of a FIS, and to identify the streams to be studied or restudied. A final meeting is held with representatives from FEMA, the community, and the study contractor to review the results of the study.

Precountywide Analyses

The initial and final meeting dates for previous FIS reports for Douglas County and its communities are listed in the table on the following page:

<u>Community</u>	FIS Date	Initial Meeting	Final Meeting
Douglas County (Unincorporated Areas)	July 2, 1979	June 23, 1974	January 4, 1976

August 18, 2009 Initial Countywide FIS Report

For the August 18, 2009 initial countywide FIS report, the initial meeting was held on October 18, 2004, and was attended by representatives of FEMA, the Georgia DNR (GA DNR), Douglas County, and the City of Douglasville.

The results of the study were reviewed at the final meeting held on November 29, 2007, and attended by representatives of the City of Douglasville, Douglas County, GA DNR, and Atkins, all issues raised at the meeting have been addressed.

This Countywide Revision

The initial meeting was held on April 12, 2010, and attended by representatives of FEMA, Douglas County, the City of Douglasville, GA DNR, and Atkins.

The results of the study were reviewed at the final meeting held on November 30, 2011 and attended by representatives of FEMA, The City of Austell, The City of Douglasvile, GA DNR, and Atkins. All issues and/or concerns raised at that meeting have been addressed.

2.0 AREA STUDIED

2.1 Scope of Study

This FIS covers the geographic area of Douglas County, Georgia, including the incorporated communities listed in Section 1.1. The areas studied by detailed methods were selected with priority given to all known flood hazards and areas of projected development or proposed construction.

The following streams were studied by detailed methods in this FIS report:

Table 1 – Streams Studied by Detailed Methods

Alexander Branch Hurricane Creek Tributary A Alexander Branch Tributary A Hurricane Creek Tributary B Alexander Branch Tributary B Hurricane Creek Tributary C Hurricane Creek Tributary D Amber Creek Amber Creek Tributary A Hurricane Creek Tributary E Anneewakee Creek Knollwood Branch Knollwood Branch Tributary A Anneewakee Creek Tributary A Anneewakee Creek Tributary B Kraft Creek Anneewakee Creek Tributary C Kraft Creek Tributary A Anneewakee Creek Tributary D Little Anneewakee Creek Anneewakee Creek Tributary E Little Anneewakee Creek Tributary A Anneewakee Creek Tributary F Little Anneewakee Creek Tributary B Anneewakee Creek Tributary G Little Anneewakee Creek Tributary C Anneewakee Creek Tributary H Little Anneewakee Creek Tributary D Anneewakee Creek Tributary I Little Anneewakee Creek Tributary E Anneewakee Creek Tributary J Little Bear Creek Anneewakee Creek Tributary K Little Bear Creek Tributary A Anneewakee Creek Tributary L Little Bear Creek Tributary B Arbor Branch Little Bear Creek Tributary C Arbor Branch Tributary A Little Bear Creek Tributary D Little Bear Creek Tributary E Austin Creek Little Bear Creek Tributary F Baldwin Creek Little Hurricane Creek Baldwin Creek Tributary A Bear Creek Little Hurrican Creek Tributary A Bear Creek Tributary A Lion Branch Lion Branch Tributary A Bear Creek Tributary B Bear Creek Tributary C Lion Branch Tributary B Bear Creek Tributary D Margie Branch Margie Branch Tributary A Bear Creek Tributary E Bear Creek Tributary F Mill Creek Bear Creek Tributary G Mill Creek Tributary 1 Beaver Creek Miller Creek Beaver Creek Tributary A Miller Creek Tributary A Bomar Branch Mobley Creek Mobley Creek Tributary 5 Camp Branch Camp Branch Tributary A Mobley Creek Tributary 6 Mobley Creek Tributary 7 Chapel Farms Creek Chapel Farms Creek Tributary A Mud Creek Chattahoochee River Palmer Branch Coursey Creek Palmer Branch Tributary A Crooked Creek Palmer Branch Tributary B Palmer Branch Tributary C Crooked Creek Tributary A Crooked Creek Tributary B Panther Creek Crooked Creek Tributary C Panther Creek Tributary A

Crooked Creek Tributary D	Park Creek
Crossing Branch	Pine Creek
Dry Creek	Pinewood Branch
Dry Creek Tributary A	Pinewood Branch Tributary A
Dry Creek Tributary B	Shell Creek
Dry Creek Tributary C	Shoals Branch
Dog River	Shoals Branch Tributary A
Dorsett Creek	Shoals Branch Tributary B
Farm Branch	Simon Creek
Farm Branch Tributary A	Slater Mill Creek
Gordon Creek	Slater Mill Creek Tributary A
Gothards Creek	Slater Mill Creek Tributary B
Gothards Creek Tributary 1	Spivey Branch
Gothards Creek Tributary 2	Spivey Branch Tributary A
Gothards Creek Tributary 2.1	Spivey Branch Tributary B
Gothards Creek Tributary 3	Sweetwater Creek
Gothards Creek Tributary 3.1	Sweetwater Creek Tributary A
Gothards Creek Tributary 3.2	Sweetwater Creek Tributary B
Gothards Creek Tributary 4	Sweetwater Creek Tributary C
Gothards Creek Tributary 4.1	Sweetwater Creek Tributary D
Gothards Creek Tributary 4.1.1	Sweetwater Creek Tributary E
Gothards Creek Tributary 6	Sweetwater Creek Tributary F
Gothards Creek Tributary 8	Sweetwater Creek Tributary G
Gothards Creek Tributary 8.1	Sweetwater Creek Tributary H
Gothards Creek Tributary 9	Sweetwater Creek Tributary I
Gothards Creek Tributary 10	Sweetwater Creek Tributary J
Gothards Creek Tributary 11	Sweetwater Creek Tributary K
Gothards Creek Tributary 11.1	Sweetwater Creek Tributary L
Gothards Creek Tributary 11.2	Sweetwater Creek Tributary L.2
Gothards Creek Tributary 11.3	Sweetwater Creek Tributary L.3
Gothards Creek Tributary 15	Sweetwater Creek Tributary L.3.1
Hickory Creek	Taynyard Branch
Hickory Creek Tributary A	Tanyard Branch Tributary A
Hickory Creek Tributary B	Tiger Creek
Hickory Creek Tributary C	Tiger Creek Tributary A
Hickory Creek Tributary D	Town Branch
Hickory Creek Tributary E	Tributary 1 to Northern Lake
Huey Creek	Tributary 2 to Northern Lake
Huey Creek Tributary 1	Tyree Branch
Huey Creek Tributary 1.1	Unnamed Tributary to Southern Lake
Huey Creek Tributary 2	Waterfall Branch
Huey Creek Tributary 2.1	Zion Branch
Hurricane Creek	

The limits of detailed study are indicated on the Flood Profiles (Exhibit 1) and on the FIRM (Exhibit 2).

August 18, 2009 Initial Countywide FIS Report

The streams studied by detailed methods in the August 18, 2009, initial countywide FIS Report (FEMA, 2009) are presented in Table 2.

<u>Table 2 – Streams Studied by Detailed Methods in the Initial Countywide FIS</u> <u>Report</u>

Alexander Branch	Crooked Creek
Alexander Branch Tributary A	Crooked Creek Tributary A
Alexander Branch Tributary B	Crooked Creek Tributary B
Amber Creek	Crooked Creek Tributary C
Amber Creek Tributary A	Crooked Creek Tributary D
Anneewakee Creek	Crossing Branch
Anneewakee Creek Tributary A	Dorsett Creek
Anneewakee Creek Tributary B	Farm Branch
Anneewakee Creek Tributary C	Farm Branch Tributary A
Anneewakee Creek Tributary D	Gordon Creek
Anneewakee Creek Tributary E	Gothards Creek
Anneewakee Creek Tributary F	Gothards Creek Tributary 2
Anneewakee Creek Tributary G	Gothards Creek Tributary 3
Anneewakee Creek Tributary H	Gothards Creek Tributary 4
Anneewakee Creek Tributary I	Knollwood Branch
Anneewakee Creek Tributary J	Knollwood Branch Tributary A
Anneewakee Creek Tributary K	Little Anneewakee Creek
Anneewakee Creek Tributary L	Little Anneewakee Creek Tributary A
Arbor Branch	Little Anneewakee Creek Tributary B
Arbor Branch Tributary A	Little Anneewakee Creek Tributary C
Austin Creek	Little Anneewakee Creek Tributary D
Baldwin Creek	Little Anneewakee Creek Tributary E
Baldwin Creek Tributary A	Little Bear Creek
Bear Creek	Little Bear Creek Tributary A
Bear Creek Tributary A	Little Bear Creek Tributary B
Bear Creek Tributary B	Little Bear Creek Tributary C
Bear Creek Tributary C	Little Bear Creek Tributary D
Bear Creek Tributary D	Little Bear Creek Tributary E
Bear Creek Tributary E	Little Bear Creek Tributary F
Bear Creek Tributary F	Mobley Creek
Bear Creek Tributary G	Mobley Creek Tributary 5
Bomar Branch	Mobley Creek Tributary 6
Chapel Farms Creek	Mobley Creek Tributary 7
Chapel Farms Creek Tributary A	Mud Creek
Chattahoochee River	Panther Creek
Coursey Creek	Panther Creek Tributary A

Pine Creek Simon Creek Slater Mill Creek Slater Mill Creek Tributary A Slater Mill Creek Tributary B Sweetwater Creek Sweetwater Creek Tributary 1 Tanyard Branch Tanyard Branch Tributary A Tiger Creek Tiger Creek Tributary A Town Branch Waterfall Branch

The August 18, 2009, initial countywide study covers the extents of the Anneewakee Creek and Bear Creek Watersheds. The Anneewakee Creek Basin was divided into fifteen watersheds: Amber Creek, Anneewakee Creek, Arbor Branch, Austin Creek, Bomar Branch, Chapel Farms Creek, Crooked Creek, Crossing Branch, Farm Branch, Knollwood Branch, Little Anneewakee Creek, Panther Creek, Simon Creek, Slater Mill Creek and Tiger Creek. The Bear Creek Basin was divided into seven hydraulic models: Alexander Branch, Baldwin Creek, Bear Creek, Coursey Creek, Dorsett Creek, Little Bear Creek, and Tanyard Branch. Each model consisted of a main channel and, if applicable, any significant tributaries with at least 100 acres of drainage area.

Three significant tributaries in the Bear Creek Basin (Alexander Branch, Coursey Creek, and Dorsett Creek) were unnamed streams and eleven significant tributaries (all except for Crooked Creek, Little Anneewakee Creek, and Slater Mill Creek) in the Anneewakee Creek Basin were also unnamed streams. For organization, simplification and convenience purposes, these tributaries were assigned names in consultation with WSA in accordance with guidelines set forth in "Principles, Policies, and Procedures: Domestic Geographic Names" (USGS, 2003).

The streams and reaches studied by limited detailed methods in the initial countywide FIS Report are presented in Table 3.

Table 3 – Streams Studied by	/ Limited Detailed Methods in the Initial Countywide
	FIS Report

Beaver Creek	From approximately 390 feet upstream of Groover Lake Road to approximately 520 feet upstream of Patty Court
Huey Creek	From approximately 425 feet upstream of Maroney Mill Road to approximately 880 feet upstream of Brown Road

Table 3 – Streams Studied by I	imited Detailed Methods in the Initial Countywide FIS Report
Huey Creek Tributary A	From the confluence with Huey Creek to approximately 340 feet upstream of Pirkle Road
Keaton Creek Tributary 1	From the confluence with Keaton Creek to the City of Villa Rica corporate limits (approximately 4,160 feet upstream of West Tyson Road
Keaton Creek Tributary 2	From the confluence with Keaton Creek Tributary 1 to the county boundary
Margie Branch	From the confluence with Beaver Creek to approximately 2,550 feet upstream of Margie Lane
Miller Creek	From the confluence with Beaver Creek to approximately 610 feet upstream of Miller Street
Miller Creek Tributary A	From the confluence with Miller Creek to approximately 1,445 feet upstream of the confluence with Miller Creek
Pinewood Branch	From the confluence with Sweetwater Creek Tributary 1 to approximately 1,510 feet upstream of Lakeside Drive

For the initial countywide FIS, the FIS report and FIRM were converted to countywide format, and the flooding information for the entire county, including both incorporated and unincorporated areas, is shown. Also, the vertical datum was converted from the National Geodetic Vertical Datum of 1929 (NGVD) to the North American Vertical Datum of 1988 (NAVD). In addition, the Transverse Mercator, State Plane coordinates, previously referenced to the North American Datum of 1927 (NAD27), are now referenced to the North American Datum of 1983 (NAD83).

This Countywide FIS Report

The following streams presented in Table 4 were studied by detailed methods for this countywide FIS report.

Table 4 – Streams Studied by	Detailed Methods for this	Countywide FIS Report
		•

Beaver Creek	ŀ
Beaver Creek Tributary A	ŀ
Camp Branch	ł
Camp Branch Tributary A	ŀ
Chattahoochee River	ŀ
Dry Creek	ŀ
Gordon Creek	ŀ
Gothards Creek	ŀ
Gothards Creek Tributary 1	Ι
Gothards Creek Tributary 2	Ι
Gothards Creek Tributary 2.1	Ι
Gothards Creek Tributary 3	Ι
Gothards Creek Tributary 3.1	Ι
Gothards Creek Tributary 3.2	N
Gothards Creek Tributary 4	N
Gothards Creek Tributary 4.1	N
Gothards Creek Tributary 4.1.1	N
Gothards Creek Tributary 6	N
Gothards Creek Tributary 8	F
Gothards Creek Tributary 8.1	F
Gothards Creek Tributary 9	F
Gothards Creek Tributary 10	F
Gothards Creek Tributary 11	F
Gothards Creek Tributary 11.1	F
Gothards Creek Tributary 11.2	F
Gothards Creek Tributary 11.3	F
Gothards Creek Tributary 12	S
Gothards Creek Tributary 15	S
Hickory Creek	S
Hickory Creek Tributary A	S
Hickory Creek Tributary B	S
Hickory Creek Tributary C	S
Hickory Creek Tributary D	S
Hickory Creek Tributary E	S
Huey Creek	S
Huey Creek Tributary 1	S
Huey Creek Tributary 1.1	S
Huey Creek Tributary 2	S

Huey Creek Tributary 3 Hurricane Creek Hurricane Creek Tributary A Hurricane Creek Tributary B Hurricane Creek Tributary C Hurricane Creek Tributary D Hurricane Creek Tributary E Kraft Creek Lion Branch Lion Branch Tributary A Lion Branch Tributary B Little Hurricane Creek Little Hurricane Creek Tributary A Margie Branch Mill Creek Mill Creek Tributary 1 Miller Creek Miller Creek Tributary A Palmer Branch Palmer Branch Tributary A Palmer Branch Tributary B Palmer Branch Tributary C Park Creek Pine Creek Pinewood Branch Pinewood Branch Tributary A Shell Creek Shoals Branch Shoals Branch Tributary A Shoals Branch Tributary B Spivey Branch Spivey Branch Tributary A Spivey Branch Tributary B Sweetwater Creek Sweetwater Creek Tributary A Sweetwater Creek Tributary B Sweetwater Creek Tributary C Sweetwater Creek Tributary D

Sweetwater Creek Tributary E	Sweetwater Creek Tributary L.1
Sweetwater Creek Tributary F	Sweetwater Creek Tributary L.3
Sweetwater Creek Tributary G	Sweetwater Creek Tributary L.3.1
Sweetwater Creek Tributary H	Sweetwater Creek Tributary J
Sweetwater Creek Tributary I	Tyree Branch
Sweetwater Creek Tributary J	Unnamed Tributary to Southern Lake
Sweetwater Creek Tributary K	Zion Branch
Sweetwater Creek Tributary L	

Approximate analyses were used to study those areas having low development potential or minimal flood hazards. The scope and methods of study were proposed to and agreed upon by FEMA and Douglas County.

The following tabulation presents Letters of Map Change (LOMCs) incorporated into this countywide study:

LOMC	Case Number	Date Issued	Project Identifier
LOMR* LOMR*	09-04-6891P 10-04-4871P	6/14/2010 05/02/2011	Unnamed Tributaries, Douglas Co. Dog River Dam Renovation
*Letter of Ma	o Revision (LOMR)		

The following tabulation lists streams that have names in this countywide FIS other than those used in the previously printed initial countywide FIS reports for the communities in which they are located.

<u>Community</u>	Old Name	New Name
Douglas County (Unincorporated Areas)	Sweetwater Creek Tributary 1	Park Creek
Douglasville, City of Douglas County (Unincorporated Areas)	Gothards Creek Tributary 2	Mill Creek
Douglas County (Unincorporated Areas)	Gothards Creek Tributary 3	Gothards Creek Tributary 8
Douglas County (Unincorporated Areas)	Gothards Creek Tributary 4	Gothards Creek Tributary 11

2.2 Community Description

Douglas County was formed from portions of Cobb and Campbell Counties on October 17, 1870. It is named after the famous Illinois senator, Stephen A. Douglas. The county, encompassing 201 square miles, is located in northwest Georgia, approximately 15 miles west of the City of Atlanta. The incorporated communities within county boundaries are the Cities of Austell, Douglasville, and Villa Rica, which is not included in this study. The City of Douglasville is the county seat. Douglas County is bordered by Paulding County to the northwest, Cobb County to the northeast, Fulton County to the southeast, and Carroll County to the west and southwest.

The topography of the county is typified by rolling hills and thickly wooded forests. Elevation varies from 700 to 1,250 feet NAVD. Of the more than 25 soil types in the county, three pose severe limitations to development: floodplain soils, soils with excessive slope, and rock soils. Above 38 percent of the county is composed of these soil types.

The entire county is located within the Chattahoochee River drainage basin. Mud Creek and Gothards Creek drain the northwestern portion of Douglas County. The Dog River-Mobley Creek watershed lies in the western portion of the county. The Anneewakee watershed drains the central portions of the county, and Sweetwater Creek drains eastern part of Douglas County.

The climate is characteristic of the southeastern United States, with mild winters and warm summers. Average winter temperatures are usually around freezing; only rarely dipping below zero. Summertime temperatures range from lows in the mid-60's degrees Fahrenheit (°F) to greater than 90° F. The growing season is long spanning from late March to early November. Rainfall averages 50 inches per year.

The population of Douglas County nearly doubled between 1960 and 1970 to a 1970 population of 28,659. By 1975, the population had increased by another 78 percent over 1970 totals, to 50,920. The county had an estimated population of 129,703 in 2009 according to the U.S. Census Bureau (U.S. Census Bureau, 2011). Much of this growth derives from the proximity of Douglas County to the Atlanta Metropolitan Area. This is further substantiated by the fact that, as of 1975, approximately 80 percent of the workers who live in Douglas County earn their living outside of the county.

The major employment areas within the county are manufacturing and clerical work. Although it has in the past, agriculture no longer plays a significant economic role.

Interstate Highway 20 provides Douglas County with a major transportation link with the City of Atlanta on the east and the State of Alabama approximately 40 miles to the west. State Highway 5 connects Douglas County with Carroll County to the south. Other major highways are State Highways 92 and 166 and U.S. Highway 78. The Norfolk Southern Railway provides east-west rail transportation between the City of Villa Rica, the City of Douglasville, and points outside the county.

2.3 Principal Flood Problems

Major floods have affected Douglas County in July 1916, November 1948, February 1961, February 1982, July 2005, and September 2009.

The July 1916 flood was generated by a tropical storm. This storm caused discharges of 12,600 cubic feet per second (cfs) on Sweetwater Creek, in the vicinity of the City of Austell, (USGS Gage No. 02337000) (USGS, 2007).

In November 1948, a well-developed, low-pressure center produced a maximum recorded rainfall of 8.25 inches at the City of Douglasville. A maximum 24-hour total of 3.75 inches fell on November 29th.

The February 1961 flood resulted from a tropical air mass across the Gulf of Mexico and the southeastern states combined with a long wave trough in the western states. The City of Douglasville recorded a total of 12.38 inches, with 5.19 inches reported on February 25th. This storm caused discharges of 10,100 cfs on Sweetwater Creek near the City of Austell (USGS Gage No. 02337000) (USGS, 2007).

The February 1982 and July 2005 floods had discharges of 10,700 cfs and 13,400 cfs, respectively, on Sweetwater Creek near the City of Austell (USGS Gage No. 02337000) (USGS, 2007).

The September 2009 flood had a maximum discharge record of 31,490 cfs and 30.82 feet from floodmarks on Sweetwater Creek near the City of Austell. (USGS Gage No. 02337000) (USGS, 2011).

2.4 Flood Protection Measures

The floodplains for the majority of the streams studied by detailed methods in the unincorporated areas of Douglas County are relatively undeveloped, with thick wooded areas lining the stream banks. Obstructions to flood flows include those which are natural (rock outcrops, brush-filled channels, trees and vegetation along banks) and those which are man-made (bridges and associated approach fills). A floodplain zoning ordinance has been enacted by Douglas County for the control of development in flood hazard areas.

Within the City of Douglasville, localized flooding occurs in low-lying areas mainly as a result of heavy rains and sediments entering stream channels.

The USACE, Mobile District, constructed the Buford Dam on the Chattahoochee River for flood control and power generation. This dam provides some flood protection to the area of Douglas County.

3.0 ENGINEERING METHODS

For the flooding sources studied by detailed methods 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 that are expected to be equaled or exceeded once on the average during any 10-, 50-, 100-, or 500-year period (recurrence interval) have been selected as having special significance for floodplain management and for flood insurance rates. These events, commonly termed the 10-, 50-, 100-, 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 1 year are considered. For example, the risk of having a flood that equals or exceeds the 1-percent-annual-chance (100-year) flood in any 50-year period is approximately 40 percent (4 in 10); for any 90-year period, the risk increases to approximately 60 percent (6 in 10). The analyses reported herein reflect flooding potentials based on conditions existing in the community at the time of completion of this study. Maps and flood elevations will be amended periodically to reflect future changes.

3.1 Hydrologic Analyses

August 18, 2009 Initial Countywide FIS Report

The flood flow-frequency data adopted for the Chattahoochee River and Sweetwater Creek were based on analyses performed by the USACE, Mobile District. The Mobile District prepared flood predictions for the Sweetwater Creek Basin and the Chattahoochee River using a log-Pearson Type III analysis as outlined in the Water Resources Council (WRC) Bulletin No. 15 (WRC, 1967), the Sauer-Golden Method (USGS, 1977), and a drainage area-river miledischarge correlation technique.

The Chattahoochee River reach between Fairburn Road/State Highway 92 and the upstream county boundary was updated with more current gage records from the Vinings gage since the Buford Dam began operation. Three separate hydrologic analyses were performed for the area.

The first approach consisted of a log-Pearson Type III distribution using a regional skew of zero which fit the plotted data and was adopted for this study. The March 1977 flood, which had the highest observed discharge (28,900 cfs) since the Buford Dam began operation, would be approximately a 5.56-percent-annual-chance flood on the curve. In conjunction with the gage analyses, the contribution of tributary flow to flood peaks in the river was estimated. The March 1977 and the April 1979 floods were selected for analysis because they were pertinent to the restudy and the flood hydrographs were readily available at several locations.

The flood hydrograph for Peachtree Creek at the Northside Drive gage was routed to the river and increased by the drainage area ratio to estimate the Peachtree Creek flow at its mouth. This hydrograph was then added to the City of Vinings gage hydrograph which was lagged to allow for the distance between the 2 points. This resulted in the estimated total flow in the river at the junction of Peachtree Creek with the Chattahoochee River.

A similar procedure was followed at Sweetwater Creek. Sweetwater Creek hydrograph characteristically peaks later than the river. The Sweetwater Creek hydrographs are flatter than those of Peachtree Creek, which causes their effect on the river to be more consistent and less drastic.

Effects of tributaries where no observed data were available were estimated by applying the drainage area ratios to the main stream flow.

The estimated flow distributions on the Chattahoochee River for the March 1977 and April 1979 floods were plotted as discharge versus river mile. The dischargefrequency relationship for the 10-, 2-, 1-, and 0.2-percent-annual-chance floods was left unchanged at Fairburn Road/State Highway 92 and then transitioned within the reach to incorporate the revised frequency curve at the City of Vinings The discharge-frequency relationship for points between the gaging gage. stations was estimated by prorating the difference in adjacent discharge-frequency curves by the drainage area ratio. One exception to this was the discharge estimated at Marietta Boulevard (downstream of the City of Vinings gage) which includes the flow from Peachtree Creek. Discharges at Marietta Boulevard were obtained using runoff rates computed from the local contribution between the City of Norcross and the City of Vinings gages which were higher than those obtained from the local contribution between the Cities of Vinings and Fairburn. This was done to account for the high degree of urbanization in the Peachtree Creek watershed. Because of the higher flows per unit area adopted at this point, a slight attenuation was required to tie in downstream (USACE, 1981).

The two alternative hydrologic analyses that were used for comparison purposes included a discharge-frequency analysis for the 410 square mile uncontrolled area above the City of Vinings gage using equations from a USGS report (USGS, 1977) with allowances for Buford Dam power releases, and a comparison of pre-to post-Buford Dam discharges. The comparison computed a frequency curve for natural conditions using only the data observed before operations began at the Buford Dam.

The flood-flow frequency relationships for Gordon Creek, Gothards Creek, Mill Creek, Gothards Creek Tributary 8, Gothards Creek Tributary 11, Mobley Creek, Mobley Creek Tributary 5, Mobley Creek Tributary 6, Mobley Creek Tributary 7, Mud Creek, Pine Creek, Park Creek, Town Branch, and Waterfall Branch were developed using the Sauer-Golden Method (USGS, 1977). This technique incorporates an urbanization factor into the Golden-Price method (Golden and Price, 1976), which was developed to predict floods in rural watersheds of Georgia. The Sauer method considers urbanization effects, resulting in consistently conservative flood predictions.

For the portion of Sweetwater Creek that was incorporated from the September 29, 2006, FIS (FEMA, 2006) for Paulding County, peak discharges were developed from data supplied by a recording gage located 3 miles southeast of the City of Austell, in Cobb County. This gage has been in operation since 1904, with continuous records since 1937. The stage-discharge relationship is defined by current-meter measurements below 6,500 cfs, and extended above on the basis of contracted-opening measurement at 10,000 cfs.

On streams where gage data are available, such as Sweetwater Creek, peak discharges were developed using an empirical formula that determines peak flows at locations on the stream other than the gage station sites. The formula is a ration between peak discharge and drainage area and is written as:

 $Q_1/Q_2 = (A_1/A_2)^m$

Where Q₁=Discharge at point of interest

Q₂=Discharge at gage site A₁=Drainage area above point of interest A₂=Drainage area above gage site m=A factor normally ranging from 0.5 to 1.0 Note: for Sweetwater Creek, m=0.5

For the portion of Gothards Creek that was incorporated from the FIS for Paulding County, equations for calculating the magnitude and frequency of peak-flood discharges on small streams (rural basins draining from 0.1 to 20 square miles) were used (USGS, 1973b).

Comprehensive hydrologic models were created for the Anneewakee Creek and Bear Creek Basins and the limited detailed analyses for Beaver Creek, Huey Creek, Huey Creek Tributary A, Margie Branch, Miller Creek, Miller Creek Tributary A, and Pinewood Branch using the USACE, Hydrologic Engineering Center (HEC) computer program, HEC-HMS, version 2.0 (HEC, 2000) to compute runoff hydrographs and associated peak discharges at relevant locations in the study area. The hydrologic models used the Soil Conservation Service (SCS) methodology (SCS, 1986) to define the peak runoff rates for the basins.

This Countywide FIS Report

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

The discharge-frequency relationship for the Chattahoochee River was based on an analytical curve (log-Pearson Type III distribution) using the records at the USGS gages since Buford Dam began operation, and a regional skew of zero that fitted the plotted data and was adopted for this study (USGS, 1999). Frequency discharges for points between the gage stations were estimated by prorating the difference in adjacent frequency curves by the drainage area ratio.

The discharge-frequency relationship for Sweetwater Creek was based on a series of analyses starting with USGS stream flow gage at the City of Austell. Because several additional gage results were available along Sweetwater Creek during the 1982 flood, the recurrence interval of 25-years was approximated for this storm using a statistical analysis of the City of Austell gage based on procedures outlined in WRC Bulletin 17B (WRC, 1982). Area-weighted flows were determined at each of the remaining gages assuming the 1982 flood was the 25-year storm. This data was used to estimate a correction factor and overall multiplier for each gage, and this multiplier was used to determine peak flows for all storms at each gage.

For Gothards Creek, Park Creek, Hurricane Creek, and Sweetwater Creek basins the USACE, HEC computer program, HEC-HMS, version 3.4 was used to compute peak discharges (HEC, 2009).

The 24-hour rainfall depths for the 1-percent-annual-chance frequency storms were obtained from the Georgia Stormwater Management Manual (Atlanta Regional Commission, 2001). A rainfall amount of 7.92 inches, for the 1-percent-annual-chance storm, was applied uniformly over the entire Anneewakee Creek and Bear Creek Basins. Rainfall was converted to runoff utilizing the Curve Number methodology (SCS, 1986) for Anneewakee Creek, Bear Creek, Hurricane Creek, Sweetwater Creek, Park Creek, and Gothards Creek basins. The curve numbers for the Anneewakee Creek subcatchments varied from 61-92 with an

average of 72.4. The curve numbers for the Bear Creek subcatchments varied from 61-91 with an average of 70.5.

Subcatchments for each major basin were delineated using Digital Elevation Models (DEMs) created from Light Detection and Ranging (LiDAR) data (Photo Science Geospatial Solutions, 2004) available from Douglas County. The time of concentration was determined for each subcatchment using SCS methods (SCS, 1986). Channel routing simulated the in-stream storage and effects on travel time that lead to subcatchment hydrograph attenuation, and was performed using the Muskingum-Cunge routing technique for the Anneewakee Creek, Bear Creek, Hurricane Creek, and Sweetwater Creek basins. For Gothards Creek and Park Creek basins, the Modified Puls Method was used for reach routing.

There were a total of 116 lakes located within the Anneewakee Creek Basin study area. Thirty-one of these lakes, determined to have a significant effect on stream discharges, were included in the hydrologic model.

There were a total of 170 lakes located within the Bear Creek Basin study area. Of these, 44 lakes were included in the hydrologic model.

For Keaton Creek Tributaries 1 and 2, which were studied by limited detailed methods, the peak discharge for the 1-percent-annual-chance flood was estimated using the regression equations published by the USGS (USGS, 1999).

Discharges for all approximate studies within the Sweetwater Creek, Hurricane Creek, and Chattahoochee tributaries were developed using a combination of the rural USGS regression equations (USGS, 2009), urban USGS regression equations (Inman, 1995), or USGS gage data. Both rural and urban regression flows were run for all flow change location points and the higher discharge of the two was used, as was recommended in Inman. If sufficient gage data was available it was used instead of the regression equations. Drainage areas were developed from 20-foot DEMs developed from the best available topographic data.

Peak discharge-drainage area relationships for the 10-, 2-, 1-, and 0.2-percentannual-chance floods of each flooding source studied in detail in the county are presented in Table 5.

Table 5 - Summary of Discharges

		Peak Discharges (cfs)			
Flooding Source and Location	Drainage Area (square miles)	10-Percent- <u>Annual-Chance</u>	2-Percent- Annual-Chance	1-Percent- <u>Annual-</u> <u>Chance</u>	0.2-Percent- Annual-Chance
At the confluence with Bear Creek	1.43	1,070	1,519	1,714	2,232
Just downstream of the confluence of Alexander	1.36	1,043	1,479	1,668	2,155
Just downstream of the confluence of Alexander	0.80	459	680	780	1,032
Approximately 3,640 feet upstream of confluence of Alexander Branch Tributary B	0.15	221	321	365	475
Alexander Branch Tributary A At the confluence with Alexander Branch	0.36	406	606	695	917
Just upstream of Cougar Trail	0.34	401	598	685	904
Alexander Branch Tributary B At the confluence with Alexander Branch	0.45	160	220	246	311
Just downstream of Lake Sarah Glenn	0.40	51	72	81	153
Amber Creek		0.00	1.665	1.050	2 (15
At the confluence with Anneewakee Creek	1.11	966	1,665	1,950	2,645
Just downstream of the confluence of Amber Creek Tributary A	0.81	774	1,259	1,465	1,980
Just upstream of the confluence of Amber Creek Tributary A	0.38	435	651	746	984
Amber Creek Tributary A At the confluence with Amber Creek	0.31	400	597	685	912
Anneewakee Creek At the confluence with the Chattaboochee River	29.89	6,024	9,286	10,744	14,493
Just downstream of the confluence of Anneewakee	29.36	6,499	9,924	11,496	15,560
Just downstream of the confluence of Chapel Farms	28.47	6,421	9,818	11,379	15,409
Just downstream of the confluence of Anneewakee Creek Tributary C	25.82	6,366	9,696	11,232	15,213
Just upstream of the confluence of Amber Creek	25.19	6,364	9,682	11,214	15,204
Just downstream of the confluence of Annewakee Creek Tributary D	23.78	6,232	9,479	10,970	14,821

		Peak Discharges (cfs)			
Flooding Source and Location	Drainage Area (square miles)	10-Percent- Annual-Chance	2-Percent- Annual-Chance	1-Percent- <u>Annual-</u> <u>Chance</u>	0.2-Percent- Annual-Chance
Approximately 680 feet	23.06	6,200	9.431	10,913	14,780
upstream of Anneewakee Road		,	,	,	,
Just upstream of the confluence	22.82	6,172	9,381	10,849	14,622
Just downstream of the	19.01	5,122	7,692	8,840	11,688
confluence of Simon Creek	18.02	5.038	7 548	8 669	11 /21
confluence of Anneewakee Creek Tributary F	18.02	5,058	7,540	8,007	11,421
Just downstream of the	17.61	4,992	7,474	8,584	11,307
Just downstream of the	16.70	5,359	8,112	9,326	12,291
confluence of Farm Branch		,	,	,	*
Just downstream of the confluence of Anneewakee	16.40	5,775	8,739	10,011	13,136
Ust downstream of the	16.03	5 868	8 861	10 146	13 307
confluence of Anneewakee Creek Tributary H	10.05	5,606	0,001	10,140	15,507
Just downstream of the	15.69	6,323	9,552	10,930	14,348
confluence of Anneewakee					
Creek Tributary I	0.04	<	10.007		
Just downstream of the confluence of Little	8.94	6,837	10,286	11,756	15,413
Just downstream of the	7.21	3,706	5,360	6,076	7,852
confluence of Crossing Branch Just downstream of the	6.08	3,921	5,489	6,162	7,827
confluence of Austin Creek	5 / 6		1.044	- 4 - 0	< - 0 0
Just downstream of the confluence of Anneewakee	5.42	3,526	4,866	5,428	6,790
Creek Tributary J					
Just downstream of the	4.27	3,697	5,053	5,620	6,972
confluence of Knollwood					
Branch	2.26	2,519	2 221	2 (22	4 200
Just downstream of the	2.26	2,518	3,321	3,623	4,300
Just downstream of the	1.64	1,548	2,123	2,365	2,879
confluence of Tiger Creek	1.60	-	1.025	1 000	1 (5)
Just upstream of the confluence of Tiger Creek	1.63	708	1,035	1,209	1,676
Just downstream of the	1.29	956	1,399	1,639	2,242
Creek Tributary K					
lust downstream of the	0.75	626	1 018	1 260	1 821
confluence of Anneewakee Creek Tributary L	0.70	020	1,010	1,200	1,021
Just upstream of the confluence	0.38	291	556	725	1,128
Tributary L					
Anneewakee Creek Tributary A					
At the confluence with Anneewakee Creek	0.33	185	285	398	783
Approximately 1,000 feet	0.25	69	256	357	708
upstream of the confluence with Anneewakee Creek					

			Peak Disc	harges (cfs)	
Flooding Source and Location	Drainage Area (square miles)	10-Percent- Annual-Chance	2-Percent- Annual-Chance	1-Percent- <u>Annual-</u> <u>Chance</u>	0.2-Percent- Annual-Chance
Anneewakee Creek Tributary B At the confluence with Anneewakee Creek	0.23	307	455	522	692
Anneewakee Creek Tributary C At the confluence with Anneewakee Creek	0.19	378	546	620	807
Anneewakee Creek Tributary D At the confluence with Anneewakee Creek	0.27	317	467	536	707
Anneewakee Creek Tributary E At the confluence with Anneewakee Creek	0.24	208	306	349	459
Anneewakee Creek Tributary F At the confluence with Anneewakee Creek	0.36	311	462	529	703
Anneewakee Creek Tributary G At the confluence with	0.30	222	370	487	777
Approximately 2,350 feet upstream of Warren Road	0.29	117	221	303	473
Anneewakee Creek Tributary H At the confluence with Anneewakee Creek	0.25	289	422	480	628
Anneewakee Creek Tributary I At the confluence with Anneewakee Creek	0.26	466	674	765	995
Anneewakee Creek Tributary J At the confluence with Anneewakee Creek	0.23	352	502	567	731
Anneewakee Creek Tributary K At the confluence with Anneewakee Creek	0.95	132	198	226	292
Anneewakee Creek Tributary L At the confluence with	0.32	255	368	418	544
At the confluence with	1.69	1,170	1,450	1,565	1,794
Anneewakee Creek Approximately 500 feet downstream of State Highway	0.99	1,717	2,304	2,546	3,154
Just downstream of the confluence of Arbor Branch Tributary A	0.52	903	1,156	1,268	1,547
Arbor Branch Tributary A At the confluence with Arbor Branch	0.40	285	335	357	410

		Peak Discharges (cfs)			
Flooding Source and Location	Drainage Area (square miles)	10-Percent- Annual-Chance	2-Percent- Annual-Chance	1-Percent- <u>Annual-</u> Chance	0.2-Percent- Annual-Chance
At the confluence with Anneewakee Creek	1.00	374	600	707	985
Just upstream of Yancey Road	0.43	356	521	595	790
Baldwin Creek					
At the confluence with Little Bear Creek	2.41	1,731	2,585	2,976	4,004
At Bear Creek Golf Course	2.20	1,761	2,647	3,055	4,097
Just downstream of the confluence of Baldwin Creek Tributary A	1.13	1,345	1,985	2,265	2,959
Just upstream of North Bear Drive	0.27	354	507	574	743
Baldwin Creek Tributary A					
At the confluence with Baldwin Creek	0.35	394	585	678	885
Just upstream of Dorsett Shoals Road	0.12	230	334	380	496
Bear Creek					
At the confluence with	17.55	4,180	6,484	7,574	10,479
Just downstream of the confluence of Bear Creek	17.39	4,269	6,685	7,832	10,913
Just downstream of the confluence of Bear Creek Tributary	17.13	4,259	6,669	7,814	10,893
Just downstream of Bear Creek	16.79	4,281	6,713	7,877	11,012
Just downstream of the confluence of Little Bear Creek	15.70	4,385	6,886	8,094	11,374
Just downstream of the confluence of Bear Creek Tributary D	5.90	2,310	3,441	3,987	5,541
Just downstream of the confluence of Bear Creek Tributary F	5.97	2,168	3,250	3,810	5,317
Just downstream of the confluence of Bear Creek Tributary G	4.81	1,985	3,163	3,706	5,154
Just downstream of Kings Highway	4.29	1,899	3,030	3,544	4,901
Just downstream of the	4.01	1,969	3,162	3,700	5,116
Just downstream of the confluence of Alexander Branch	3.13	1,720	2,809	3,287	4,452
Just upstream of South Skyline	0.58	691	1,076	1,251	1,693
Just downstream of Hillpine Drive	0.33	492	724	827	1,089

			Peak Disc	harges (cfs)	
Flooding Source and Location	Drainage Area (square miles)	10-Percent- Annual-Chance	2-Percent- Annual-Chance	1-Percent- <u>Annual-</u> <u>Chance</u>	0.2-Percent- Annual-Chance
At the confluence with Bear	0.25	315	465	538	752
Approximately 1,180 feet upstream of the confluence with Bear Creek	0.16	233	346	398	529
Bear Creek Tributary B At the confluence with Bear Creek	0.10	179	261	297	388
Bear Creek Tributary C At the confluence with Bear	0.35	308	453	517	684
Just downstream of Fouts Mill Road	0.28	415	613	702	929
Bear Creek Tributary D At the confluence with Bear	0.20	355	527	602	792
At Double Birch Road	0.14	252	368	420	551
Bear Creek Tributary E At the confluence with Bear	0.22	103	172	272	530
Approximately 1,160 feet upstream of the confluence with Bear Creek	0.17	30	152	242	466
Bear Creek Tributary F At the confluence with Bear	0.35	518	760	868	1,152
Just downstream of Yorktown Road	0.26	421	617	704	924
Bear Creek Tributary G At the confluence with Bear Creek	0.18	217	319	365	481
Beaver Creek	12.60	2 260	2 202	2 572	5 105
Sweetwater Creek	10.20	2,200	2,057	2 768	5 200
downstream of Lee Road Approximately 150 feet	2.43	1,416	2,275	2,685	3,892
downstream of the confluence of Miller Creek					
Approximately 260 feet downstream of the confluence of Margie Branch	0.69	907	1,466	1,764	2,610
Beaver Creek Tributary A At the confluence with Beaver Creek	0.24	112	231	276	373
Bomar Branch At the confluence with Anneewakee Creek	0.35	418	609	694	909

		harges (cfs)			
Flooding Source and Location	Drainage Area (square miles)	10-Percent- Annual-Chance	2-Percent- Annual-Chance	1-Percent- <u>Annual-</u> <u>Chance</u>	0.2-Percent- Annual-Chance
At the confluence with	0.78	652	1,117	1,353	1,939
Approximately 5,530 feet upstream of the confluence	0.37	500	816	958	1,318
With Hurricane Creek Approximately 1,100 feet upstream of the confluence of Camp Branch Tributary A	0.20	269	435	509	697
Camp Branch Tributary A At the confluence with Camp Branch	0.08	114	189	222	308
Chapel Farms Creek At the confluence with	2.33	2,058	3,225	3,745	5,082
Anneewakee Creek At the confluence of Panther Creek	1.13	871	1,437	1,692	2,347
At Bald Eagle Way Just downstream of the confluence of Chapel Farms Creek Tributary A	0.76 0.25	678 264	1,097 386	1,276 440	1,721 578
Chapel Farms Creek Tributary A At the confluence with Chapel Farms Creek	0.23	239	377	438	595
Chattahoochee River Just downstream of the confluence of Sweetwater	2,243	40,420	53,817	59,595	73,537
Just downstream of the confluence of Anneewakee	2,093	38,145	50,688	56,087	69,086
Just downstream of the confluence of the Dog River	1,968	35,369	46,873	51,809	63,657
Coursey Creek At the confluence with Little	0.71	172	444	587	919
Bear Creek Just above Dorsett Shoals Road	0.44	256	417	491	722
Crooked Creek					
At the confluence with Anneewakee Creek	3.54	1,760	2,800	3,296	4,560
Just downstream of Pope Road Just downstream of the confluence of Crooked Creek Tributary A	3.20 2.21	1,776 1,790	2,848 2,983	3,359 3,542	4,662 4,994
Just downstream of the confluence of Crooked Creek Tributary B	1.99	1,305	2,196	2,641	3,734
Just downstream of the confluence of Crooked Creek Tributary C	1.80	1,186	1,992	2,392	3,320
Just downstream of the confluence of Crooked Creek Tributary D	1.19	1,161	1,900	2,187	2,902

		Peak Discharges (cfs)				
Flooding Source and Location	Drainage Area (square miles)	10-Percent- Annual-Chance	2-Percent- Annual-Chance	1-Percent- <u>Annual-</u> <u>Chance</u>	0.2-Percent- Annual-Chance	
Just upstream of Bomar Road Approximately 4,070 feet upstream of Bomar Road	0.66 0.11	898 685	1,283 979	1,452 1,107	1,881 1,429	
Crooked Creek Tributary A At the confluence with Crooked	0.64	378	800	1,001	1,501	
Just upstream of Legion Lake	0.30	475	691	786	1,027	
Crooked Creek Tributary B At the confluence with Crooked Creek	0.33	363	530	604	792	
Crooked Creek Tributary C At the confluence with Crooked Creek	0.28	370	538	613	802	
Crooked Creek Tributary D At the confluence with Crooked	0.28	185	383	460	638	
Approximately 1,700 feet upstream of the confluence with Crooked Creek	0.22	224	347	403	542	
Crossing Branch						
At the confluence with Anneewakee Creek	0.84	342	505	577	756	
Approximately 1,500 feet upstream of Chapel Crossing	0.35	422	612	696	908	
Dog River						
Approximately 6,480 feet Upstream of State Highway	78.5	11,520	17,580	19,610	24,710	
Just downstream of Douglas County Water Reservoir Dam	78.5	11,400	17,280	19,230	24,500	
Dorsett Creek						
At the confluence with Bear Creek	0.65	658	931	1,056	1,380	
At Gray Road At Lakeshore Drive	0.47 0.30	440 195	607 369	692 427	910 587	
Dry Creek						
At the confluence of Beaver	2.29	571	1,124	1,495	2,158	
Approximately 140 feet downstream of the confluence of Tributary A to Dry Creek	1.80	1,610	2,396	2,753	3,646	
Approximately 1,050 feet downstream of the confluence	1.10	1,157	1,739	2,014	2,739	
Approximately 450 feet downstream of Lee Road	0.30	335	502	576	761	

	Peak Discharges (cfs)					
Flooding Source and Location	Drainage Area (square miles)	10-Percent- Annual-Chance	2-Percent- Annual-Chance	1-Percent- <u>Annual-</u> <u>Chance</u>	0.2-Percent- Annual-Chance	
At the confluence with Dry Creek	0.23	599	845	948	1,219	
Dry Creek Tributary B At the confluence with Dry Creek	0.21	150	225	259	342	
Dry Creek Tributary C At the confluence with Dry Creek	0.18	278	435	505	681	
Farm Branch At the confluence with	0.57	549	809	925	1,252	
Just upstream of the confluence of Farm Branch Tributary A	0.24	546	799	911	1,196	
Farm Branch Tributary A At the confluence with Farm Branch	0.27	275	405	464	612	
Gordon Creek At the confluence with	2.72	1.543	1.961	2.170	3.930	
Sweetwater Creek Approximately 330 feet upstream of Thornton Road/	2.57	1,502	1,904	2,111	3,891	
Approximately 5,150 feet upstream of the confluence with Sweetwater Creek	2.28	2,145	3,189	3,656	4,905	
Gothards Creek						
At the confluence of Gothards Creek Tributary 1	21.16	2,325	4,454	5,534	8,259	
At the confluence of Gothards	8.94	1,796	3,198	4,188	6,375	
Approximately 350 feet downstream of the confluence	2.41	638	1,058	1,235	1,720	
of Gothards Creek Tributary 12 Approximately 5,000 feet upstream of Cedar Mountain Road	0.33	251	452	553	802	
Gothards Creek Tributary 1 At the confluence with Gothards Creek	0.21	188	311	368	512	
Gothards Creek Tributary 2 At the confluence with Gothards Creek	0.23	33	46	76	264	
Approximately 4,100 feet upstream of the confluence with Gothards Creek	0.18	165	285	340	482	
Gothards Creek Tributary 2.1 At the confluence with Gothards Creek Tributary 2	0.04	50	85	100	140	

		Peak Discharges (cfs)				
Flooding Source and Location	Drainage Area (square miles)	10-Percent- Annual-Chance	2-Percent- Annual-Chance	1-Percent- <u>Annual-</u> <u>Chance</u>	0.2-Percent- Annual-Chance	
At the confluence with	0.92	465	812	978	1,406	
At the confluence of Gothards Creek Tributary 3.2	0.44	84	144	174	251	
At North Hickory Lane	0.14	74	124	148	207	
Gothards Creek Tributary 3.1 At the confluence with Gothards Creek Tributary 3	0.32	103	171	203	286	
Gothards Creek Tributary 3.2 At the confluence with Gothards Creek Tributary 3	0.23	232	382	450	623	
Gothards Creek Tributary 4 At the confluence of Gothards	1.00	636	1,282	1,607	2,249	
Creek At the confluence of Gothards	0.82	443	688	844	1,256	
Approximately 3,370 feet upstream of the confluence of Gothards Creek Tributary 4.1	0.17	178	292	344	475	
Gothards Creek Tributary 4.1 At the confluence of Gothards	0.50	443	688	844	1,256	
Creek Tributary 4 Approximately 2,990 feet upstream of the confluence of Gothards Creek Tributary 4.1.1	0.17	169	284	337	472	
Gothards Creek Tributary 4.1.1						
At the confluence with Gothards Creek Tributary 4.1	0.21	225	322	383	586	
Approximately 1,840 upstream of the county boundary	0.14	188	295	343	464	
Gothards Creek Tributary 6 At the confluence with Gothards Creek	0.22	200	341	406	572	
Gothards Creek Tributary 8 At the confluence with	1.62	659	1,077	1,304	1,968	
Just upstream of Cedar Mountain Road	1.04	393	655	774	1,083	
Gothards Creek Tributary 8.1 At the confluence with Gothards Creek Tributary 8	0.38	266	424	507	773	
Gothards Creek Tributary 9 At the confluence with Gothards Creek	0.48	347	617	742	1,078	
			Peak Disc	harges (cfs)		
---	---------------------------------	------------------------------	-----------------------------	--	-------------------------------	
<u>Flooding Source and Location</u> Gothards Creek Tributary 10	Drainage Area (square miles)	10-Percent- Annual-Chance	2-Percent- Annual-Chance	1-Percent- <u>Annual-</u> <u>Chance</u>	0.2-Percent- Annual-Chance	
At the confluence with Gothards Creek	0.36	206	353	421	575	
Gothards Creek Tributary 11 At the confluence of Gothards	3.12	1,236	2,283	2,778	4,092	
At the confluence of Gothards	1.39	1,022	1,796	2,130	2,949	
Creek Tributary 11.3 Approximately 4,960 feet upstream of the confluence of Gothards Creek Tributary 11.3	0.24	254	412	483	663	
Gothards Creek Tributary 11.1 At the confluence with Gothards Creek Tributary 11	0.24	252	422	497	707	
Gothards Creek Tributary 11.2 At the confluence with Gothards Creek Tributary 11	0.53	285	526	657	996	
Gothards Creek Tributary 11.3 At the confluence with Gothards Creek Tributary 11	0.52	537	995	1,198	1,682	
Gothards Creek Tributary 12 At the confluence with Gothards Creek	0.31	323	539	640	890	
Gothards Creek Tributary 15 At the confluence with Gothards Creek	0.22	178	339	405	570	
Hickory Creek At the confluence with Beaver Creek	4.32	2,743	4,154	4,745	6,222	
Approximately 1,830 feet upstream of the confluence of Spivey Branch	2.15	1,445	2,166	2,462	3,221	
Approximately 90 feet downstream of the confluence of Tributary C to Hickory	1.38	864	1,274	1,449	1,899	
Approximately 1,280 feet upstream of the confluence of Tributary E to Hickory Creek	0.21	280	399	451	581	
Hickory Creek Tributary A At the confluence with Hickory Creek	0.22	216	308	335	387	
Hickory Creek Tributary B At the confluence with Hickory Creek	0.20	131	193	220	287	

		harges (cfs)			
Flooding Source and Location	Drainage Area (square miles)	10-Percent- Annual-Chance	2-Percent- Annual-Chance	1-Percent- <u>Annual-</u> <u>Chance</u>	0.2-Percent- Annual-Chance
At the confluence with Hickory Creek	0.47	262	356	399	454
Hickory Creek Tributary D At the confluence with Hickory	0.26	622	913	1,041	1,364
Approximately 1,250 feet upstream of Lakeland Hills Drive	0.14	376	548	624	814
Hickory Creek Tributary E At the confluence with Hickory Creek	0.18	100	155	179	240
Huey Creek	0.70	1 225	2.266	2.976	4.070
At Maroney Mill Road	2.79	1,337	2,366	2,876	4,078
At Malone Road	1.21	793	1,291	1,535	2,163
At Linecrest Drive	0.48	495	812	946	1,300
Huey Creek Tributary 1 At the confluence with Huey Creek	1.21	800	1,329	1,573	2,191
Huey Creek Tributary 1.1 At the confluence with Huey Creek Tributary 1	0.28	252	425	500	693
Huey Creek Tributary 2 At the confluence with Huey Creek	0.11	210	351	400	389
Huey Creek Tributary 3 At the confluence with Huey Creek	0.22	125	216	270	389
Hurricane Creek					
Approximately 70 feet downstream of State Highway	4.84	2,108	3,755	4,631	6,733
Approximately 25 feet upstream of Post Road	3.39	1,918	3,615	4,437	6,254
Approximately 80 feet downstream of the confluence with Hurricane Creek	0.73	667	1,086	1,323	1,765
Hurricane Creek Tributary A At the confluence with Hurricane Creek	0.33	324	507	588	787
Hurricane Creek Tributary B At the confluence with Hurricane Creek	0.18	282	472	556	775
Hurricane Creek Tributary C At the confluence with Hurricane Creek	0.27	307	517	612	857

			Peak Disc	Peak Discharges (cfs)		
Flooding Source and Location	Drainage Area (square miles)	10-Percent- Annual-Chance	2-Percent- Annual-Chance	1-Percent- <u>Annual-</u> <u>Chance</u>	0.2-Percent- Annual-Chance	
At the confluence with Hurricane Creek	0.37	318	522	614	848	
Hurricane Creek Tributary E At the confluence with Hurricane Creek	0.25	119	199	236	330	
Knollwood Branch At the confluence with	1.12	1,446	2,094	2,376	3,081	
Just downstream of the confluence of Knollwood	0.45	797	1,136	1,284	1,655	
Branch Tributary A Just upstream of the confluence of Knollwood Branch Tributary A	0.25	409	586	663	856	
Knollwood Branch Tributary A At the confluence with Knollwood Branch	0.20	414	587	663	851	
Kraft Creek At the confluence with	0.11	312	528	626	879	
Approximately 450 feet upstream of Kraft Drive	0.10	131	222	263	369	
Kraft Creek Tributary A At the confluence with Kraft Creek	0.14	182	310	368	518	
Lion Branch At the confluence with Beaver	2.31	1,366	2,159	2,479	3,273	
Approximately 170 feet downstream of East County	1.74	1,077	1,692	1,943	2,558	
Approximately 940 feet downstream of Mack Road	0.54	741	1,068	1,201	1,530	
Lion Branch Tributary A At the confluence with Lion Branch	0.21	130	197	228	306	
Lion Branch Tributary B At the confluence with Lion Branch	0.20	687	1,120	1,282	1,690	
Little Anneewakee Creek At the confluence with	6.52	3,821	5,690	6,509	8,521	
Just downstream of the confluence of Little Anneewakee Creek Tributary A	6.44	4,135	5,956	6,817	8,959	

			Peak Disc	harges (cfs)	
Flooding Source and Location Little Anneewakee Creek	Drainage Area (square miles)	10-Percent- <u>Annual-Chance</u>	2-Percent- <u>Annual-Chance</u>	1-Percent- <u>Annual-</u> <u>Chance</u>	0.2-Percent- Annual-Chance
<i>(Continued)</i> Just downstream of the confluence of Little Anneewakee Creek Tributary	5.58	3,768	5,419	6,159	8,023
B Just downstream of the confluence of Little Anneewakee Creek Tributary	5.05	3,711	5,402	6,143	8,016
Just downstream of confluence	4.55	3,877	5,627	6,398	8,351
Just downstream of the confluence of Little Anneewakee Creek Tributary D	1.91	1,388	2,023	2,304	3,017
Just downstream of confluence with Tributary E to Little Anneewakee Creek	1.55	1,270	1,839	2,086	2,707
Just upstream of Shawnee Lake	0.97	1,087	1,474	1,642	2,046
at Fairburn Road Just upstream of Interstate Highway 20	0.28	510	663	724	853
Little Anneewakee Creek Tributary A					
At the confluence with Little	0.78	555	984	1,178	1,657
At Grace Lake Drive	0.34	1,215	1,704	1,915	2,444
Little Anneewakee Creek Tributary B At the confluence with Little Anneewakee Creek	0.18	356	514	584	758
Little Anneewakee Creek Tributary C At the confluence with Little Anneewakee Creek	0.31	416	607	692	906
Little Anneewakee Creek Tributary D At the confluence with Little Anneewakee Creek	0.33	554	771	870	1,132
Little Anneewakee Creek Tributary E At the confluence with Little Anneewakee Creek	0.24	377	527	592	753
Little Bear Creek At the confluence with Bear	9.67	2,296	3,670	4,344	6,168
Just downstream of the	9.56	3,142	4,764	5,534	7,726
confluence of Baldwin Creek Just downstream of the confluence of Little Bear Creek Tributary A	6.67	1,954	3,177	3,739	5,272

			Peak Disc	harges (cfs)		
Flooding Source and Location	Drainage Area (square miles)	10-Percent- Annual-Chance	2-Percent- Annual-Chance	1-Percent- <u>Annual-</u> <u>Chance</u>	0.2-Percent- Annual-Chance	
Just downstream of the confluence of Little Bear	5.81	2,012	3,338	3,942	5,642	
Just downstream of the	5.17	2,168	3,650	4,431	6,484	
Just downstream of the confluence of Coursey Creek	3.31	1,484	2,523	2,975	4,174	
Just downstream of the confluence of Little Bear Creek Tributary D	2.57	1,350	2,158	2,528	3,502	
Just downstream of the confluence of Little Bear Creek Tributary E	2.18	1,419	2,232	2,594	3,543	
At Dorsett Shoals Road Just downstream of the confluence of Little Bear Creek Tributary F	1.08 0.78	994 821	1,425 1,218	1,626 1,394	2,141 1,843	
Just upstream of the confluence of Little Bear Creek Tributary F	0.47	454	659	747	970	
Approximately 5,550 feet upstream of confluence of Little Bear Creek Tributary F	0.11	147	216	246	324	
Little Bear Creek Tributary A At the confluence with Little Bear Creek	0.54	631	967	1,122	1,511	
Just upstream of the confluence of Little Bear Creek Tributary B	0.29	363	538	616	817	
Little Bear Creek Tributary B At the confluence with Little Bear Creek Tributary A	0.17	207	327	381	517	
Little Bear Creek Tributary C At the confluence with Little Bear Creek	0.55	714	1,066	1,220	1,610	
Approximately 4,760 feet upstream of the confluence with Little Bear Creek	0.29	426	624	711	940	
Little Bear Creek Tributary D At the confluence with Little Bear Creek	0.33	381	569	650	861	
Approximately 3,150 feet upstream of the confluence with Little Bear Creek	0.20	295	432	493	645	
Little Bear Creek Tributary E At the confluence with Little Bear Creek	0.83	398	720	876	1,308	
Approximately 4,905 feet upstream of the confluence with Little Bear Creek	0.14	253	367	418	545	

			Peak Disc	Peak Discharges (cfs)		
Flooding Source and Location	Drainage Area (square miles)	10-Percent- Annual-Chance	2-Percent- Annual-Chance	1-Percent- <u>Annual-</u> <u>Chance</u>	0.2-Percent- Annual-Chance	
At the confluence with Little	0.31	396	590	677	897	
Approximately 2,055 feet upstream of the confluence with Little Bear Creek	0.21	333	480	544	706	
Little Hurricane Creek At the confluence with Hurricane Creek	2.25	1,809	3,084	3,664	4,947	
Approximately 50 feet upstream	1.38	1,244	2,035	2,356	3,310	
Approximately 1,350 feet upstream of Shady Creek Lane	0.35	513	801	929	1,256	
Little Hurricane Creek Tributary A At the confluence with Little Hurricane Creek	0.52	345	845	1,155	1,786	
Margie Branch At the confluence with Beaver Creek	1.04	434	832	1,051	1,792	
Just upstream of Margie Lane	0.51	252	642	838	1,417	
Margie Branch Tributary A At the confluence with Margie Branch	0.12	101	150	178	242	
Mill Creek At the confluence with Gothards Creek	1.73	1,013	2,140	2,447	3,765	
At Chicago Avenue	0.20	218	357	419	579	
Mill Creek Tributary 1 At the confluence with Mill Creek	0.53	506	835	979	1,370	
Miller Creek At the confluence with Beaver Creek	0.54	552	867	1,009	1,412	
Miller Creek Tributary A At the confluence with Miller Creek	0.09	139	244	288	396	
Mobley Creek At the confluence with Dog River	15.90	2,324	3,668	4,227	5,758	
Just upstream of the confluence of Pool Creek	13.50	2,111	3,338	3,852	5,257	
Just upstream of the confluence of Mobley Creek Tributary 5	11.80	1,955	3,096	3,578	4,888	
At Pool Road Just upstream of the confluence	7.80 5.00	1,591 1.358	2,505 2.095	2,900 2.419	3,956 3,266	
of Mobley Creek Tributary 6	2.00	1,000	2,075	-,>	5,200	

		harges (cfs)	(cfs)		
Flooding Source and Location	Drainage Area (square miles)	10-Percent- Annual-Chance	2-Percent- Annual-Chance	1-Percent- <u>Annual-</u> <u>Chance</u>	0.2-Percent- Annual-Chance
At the confluence with Mobley Creek	2.00	689	1,110	1,305	1,815
Mobley Creek Tributary 6 At the confluence with Mobley Creek	1.20	494	800	946	1,324
Mobley Creek Tributary 7 At the confluence with Mobley Creek	1.90	773	1,202	1,400	1,907
Mud Creek	16.60	2 402	2.905	4 477	(0(2
Sweetwater Creek	16.60	2,492	3,895	4,477	6,063
Just upstream of the confluence	13.90	2,243	3,512	4,042	5,484
Just upstream of the confluence	6.00	1,315	2,096	2,438	3,353
of Town Branch At Stockmar Road	4.50	1,098	1,759	2,055	2,838
Tributary 1 to Northann Lake					
At the mouth of Northern Lake	0.63	*	*	507	*
Tributary 2 to Northern Lake At the confluence with Tributary 1 to Northern Lake	0.54	*	*	145	*
Palmer Branch					
At the confluence with	1.97	1,643	2,739	3,310	5,065
Approximately 2,040 feet	0.96	1,140	1,916	2,336	3,608
of Palmer Branch Tributary B Approximately 1,280 feet upstream of the confluence of Palmer Branch Tributary C	0.24	537	923	1,099	1,505
Palmer Branch Tributary A At the confluence with Palmer Branch	0.13	11	49	87	225
Palmer Branch Tributary B At the confluence with Palmer Branch	0.33	460	727	846	1,147
Palmer Branch Tributary C At the confluence with Palmer Branch	0.30	447	715	870	1,252
Panther Creek At the confluence with Chapel Farms Creek *Data not available	1.17	1,229	1,849	2,126	2,846

		Peak Discharges (cfs)				
Flooding Source and Location	Drainage Area (square miles)	10-Percent- Annual-Chance	2-Percent- Annual-Chance	1-Percent- <u>Annual-</u> <u>Chance</u>	0.2-Percent- Annual-Chance	
Just downstream of the confluence of Panther Creek	0.76	1,106	1,642	1,896	2,507	
At Chapel Hill Farms Drive	0.31	505	734	835	1,089	
Panther Creek Tributary A At the confluence with Panther Creek	0.24	447	657	751	989	
Park Creek						
At the confluence with Sweetwater Creek	0.70	1,821	2,718	3,057	4,351	
Approximately 1,120 feet upstream of Skyview Drive	0.31	1,066	1,578	1,803	2,368	
Approximately 760 feet upstream of Sinyard Road	0.23	734	1,080	1,232	1,612	
Pine Creek						
At the confluence with Sweetwater Creek	0.68	1,585	2,445	2,820	3,707	
Approximately 4,160 feet upstream of the confluence with Sweetwater Creek	0.20	376	548	624	814	
Pinewood Branch						
At the confluence with Park Creek	0.67	676	1,050	1,258	1,806	
Approximately 620 feet upstream of Paces Drive	0.34	207	748	936	1,343	
Pinewood Branch Tributary A At the confluence with Pinewood Branch	0.17	188	275	313	408	
Shell Creek						
At the confluence with Hurricane Creek	0.66	675	1,001	1,176	1,670	
Approximately 2,080 feet upstream of Shell Road	0.26	366	593	696	966	
Shoals Branch						
At the confluence with Sweetwater Creek	1.29	973	1,512	1,751	2,316	
Approximately 100 feet downstream of the confluence of Tributary A to Shoals	1.05	1,445	2,204	2,542	3,388	
Branch Approximately 3,080 feet upstream of the confluence of Tributary B to Shoals Branch	0.29	558	874	1,044	1,457	
Shoals Branch Tributary A At the confluence with Shoals Branch	0.19	386	591	681	909	

		Peak Discharges (cfs				
Flooding Source and Location	Drainage Area (square miles)	10-Percent- Annual-Chance	2-Percent- Annual-Chance	1-Percent- <u>Annual-</u> <u>Chance</u>	0.2-Percent- Annual-Chance	
At the confluence with Shoals Branch	0.19	372	566	652	867	
Simon Creek At the confluence with	0.82	896	1,291	1,465	1,901	
Approximately 1,660 feet upstream of Harvest Ridge Drive	0.25	565	800	902	1,156	
Slater Mill Creek At the confluence with Little Anneewakee Creek	2.61	2,660	3,762	4,239	5,436	
Just downstream of the confluence of Slater Mill Creek Tributaries A and B	0.94	2,006	2,782	3,101	3,891	
At Village Court	0.39	715	979	1,093	1,373	
Slater Mill Creek Tributary A At the confluence with Slater	0.78	861	1,218	1,363	1,721	
At Hospital Drive	0.51	879	1,240	1,398	1,789	
Slater Mill Creek Tributary B At the confluence with Slater Mill Creek	0.51	499	665	735	911	
Spivey Branch At the confluence with Hickory Creek	1.41	980	1,489	1,701	2,232	
Approximately 160 feet upstream of Country Park	0.91	645	961	1,156	1,668	
Approximately 4,550 feet upstream of the confluence of Spivey Branch Tributary B	0.20	309	454	515	667	
Spivey Branch Tributary A At the confluence with Spivey Branch	0.22	145	222	256	342	
Spivey Branch Tributary B At the confluence with Spivey Branch	0.31	235	702	898	1,349	
Sweetwater Creek						
At the county boundary Just downstream of the confluence of Park Creek	35.75 4.94	8,648 8,412	14,197 13,810	17,096 16,630	25,310 24,620	
Approximately 300 feet downstream of Old Alabama Road	0.21	8,333	13,681	16,475	24,390	
Sweetwater Creek Tributary A At the confluence with Sweetwater Creek	0.22	344	520	598	794	

			Peak Discharges (cfs)			
Flooding Source and Location	Drainage Area (square miles)	10-Percent- Annual-Chance	2-Percent- Annual-Chance	1-Percent- <u>Annual-</u> <u>Chance</u>	0.2-Percent- Annual-Chance	
At the confluence with Sweetwater Creek	0.21	323	497	574	769	
Sweetwater Creek Tributary C At the confluence with Sweetwater Creek	0.49	876	1,371	1,591	2,139	
Sweetwater Creek Tributary D At the confluence with	0.54	757	1,165	1,346	1,811	
Approximately 8,020 feet upstream of the confluence with Sweetwater Creek	0.18	320	495	572	766	
Sweetwater Creek Tributary E At the confluence with Sweetwater Creek	0.45	754	1,178	1,365	1,838	
Sweetwater Creek Tributary F At the confluence with Sweetwater Creek	0.25	494	744	854	1,131	
Sweetwater Creek Tributary G At the confluence with Sweetwater Creek	0.40	789	1,213	1,389	1,836	
Approximately 600 feet	0.22	474	705	807	1,062	
Approximately 835 feet upstream of Trae Lane	0.11	245	366	419	553	
Sweetwater Creek Tributary H At the confluence with Sweetwater Creek	1.94	1,388	1,980	2,211	2,746	
Approximately 340 feet upstream of Thornton Road	0.65	816	1,129	1,261	1,634	
Sweetwater Creek Tributary I At the confluence with	0.32	1,156	1,686	1,918	2,498	
Sweetwater Creek Approximately 230 feet upstream of White Flag Trail	0.08	163	242	277	363	
Sweetwater Creek Tributary J At the confluence with	0.36	808	1,157	1,334	1,768	
Approximately 230 feet upstream of White Flag Trail	0.22	655	963	1,114	1,471	
Sweetwater Creek Tributary K At the confluence with	1.19	407	670	787	1,110	
Sweetwater Creek Approximately 3,400 feet upstream of the confluence with Sweetwater Creek	0.41	342	580	697	1,009	

			Peak Disc	harges (cfs)	
Flooding Source and Location	Drainage Area (square miles)	10-Percent- Annual-Chance	2-Percent- Annual-Chance	1-Percent- <u>Annual-</u> <u>Chance</u>	0.2-Percent- Annual-Chance
At the confluence with Sweetwater Creek	1.79	644	1,070	1,307	1,944
At the confluence of Sweetwater	1.50	297	503	604	960
At Brownsville Road	0.10	260	441	525	735
Sweetwater Creek Tributary L.2 At the confluence with Sweetwater Creek Tributary L	0.21	189	299	347	479
Sweetwater Creek Tributary L.3 At the confluence with Sweetwater Creek Tributary L	0.17	107	203	258	431
Sweetwater Creek Tributary					
At the confluence with Sweetwater Creek Tributary L.3	0.05	66	110	130	181
Unnamed Tributary to Southern Lake At the mouth of Southern Lake	0.23	*	*	258	*
Tanyard Branch				1 000	• • • •
At the confluence with Little Bear Creek	1.54	850	1,422	1,809	2,819
Approximately 5,640 feet upstream of Dorsett Shoals Road	1.12	758	1,288	1,658	2,528
Just downstream of the confluence of Tanyard Branch Tributary A	0.82	1,211	1,752	1,990	2,608
At Devonwood Avenue	0.18	383	554	630	821
Tanyard Branch Tributary A At the confluence with Tanyard Branch	0.23	292	425	484	633
Tiger Creek At the confluence with	0.95	886	1,372	1,582	2,103
Anneewakee Creek	0.50	000	1 2 4 2	1.552	2.046
Just downstream of Par Drive Just downstream of the confluence of Tiger Creek	0.35	909 703	1,343 1,046	1,553 1,221	2,046 1,619
Just downstream of West Selman Drive	0.28	456	688	818	1,094
Tiger Creek Tributary A At the confluence with Tiger Creek	0.16	212	302	341	439
Town Branch At the confluence with Mud Creek *Data not available	5.70	1,472	2,268	2,616	3,527

		Peak Discharges (cfs)				
Flooding Source and Location	Drainage Area (square miles)	10-Percent- Annual-Chance	2-Percent- Annual-Chance	1-Percent- <u>Annual-</u> <u>Chance</u>	0.2-Percent- Annual-Chance	
At Brewer Road	4.80	1,361	2,089	2,409	3,243	
Tributary 1 to Northern Lake At Northern Lake	0.63	*	*	507	*	
Tributary 2 to Northern Lake At confluence with Tributary 1 to Northern Lake	0.54	*	*	145	*	
Tyree Branch At the confluence with Hurricane Creek	0.31	280	462	544	751	
Approximately 5,800 feet upstream of the confluence with Hurricane Creek	0.10	146	241	283	392	
Unnamed Tributary to Southern Lake						
At Southern Lake	0.23	*	*	258	*	
Waterfall Branch At the confluence with Mud Creek	2.00	721	1,150	1,349	1,865	
Zion Branch At the confluence with	1.21	575	1,145	1,392	1,967	
Hurricane Creek Approximately 3,590 feet upstream of the confluence with Hurricane Creek	0.54	295	615	770	1,074	
Approximately 2,200 feet upstream of State Highway 5 *Data not available	0.19	87	143	168	234	

Stillwater elevations for Douglas County are shown in Table 6.

Table 6 - Summary of Stillwater Elevations

Flooding Source	10-Percent- <u>Annual-Chance</u>	2-Percent- Annual-Chance	1-Percent- Annual-Chance	0.2-Percent- Annual-Chance
DOUGLAS COUNTY WATERSHED RESERVOIR	*	*	760.2	*
NORTHERN LAKE	*	*	782.6	*
SOUTHERN LAKE	*	*	772.1	*

Water Surface Elevations (Feet NAVD¹)

*Data not available

¹ North American Vertical Datum of 1988

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 Table in the FIS report. Flood elevations shown on the FIRM are primarily intended for flood insurance rating purposes. For construction and/or floodplain management purposes, users are cautioned to use the flood elevation data presented in this FIS report in conjunction with the data shown on the FIRM.

August 18, 2009 Initial Countywide FIS Report

Cross section data for the Chattahoochee River, Gordon Creek, Gothards Creek, Mill Creek, Gothards Creek Tributary 8, Gothards Creek Tributary 11, Mobley Creek, Mobley Creek Tributary 5, Mobley Creek Tributary 6, Mobley Creek Tributary 7, Mud Creek, Pine Creek, Sweetwater Creek, Park Creek, Town Branch, and Waterfall Branch were obtained using aerial photogrammetric techniques, with the below-water sections being obtained by field measurements. All bridges and culverts were field surveyed to obtain elevation data and structural geometry. Cross sections were located at close intervals upstream and downstream of bridges and culverts in order to compute significant backwater effects of these structures.

Cross sections used in the Anneewakee Creek and Bear Creek Basin models and the limited detailed analyses for Beaver Creek, Huey Creek, Huey Creek Tributary A, Margie Branch, Miller Creek, Miller Creek Tributary A, and Pinewood Branch were obtained from 2-foot topographic contours (Photo Science Geospatial Solutions, 2004). Stream channel dimensions were augmented by field and survey measurements, where necessary. Along each stream, the cross sections were located at a maximum interval along the channel of 500 feet. Field surveys were conducted at all bridge, culvert, and dam locations within the study area to collect structural features and to determine necessary elevations. Representative upstream and downstream cross sections were placed in appropriate locations near these structures in order to accurately represent the hydraulic characteristics and backwater effects of the structures.

Water surface elevations (WSELs) of floods of the selected recurrence intervals for the Chattahoochee River, Gordon Creek, Gothards Creek, Gothards Creek Tributary 2, Gothards Creek Tributary 3, Gothards Creek Tributary 4, Mobley Creek, Mobley Creek Tributary 5, Mobley Creek Tributary 6, Mobley Creek Tributary 7, Mud Creek, Pine Creek, Sweetwater Creek, Sweetwater Creek Tributary 1, Town Branch, and Waterfall Branch (USGS, 1973a) and (Jack W.

Berry & Associates, Inc., 1977) were developed using the USACE, HEC computer program, HEC-2 (HEC, 1976). The HEC-2 input data for the Chattahoochee River and Sweetwater Creek were supplied by the USACE, Mobile District, from their studies in Fulton and Cobb Counties, Georgia. For the detailed studies for Gothards Creek and Sweetwater Creek taken from the FIS for Paulding County, WSELs of floods of the selected recurrence intervals were computed using the USACE, HEC computer program, HEC-2 (HEC, 1973). Starting WSELs were developed using the slope-area method.

The HEC-2 model for the Chattahoochee River between Fairburn Road/State Highway 92 and the upstream county boundary was revised to include updated geometry and recalibrated by using data from the March 1977 and April 1979 floods. The flood profiles were reconstructed by comparing the model results to high water marks obtained during the floods. Adjustments were made in the channel and overbank roughness coefficients (Manning's "n") until the difference between the computed and observed stages was within 0.5 foot. Additional calibration was performed for the City of Vinings gage at Paces Ferry Road and its upstream "fall" gage at U.S. Highway 41 by comparing the discharges and corresponding stages computed by the model with the actual USGS data for these stations.

WSELs of floods of the selected recurrence intervals for the Anneewakee Creek and Bear Creek Basins and the limited detailed analyses for Beaver Creek, Huey Creek, Huey Creek Tributary A, Margie Branch, Miller Creek, Miller Creek Tributary A, and Pinewood Branch were modeled using the USACE, HEC computer program, HEC-RAS, version 3.1.3 (HEC, 2005) and the USACE, HEC computer program HEC-GEORAS, version 4.1 (HEC, 2006). The starting WSELs were computed by the slope-area method. Channel slope was established by utilizing contour data. The models were run using a steady-state flow analysis.

Cross sections for the flooding sources studied by limited detailed methods, Keaton Creek Tributaries 1 and 2, were obtained using digital topography and field surveys. WSELs of floods for the limited detailed studies were computed using the USACE, HEC computer program HEC-RAS, version 3.1.3 (HEC, 2005). The hydraulic model was prepared using digital elevation data without surveying bathymetric data. Field measurements were conducted to approximate the geometry of the hydraulic structures crossing the streams. A limited detailed study can be upgraded to a full detailed study at a later date by verifying stream channel and overbank geometry, bridge and culvert data, and by analyzing multiple recurrence intervals.

This Countywide FIS Report

WSELs of floods of the selected recurrence intervals for the Hurricane Creek, Sweetwater Creek, Gothards Creek, Sweetwater Creek Tributary 1 basin models and the Chattahoochee River were modeled using the USACE, HEC computer program HEC-RAS, version 4.1 (HEC, 2010). The starting WSELs were computed by the slope-area method. Channel slope was established by utilizing contour data. The models were run using a steady-state flow analysis.

For the streams studied by approximate methods in the Sweetwater Creek Hurricane Creek basins and Chattahoochee tributaries, cross section data was obtained from the county provided topographic data. Hydraulically significant roads were modeled as bridges or culverts, with opening data approximated from available inventory data or approximated from the imagery. Top of road elevations were estimated from the best available topography. The studied streams were modeled using the USACE, HEC computer program HEC-RAS, version 4.1 (HEC, 2010).

Roughness coefficients (Manning's "n') were assigned along the studied streams based on field visits/photographs and updated aerial photography (overbank areas only). Specific values for roughness for the Anneewakee and Bear Creek Basins were determined from the HEC-RAS Hydraulic Reference Guide (HEC, 2005). Table 7 displays the range of channel and overbank Manning's n values assigned to all streams studied by detailed methods.

Stream	Channel "n"	Overbank "n"
Alexander Branch	0.035-0.050	0.035-0.110
Alexander Branch Tributary A	0.035-0.050	0.060-0.110
Alexander Branch Tributary B	0.035-0.050	0.035-0.110
Amber Creek	0.010-0.045	0.050-0.110
Amber Creek Tributary A	0.045	0.110
Anneewakee Creek	0.010-0.070	0.010-0.110
Anneewakee Creek Tributary A	0.010-0.045	0.110
Anneewakee Creek Tributary B	0.045	0.110
Anneewakee Creek Tributary C	0.045	0.050-0.110
Anneewakee Creek Tributary D	0.040	0.035-0.110
Anneewakee Creek Tributary E	0.035	0.110
Anneewakee Creek Tributary F	0.010-0.100	0.035-0.110
Anneewakee Creek Tributary G	0.010-0.100	0.010-0.110
Anneewakee Creek Tributary H	0.045	0.035-0.110
Anneewakee Creek Tributary I	0.010-0.035	0.050-0.110
Anneewakee Creek Tributary J	0.045	0.010-0.110
Anneewakee Creek Tributary K	0.010-0.045	0.010-0.110
Anneewakee Creek Tributary L	0.045	0.045-0.110
Arbor Branch	0.010-0.110	0.035-0.110
Arbor Branch Tributary A	0.035-0.070	0.040-0.110
Austin Creek	0.010-0.045	0.010-0.110
Baldwin Creek	0.035-0.045	0.035-0.110
Baldwin Creek Tributary A	0.035-0.045	0.060-0.110
Bear Creek	0.030-0.070	0.035-0.110
Bear Creek Tributary A	0.030-0.070	0.110-0.110
Bear Creek Tributary B	0.030-0.070	0.035-0.110
Bear Creek Tributary C	0.030-0.070	0.035-0.110
Bear Creek Tributary D	0.030-0.070	0.060-0.110
Bear Creek Tributary E	0.030-0.070	0.035-0.110
Bear Creek Tributary F	0.030-0.070	0.035-0.110

Table 7 – Manning's "n" Values

Table 7 – Manning's "n" Values (Continued)

<u>Stream</u>	Channel "n"	Overbank "n"
Bear Creek Tributary G	0.030-0.070	0.035-0.110
Beaver Creek	0.010-0.100	0.035-0.110
Beaver Creek Tributary A	0.010-0.100	0.035-0.110
Bomar Branch	0.035-0.070	0.010-0.110
Camp Branch	0.045	0.035-0.110
Camp Branch Tributary A	0.045	0.110
Chapel Farms Creek	0.035-0.050	0.050-0.110
Chapel Farms Creek Tributary A	0.045	0.050-0.110
Chattahoochee River	0.028-0.055	0.070-0.188
Coursey Creek	0.035-0.045	0.035-0.110
Crooked Creek	0.010-0.110	0.010-0.110
Crooked Creek Tributary A	0.010-0.035	0.110
Crooked Creek Tributary B	0.045	0.050-0.110
Crooked Creek Tributary C	0.045-0.050	0.045-0.110
Crooked Creek Tributary D	0.010-0.110	0.010-0.110
Crossing Branch	0.010-0.050	0.035-0.110
Dog River	0.070-0.080	0.030-0.050
Dorsett Creek	0.030-0.100	0.035-0.110
Dry Creek	0.010-0.045	0.035-0.110
Dry Creek Tributary A	0.035-0.040	0.060-0.110
Dry Creek Tributary B	0.0350	0.050-0.110
Dry Creek Tributary C	0.0350	0.035-0.110
Farm Branch	0.035-0.045	0.050-0.110
Farm Branch Tributary A	0.010-0.110	0.035-0.110
Gordon Creek	0.035-0.040	0.035-0.110
Gothards Creek	0.030-0.070	0.045-0.100
Gothards Creek Tributary 1	0.070	0.050-0.100
Gothards Creek Tributary 2	0.250-0.070	0.035-0.100
Gothards Creek Tributary 2.1	0.025-0.070	0.070-0.100
Gothards Creek Tributary 3	0.025-0.070	0.040-0.100
Gothards Creek Tributary 3.1	0.025-0.070	0.050-0.100
Gothards Creek Tributary 3.2	0.050-0.070	0.090-0.100
Gothards Creek Tributary 4	0.025-0.070	0.040-0.100
Gothards Creek Tributary 4.1	0.045-0.070	0.070-0.100
Gothards Creek Tributary 4.1.1	0.050-0.070	0.100
Gothards Creek Tributary 6	0.070	0.080-0.100
Gothards Creek Tributary 8	0.040-0.070	0.060-0.100
Gothards Creek Tributary 8.1	0.025-0.070	0.035-0.100
Gothards Creek Tributary 9	0.070	0.100
Gothards Creek Tributary 10	0.070	0.080-0.100
Gothards Creek Tributary 11	0.035-0.070	0.052-0.100
Gothards Creek Tributary 11.1	0.040-0.070	0.050-0.100
Gothards Creek Tributary 11.2	0.025-0.250	0.060-0.100
Gothards Creek Tributary 11.3	0.025-0.080	0.050-0.100
Gothards Creek Tributary 12	0.070	0.100
Gothards Creek Tributary 15	0.070	0.100
Hickory Creek	0.04-0.110	0.010-0.110
Huey Creek	0.035-0.070	0.040-0.100
Huey Creek Tributary 1	0.050-0.070	0.080-0.100
Huey Creek Tributary 1.1	0.070	0.100
Huey Creek Tributary 2	0.050-0.070	0.080-0.100
Huey Creek Tributary 2.1	0.050-0.070	0.070-0.100
Hurricane Creek	0.010-0.050	0.013-0.110
Hurricane Creek Tributary A	0.0350	0.035-0.110
Hurricane Creek Tributary B	0.0350	0.110
Hurricane Creek Tributary C	0.0350	0.10-0.110
Hurricane Creek Tributary D	0.035-0.045	0.00-0.110
Hurricane Creek Tributary E	0.0350	0.013-0.110

Table 7 – Manning's	"n" Values	(Continued)
---------------------	------------	-------------

Stream	Channel "n"	Overbank "n"
Knollwood Branch Tributary A	0.045	0.060-0.110
Kraft Creek	0.045	0.013-0.110
Kraft Creek Tributary A	0.0350	0 110
Lion Branch	0.01-0.450	0.035-0.110
Lion Branch Tributary A	0.010-0.045	0.050-0.110
Lion Branch Tributary B	0.035-0.045	0.035-0.110
Little Hurricane Creek	0.010-0.110	0.013-0.110
Little Appequakee Creek	0.010-0.045	0.010-0.110
Little Anneewakee Creek Tributary A	0.010-0.045	0.010-0.110
Little Anneewakee Creek Tributary R	0.045	0.040-0.110
Little Anneewakee Creek Tributary C	0.045	0.050-0.110
Little Anneewakee Creek Tributary D	0.045	0.030-0.110
Little Anneewakee Creek Tributary E	0.045-0.050	0.040-0.110
Little Boar Crook	0.045	0.040-0.110
Little Bear Creek Tributary A	0.035-0.050	0.035-0.110
Little Bear Creek Tributary A	0.035-0.050	0.033-0.110
Little Dear Creek Tributary C	0.035-0.050	0.030-0.110
	0.035-0.050	0.000-0.110
	0.035-0.050	0.025.0.110
	0.035-0.050	0.035-0.110
Little Bear Creek Tributary F	0.035-0.050	0.060-0.110
	0.010-0.110	0.013-0.110
Little Hurricane Creek Tributary A	0.035-0.045	0.050-0.110
Margie Branch	0.010-0.100	0.035-0.110
Margie Branch Tributary A	0.045	0.050-0.110
Mill Creek	0.025-0.070	0.070-0.100
Mill Creek Tributary 1	0.050-0.070	0.050-0.100
Miller Creek	0.035-0.040	0.060-0.110
Miller Creek Tributary A	0.035-0.045	0.020-0.110
Mobley Creek	0.045-0.080	0.080-0.170
Mobley Creek Tributary 5	0.045-0.080	0.080-0.170
Mobley Creek Tributary 6	0.045-0.080	0.080-0.170
Mobley Creek Tributary /	0.045-0.080	0.080-0.170
Mud Creek	0.045-0.080	0.080-0.170
Palmer Branch	0.040-0.045	0.050-0.110
Palmer Branch Tributary A	0.010-0.045	0.040-0.110
Palmer Branch Tributary B	0.045	0.110
Palmer Branch Tributary C	0.045	0.050-0.110
Panther Creek	0.035-0.070	0.010-0.110
Panther Creek Tributary A	0.045	0.110
Park Creek	0.035-0.060	0.035-0.110
Pine Creek	0.045-0.080	0.080-0.170
	0.010-0.045	0.035-0.110
Pinewood Branch Tributary A	0.045	0.035-0.110
Sileli Ureek	0.045	0.013-0.110
Simon Creek	0.035-0.045	0.035-0.110
Shoals Branch	0.030-0.035	0.010-0.110
Shoals Branch Tributary A	0.030	0.035-0.110
Shoals Branch Tributary B	0.030-0.035	0.035-0.110
	0.035-0.050	0.040-0.110
Slater Mill Creek Tributary A	0.040-0.050	0.010-0.110
Stater Will Greek Tributary B	0.035	0.040-0.110
Spivey Branch	0.035-0.040	0.035-0.110
Spivey Branch Tributary A	0.01-0.0450	0.050-0.110
Spivey Branch Tributary B	0.01-0.0450	0.035-0.110
SweetWater Creek	0.050-0.055	0.040-0.160
Sweetwater Creek Tributary A	0.030-0.110	0.035-0.110
Sweetwater Creek Tributary B	0.035-0.100	0.005 0.440
Sweetwater Creek Tributary C	0.035	0.035-0.110

Table 7 – Manning's "n" Values (Continued)

Stream	Channel "n"	Overbank "n"
Sweetwater Creek Tributary D	0.035-0.100	0.100-0.110
Sweetwater Creek Tributary E	0.035	0.110
Sweetwater Creek Tributary F	0.045	0.05-0.110
Sweetwater Creek Tributary G	0.035-0.050	0.04-0.110
Sweetwater Creek Tributary H	0.035-0.100	0.01-0.110
Sweetwater Creek Tributary I	0.045-0.050	0.05-0.110
Sweetwater Creek Tributary J	0.013-0.040	0.035-0.110
Sweetwater Creek Tributary K	0.01-0.100	0.035-0.110
Sweetwater Creek Tributary L	0.025-0.07	0.035-0.120
Sweetwater Creek Tributary L.2	0.050-0.07	0.070-0.100
Sweetwater Creek Tributary L.3	0.025-0.08	0.050-0.100
Sweetwater Creek Tributary L.3.1	0.025-0.08	0.100
Tanyard Branch	0.035-0.050	0.035-0.110
Tanyard Branch Tributary A	0.035-0.050	0.050-0.110
Tiger Creek	0.010-0.045	0.010-0.110
Tiger Creek Tributary A	0.050	0.035-0.110
Tributary 1 to Northern Lake	*	*
Tributary 2 to Northern Lake	*	*
Town Branch	0.045-0.080	0.080-0.170
Tyree Branch	0.035	0.060-0.110
Unnamed Tributary to Southern Lake	*	*
Waterfall Branch	0.045-0.080	0.080-0.170
Zion Branch	0.010-0.050	0.010-0.110

*Data not available

Locations of selected cross sections used in the hydraulic analyses are shown on the Flood Profiles (Exhibit 1). For stream segments for which a floodway was computed (Section 4.2), selected cross section locations are also shown on the FIRM (Exhibit 2).

Flood profiles have been developed for streams studied by limited detailed methods to be used for floodplain management and flood insurance rating purposes. The flood profiles for the streams studied by limited detailed methods are published separately from this FIS report. Contact the local floodplain administrator for more information.

The profile baselines depicted on the FIRM represent the hydraulic modeling baselines that match the flood profiles on this FIS report. As a result of improved topographic data, the profile baseline, in some cases, may deviate significantly from the channel centerline or appear outside the Special Flood Hazard Area.

The hydraulic analyses for this study were based on unobstructed flow. The flood elevations shown on the Flood Profiles (Exhibit 1) are thus considered valid only if hydraulic structures remain unobstructed, operate properly, and do not fail.

The profile baselines depicted on the FIRM represent the hydraulic modeling baselines that match the flood profiles on this FIS report. As a result of improved topographic data, the profile baseline, in some cases, may deviate

significantly from the channel centerline or appear outside the Special Flood Hazard Area.

3.3 Vertical Datum

All FIS reports and FIRMs are referenced to a specific vertical datum. The vertical datum provides a starting point against which flood, ground, and structure elevations can be referenced and compared. Until recently, the standard vertical datum in use for newly created or revised FIS reports and FIRMs was NGVD. With the finalization of NAVD, many FIS reports and FIRMs are being prepared using NAVD as the referenced vertical datum.

All flood elevations shown in this FIS report and on the FIRM are referenced to NAVD. Structure and ground elevations in the community must, therefore, be referenced to NAVD. It is important to note that adjacent communities may be referenced to NGVD. This may result in differences in Base Flood Elevations (BFEs) across the corporate limits between the communities. Some of the data used in this study were taken from the prior effective FIS reports and adjusted to NAVD. The average conversion factor that was used to convert the data in this FIS report to NAVD was calculated using the National Geodetic Survey's (NGS) VERTCON online utility (NGS, 2006). The data points used to determine the conversion are listed in Table 8.

				Conversion from
Quad Name	Corner	<u>Latitude</u>	Longitude	NGVD29 to NAVD88
New Georgia	SE	33.750	-84.875	0.233 feet
Austell	SW	33.750	-84.750	0.236 feet
Campbellton	NE	33.750	-84.625	0.217 feet
Villa Rica	SE	33.625	-84.875	0.194 feet
Winston	SE	33.625	-84.750	0.125 feet
			Average:	0.201 feet

Table	8-	Vertical	Datum	Conver	sion
1 4010	0	, or crow	Datam	001101	01011

For additional information regarding conversion between NGVD and NAVD, visit the NGS website at www.ngs.noaa.gov, or contact the NGS at the following address:

Vertical Network Branch, N/CG13 National Geodetic Survey, NOAA Silver Spring Metro Center 3 1315 East-West Highway Silver Spring, Maryland 20910 (301) 713-3191 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.

To obtain current elevation, description, and/or location information for benchmarks shown on this map, please contact the Information Services Branch of the NGS at (301) 713-3242, or visit their website at www.ngs.noaa.gov.

4.0 FLOODPLAIN MANAGEMENT APPLICATIONS

The NFIP encourages State and local governments to adopt sound floodplain management programs. Therefore, each FIS provides 1-percent-annual-chance (100-year) flood elevations and delineations of the 1- and 0.2-percent-annual-chance (500-year) floodplain boundaries and 1-percent-annual-chance floodway to assist communities in developing floodplain management measures. This information is presented on the FIRM and in many components of the FIS report, including Flood Profiles, Floodway Data Table, and Summary of Stillwater Elevations Table. Users should reference the data presented in the FIS report as well as additional information that may be available at the local map repository before making flood elevation and/or floodplain boundary determinations.

4.1 Floodplain Boundaries

To provide a national standard without regional discrimination, the 1-percentannual-chance flood has been adopted by FEMA as the base flood for floodplain management purposes. The 0.2-percent-annual-chance flood is employed to indicate additional areas of flood risk in the community.

For each stream studied by detailed methods, the 1- and 0.2-percent-annualchance floodplain boundaries have been delineated using the flood elevations determined at each cross section. Between cross sections, the boundaries were interpolated using topographic maps at a scale of 1":800', with a contour interval of 2 feet (Photo Science Geospatial Solutions, 2004).

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 (Zone 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-annualchance 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 foot, provided that hazardous velocities are not produced. The floodways in this study are presented to local agencies as minimum standards that can be adopted directly or that can be used as a basis for additional floodway studies.

The floodways presented in this FIS report and on the FIRM 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 have been tabulated for selected cross sections in Table 8. In cases where the floodway and 1-percent-annual-chance floodplain boundaries are either close together or collinear, only the floodway boundary has been shown.

¹ Feet above confluence w	ith Bear Creek		 					
R	10,154	19	57	6.4	1,093.7	1,093.7	1,094.5	0.8
Q	9,387	20	44	8.3	1,077.6	1,077.6	1,077.6	0.0
Р	8,644	527	2,483	0.2	1,072.4	1,072.4	1,072.7	0.3
0	8,619	45	89	4.1	1,071.7	1,071.7	1,072.4	0.7
Ν	8,427	546	2,616	0.1	1,068.8	1,068.8	1,068.8	0.0
Μ	8,140	259	798	0.5	1,064.0	1,064.0	1,064.0	0.0
L	7,951	169	253	1.4	1,059.5	1,059.5	1,059.5	0.0
K	6,745	22	71	5.1	1,028.7	1,028.7	1,028.9	0.2
J	6,105	30	170	4.6	1,021.4	1,021.4	1,021.6	0.2
I	5,181	45	337	2.3	1,019.2	1,019.2	1,019.2	0.0
Н	5,017	45	163	4.8	1,012.3	1,012.3	1,012.4	0.1
G	4,050	32	169	4.6	1,004.4	1,004.4	1,005.4	1.0
F	3,474	30	179	9.3	999.2	999.2	999.3	0.1
E	2,769	25	147	11.4	986.4	986.4	986.9	0.5
D	1,711	150	1,614	1.0	983.4	983.4	983.5	0.1
С	1,620	56	190	8.8	972.6	972.6	972.6	0.0
В	724	200	613	2.7	962.1	962.1	962.8	0.7
ALEAANDER BRANCH A	80	50	222	7.7	958.5	958.5	958.8	0.3
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	AREA (SQUARE FEET)	VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE	MEAN VELOCITY (FEET PER	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE (FEET)
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCI (F

CE WIDTH (FEET) 1 29 1 48 1 50 1 49 1 20 1 56 1 15	SECTION AREA (SQUARE FEET) 131 99 635 107 70 104 15	MEAN VELOCITY (FEET PER SECOND) 5.3 6.9 1.1 6.4 9.7 2.4 5.5	REGULATORY (FEET NAVD) 1,002.8 1,013.6 1,027.2 1,030.5 1,040.3 1,027.1 1,027.1 1,059.7	WITHOUT FLOODWAY (FEET NAVD) 1,002.8 1,013.6 1,027.2 1,030.5 1,040.3 1,027.1 1,027.1 1,059.7	WITH FLOODWAY (FEET NAVD) 1,003.8 1,013.7 1,028.2 1,031.2 1,040.3 1,027.1 1,027.1 1,059.7	INCREASE (FEET) 1.0 0.2 1.0 0.7 0.0 0.0 0.0
	131 99 635 107 70 104 15	5.3 6.9 1.1 6.4 9.7 2.4 5.5	1,002.8 1,013.6 1,027.2 1,030.5 1,040.3 1,027.1 1,027.1 1,059.7	1,002.8 1,013.6 1,027.2 1,030.5 1,040.3 1,027.1 1,027.1	1,003.8 1,013.7 1,028.2 1,031.2 1,040.3 1,027.1 1,059.7	1.0 0.2 1.0 0.7 0.0 0.0
1 29 1 48 1 50 1 49 1 20 1 56 1 15	131 99 635 107 70 104 15	5.3 6.9 1.1 6.4 9.7 2.4 5.5	1,002.8 1,013.6 1,027.2 1,030.5 1,040.3 1,027.1 1,027.1	1,002.8 1,013.6 1,027.2 1,030.5 1,040.3 1,027.1 1,027.1	1,003.8 1,013.7 1,028.2 1,031.2 1,040.3 1,027.1 1,059.7	1.0 0.2 1.0 0.7 0.0 0.0
¹ 48 ¹ 50 ¹ 49 ¹ 20 ¹ 56 ¹ 15	99 635 107 70 104 15	6.9 1.1 6.4 9.7 2.4 5.5	1,013.6 1,027.2 1,030.5 1,040.3 1,027.1 1,027.1	1,013.6 1,027.2 1,030.5 1,040.3 1,027.1 1,029.7	1,013.7 1,028.2 1,031.2 1,040.3 1,027.1 1,059.7	0.2 1.0 0.7 0.0 0.0
¹ 50 ¹ 49 ¹ 20 ¹ 56 ¹ 15	635 107 70 104 15	1.1 6.4 9.7 2.4 5.5	1,027.2 1,030.5 1,040.3 1,027.1 1,029.7	1,027.2 1,030.5 1,040.3 1,027.1 1.059.7	1,028.2 1,031.2 1,040.3 1,027.1 1,059.7	1.0 0.7 0.0 0.0 0.0
¹ 49 ¹ 20 ¹ 56 ¹ 15	107 70 104 15	6.4 9.7 2.4 5.5	1,030.5 1,040.3 1,027.1 1,059.7	1,030.5 1,040.3 1,027.1 1.059.7	1,031.2 1,040.3 1,027.1 1,059.7	0.7 0.0 0.0 0.0
¹ 20 ¹ 56 ¹ 15	70 104 15	9.7 2.4 5.5	1,040.3 1,027.1 1,059.7	1,040.3 1,027.1 1.059.7	1,040.3 1,027.1 1,059.7	0.0 0.0 0.0
¹ 56 ¹ 15	104 15	2.4 5.5	1,027.1 1,059.7	1,027.1 1.059.7	1,027.1 1,059.7	0.0 0.0
¹ 56 ¹ 15	104 15	2.4 5.5	1,027.1 1,059.7	1,027.1 1.059.7	1,027.1 1,059.7	0.0 0.0
¹ 15	15	5.5	1,059.7	1.059.7	1,059.7	0.0
				.,		
-						
² 111	373	5.2	790.0	789.5 ³	789.5	0.0
² 83	311	6.3	797.4	797.4	797.6	0.2
² 135	358	4.1	803.9	803.9	804.0	0.1
² 50	197	7.4	813.5	813.5	814.0	0.5
² 68	244	6.0	820.0	820.0	820.0	0.0
² 18	67	11.1	821.6	821.6	821.6	0.0
² 31	82	9.1	838.8	838.8	838.8	0.0
² 16	68	10.9	857.2	857.2	857.2	0.0
² 30	82	9.1	869.6	869.6	869.6	0.0
² 17	75	10.0	876.1	876.1	876.2	0.1
	50 2 68 2 18 2 31 52 16 2 30 2 17 oder Branch	2^2 50 197 2^2 68 244 2^2 18 67 2^2 31 82 2^2 16 68 2^2 30 82 2^2 17 75 oder Branch 50 197	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	a^2 501977.4813.5 a^2 682446.0820.0 a^2 186711.1821.6 a^2 31829.1838.8 a^2 166810.9857.2 a^2 30829.1869.6 a^2 177510.0876.1der Branch ³ Elevation computed without constraints	a^2 501977.4813.5813.5 a^2 682446.0820.0820.0 a^2 186711.1821.6821.6 a^2 31829.1838.8838.8 a^2 166810.9857.2857.2 a^2 30829.1869.6869.6 a^2 177510.0876.1876.1Bevation computed without consideration of back	2^2 50 197 7.4 813.5 813.5 814.0 2^2 68 244 6.0 820.0 820.0 820.0 2^2 18 67 11.1 821.6 821.6 821.6 2^2 31 82 9.1 838.8 838.8 838.8 2^2 16 68 10.9 857.2 857.2 857.2 2^2 30 82 9.1 869.6 869.6 869.6 2^2 17 75 10.0 876.1 876.2 der Branch

FEDERAL EMERGENCY MANAGEMENT AGENCY

DOUGLAS COUNTY, GA AND INCORPORATED AREAS

TABLE

9

FLOODWAY DATA

ALEXANDER BRANCH TRIBUTARY A – ALEXANDER BRANCH TRIBUTARY B – AMBER CREEK

	FLOODING SO	URCE		FLOODWAY	WAY 1-PERCENT-ANNUAL-CHANCE-FLOOD WATER SURFACE ELEVATION				
	CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
	AMBER CREEK			,	,				
	(CONTINUED)								
	К	7,173 ¹	275	2,283	0.3	903.5	903.5	904.4	0.9
	L	7,822 ¹	153	1,198	0.6	903.5	903.5	904.4	0.9
	Μ	8,487 ¹	39	97	7.7	917.9	917.9	917.9	0.0
	Ν	8,635 ¹	15	248	3.0	933.5	933.5	934.4	0.9
	0	9,314 ¹	16	75	9.9	933.5	933.5	934.4	0.9
	AMBER CREEK TRIBUTARY A								
	А	14 ²	10	52	13.3	825.7	825.7	825.7	0.0
	В	621 ²	18	76	9.0	838.6	838.6	839.6	1.0
	С	1,358 ²	17	74	9.3	856.9	856.9	857.8	0.9
	D	1,823 ²	8	50	13.8	873.1	873.1	873.2	0.1
	E	2,582 ²	39	137	5.0	902.3	902.3	903.3	1.0
L	¹ Feet above confluence v	with Anneewake	e Creek		1	1			
	² Feet above confluence	with Amber Cree	k						
-	FEDERAL EMERGI		IENT AGENCY			FLOO	DWAY D	ATA	
ρl	DOUGLA	S COUNT	Y. GA						
П О		RPORATED	AREAS		AMBER C	REEK – AI			UTARY A

FLOODING SOL	FLOODWAY			1-PERCENT-ANNUAL-CHANCE-FLOOD WATER SURFACE ELEVATION				
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
ANNEEWAKEE CREEK								
А	1,728	665	3,674	2.9	748.6	734.9 ²	734.9	0.0
В	3,541	399	1,496	7.7	748.6	736.2 ²	736.3	0.1
С	4,731	125	1,613	7.1	748.6	739.3 ²	739.3	0.0
D	4,841	127	1,559	7.4	748.6	739.5 ²	739.5	0.0
E	5,449	572	3,088	3.7	748.6	742.8 ²	742.8	0.0
F	6,233	429	3,028	3.8	748.6	745.4 ²	745.4	0.0
G	6,630	230	1,313	8.7	748.6	745.7 ²	745.7	0.0
Н	7,799	77	1,100	10.3	753.2	753.2	753.3	0.1
I	8,587	90	1,169	9.7	758.0	758.0	758.0	0.0
J	9,381	68	651	17.5	761.1	761.1	761.1	0.0
К	10,197	393	1,378	8.2	770.1	770.1	770.1	0.0
L	11,004	353	2,150	5.2	772.9	772.9	772.9	0.0
Μ	11,815	243	1,389	8.1	774.1	774.1	774.1	0.0
Ν	12,800	461	2,017	5.6	776.4	776.4	776.4	0.0
0	13,598	485	1,599	7.0	778.2	778.2	778.2	0.0
Р	14,733	184	1,533	7.3	783.2	783.2	783.2	0.0
Q	15,593	324	2,742	4.1	785.4	785.4	785.4	0.0
R	16,398	279	1,733	6.5	786.0	786.0	786.0	0.0
S	17,211	110	1,075	10.4	787.6	787.6	787.6	0.0
Т	17,924	162	1,486	7.4	790.0	790.0	790.0	0.0
U	19,149	111	746	14.7	815.8	815.8	815.8	0.0
¹ Feet above confluence w	ith Chattahooc	hee River						
² Elevations computed wit	hout considerat	ion of backwa	ater effects fron	n Chattahooche	e River			
FEDERAL EMERGE	NCY MANAGEN	IENT AGENCY	,	FLOODWAY DATA				
DOUGLA AND INCOF	S COUN RPORATED	FY, GA AREAS			ANNEE	WAKEE C	REEK	

FLOODING SOL	JRCE		FLOODWAY		1-PE	RCENT-ANNUA WATER SURFA	AL-CHANCE-FLO CE ELEVATION	OD
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
ANNEEWAKEE CREEK (CONTINUED)								
V	20,005	107	764	14.4	831.6	831.6	831.6	0.0
W	21,065	78	897	12.2	843.9	843.9	843.9	0.0
Х	21,356	59	588	18.6	844.3	844.3	844.3	0.0
Y	22,014	57	720	15.2	849.5	849.5	849.6	0.1
Z	22,831	49	759	14.4	853.2	853.2	853.8	0.6
AA	23,222	233	2,164	5.0	857.1	857.1	857.6	0.5
AB	23,895	69	868	12.6	857.9	857.9	858.9	1.0
AC	24,434	111	1,140	9.6	861.5	861.5	862.3	0.8
AD	24,480	117	1,203	9.1	862.1	862.1	862.7	0.6
AE	25,159	97	1,312	8.3	866.1	866.1	866.7	0.6
AF	25,218	127	780	14.0	872.8	872.8	872.9	0.1
AG	25,522	708	7,076	1.5	876.1	876.1	876.3	0.2
AH	26,209	335	3,291	2.7	876.4	876.4	876.5	0.1
AI	27,002	100	1,007	8.8	876.5	876.5	877.1	0.6
AJ	27,444	771	5,839	1.5	878.2	878.2	878.9	0.7
AK	29,062	313	1,721	5.0	878.7	878.7	879.6	0.9
AL	29,935	451	2,605	3.6	881.3	881.3	881.7	0.4
AM	30,674	145	963	9.7	883.7	883.7	883.9	0.2
AN	31,014	310	2,780	3.6	887.4	887.4	888.2	0.8
AO	32,738	150	1,345	7.5	890.9	890.9	891.1	0.2
AP	33,840	516	5,433	1.9	893.4	893.4	894.3	0.9

¹Feet above confluence with Chattahoochee River

TABLE

9

FEDERAL EMERGENCY MANAGEMENT AGENCY

DOUGLAS COUNTY, GA AND INCORPORATED AREAS

FLOODWAY DATA

ANNEEWAKEE CREEK

FLOODING SOL	JRCE	FLOODWAY			1-PERCENT-ANNUAL-CHANCE-FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
ANNEEWAKEE CREEK (CONTINUED)								
AQ	35,433	249	1,966	5.6	893.8	893.8	894.7	0.9
AR	35,994	296	2,037	5.8	894.4	894.4	895.1	0.7
AS	36,978	293	2,908	4.0	897.1	897.1	897.4	0.3
AT	37,560	429	3,732	3.2	897.5	897.5	897.9	0.4
AU	38,002	408	2,856	2.1	897.8	897.8	898.2	0.4
AV	38,694	414	2,457	2.5	897.9	897.9	898.4	0.5
AW	39,426	103	582	10.5	898.0	898.0	898.5	0.5
AX	39,501	142	1,837	3.3	904.6	904.6	905.0	0.4
AY	39,888	282	2,431	2.5	904.7	904.7	905.3	0.6
AZ	40,003	449	3,435	1.8	904.7	904.7	905.3	0.6
BA	40,471	443	3,331	1.9	904.7	904.7	905.4	0.7
BB	41,463	241	1,366	4.5	904.8	904.8	905.6	0.8
BC	41,588	186	956	6.4	904.8	904.8	905.6	0.8
BD	41,608	186	1,127	5.5	905.6	905.6	906.4	0.8
BE	41,946	84	456	13.5	906.4	906.4	906.4	0.0
BF	42,431	191	1,214	5.1	910.2	910.2	910.6	0.4
BG	42,884	192	911	6.8	910.9	910.9	911.6	0.7
BH	43,386	284	1,182	5.2	913.3	913.3	913.4	0.1
BI	43,817	256	764	8.1	915.5	915.5	915.5	0.0
BJ	43,843	309	1,460	4.2	916.8	916.8	916.8	0.0

FEDERAL EMERGENCY MANAGEMENT AGENCY

DOUGLAS COUNTY, GA AND INCORPORATED AREAS

TABLE

9

FLOODWAY DATA

ANNEEWAKEE CREEK

FLOODING SOL	IRCE		FLOODWAY		1-PE	1-PERCENT-ANNUAL-CHANCE-FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)	
ANNEEWAKEE CREEK (CONTINUED)									
BK	44,493	100	829	7.4	921.1	921.1	921.1	0.0	
BL	45,646	83	612	10.1	924.2	924.2	925.0	0.8	
BM	46,046	82	547	11.3	927.6	927.6	927.6	0.0	
BN	46,532	205	1,409	4.4	931.7	931.7	931.8	0.1	
BO	46,950	145	831	7.4	932.1	932.1	932.8	0.7	
BP	47,351	158	971	6.3	935.1	935.1	935.6	0.5	
BQ	47,478	245	691	15.2	934.9	934.9	935.5	0.6	
BR	47,548	238	1,878	2.9	944.7	944.7	944.7	0.0	
BS	48,025	207	2,145	2.5	944.8	944.8	945.2	0.4	
BT	48,505	249	1,631	3.5	944.8	944.8	945.5	0.7	
BU	49,159	64	397	14.2	950.8	950.8	950.8	0.0	
BV	49,545	100	543	10.3	956.4	956.4	956.4	0.0	
BW	50,555	161	930	6.0	961.4	961.4	961.9	0.5	
BX	51,110	270	1,068	5.3	963.8	963.8	964.8	1.0	
BY	51,849	64	700	8.0	968.1	968.1	968.2	0.1	
BZ	52,298	51	408	13.8	968.1	968.1	968.3	0.2	
CA	52,795	83	936	6.0	971.7	971.7	972.0	0.3	
CB	53,163	55	273	13.3	972.1	972.1	972.2	0.1	
CC	54,116	50	267	14.6	986.0	986.0	986.1	0.1	
CD	54,198	67	942	3.9	994.8	994.8	995.1	0.3	
'Feet above confluence w	vith Chattahooc	hee River							
FEDERAL EMERGENCY MANAGEMENT AGENCY				FLOODWAY DATA					
DOUGLA AND INCOR	S COUN	r Y, GA AREAS	ANNEEWAKEE CREEK						

FLOODING SOL	JRCE		FLOODWAY		1-PERCENT-ANNUAL-CHANCE-FLOOD WATER SURFACE ELEVATION				
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)	
ANNEEWAKEE CREEK (CONTINUED)									
CE	54,802	140	3,108	0.9	1,023.6	1,023.6	1,023.6	0.0	
CF	55,426	300	8,535	0.3	1,023.7	1,023.7	1,023.7	0.0	
CG	55,737	59	348	7.0	1,023.7	1,023.7	1,023.7	0.0	
СН	57,525	59	446	6.0	1,040.9	1,040.9	1,040.9	0.0	
CI	57,567	171	945	2.5	1,041.4	1,041.4	1,041.4	0.0	
CJ	57,846	244	1,993	3.1	1,045.2	1,045.2	1,045.2	0.0	
СК	58,062	364	2,585	0.5	1,045.6	1,045.6	1,045.6	0.0	
CL	58,178	205	1,725	0.7	1,045.6	1,045.6	1,045.6	0.0	
СМ	58,764	117	762	1.6	1,045.6	1,045.6	1,045.6	0.0	
CN	58,918	148	555	2.2	1,045.6	1,045.6	1,045.6	0.0	
СО	59,077	110	409	3.0	1,046.1	1,046.1	1,046.1	0.0	
CP	59,328	27	118	10.3	1,046.1	1,046.1	1,046.1	0.0	
CQ	59,526	90	365	4.5	1,048.7	1,048.7	1,049.2	0.5	
CR	59,546	90	512	3.2	1,050.1	1,050.1	1,051.0	0.9	
CS	59,930	36	208	7.9	1,050.2	1,050.2	1,051.1	0.9	
СТ	60,247	106	559	2.9	1,055.6	1,055.6	1,056.4	0.8	
CU	60,775	112	403	4.1	1,056.8	1,056.8	1,057.5	0.7	
CV	61,302	50	190	8.6	1,059.5	1,059.5	1,059.8	0.3	
CW	61,648	68	383	3.3	1,063.3	1,063.3	1,063.4	0.1	
CX	62,040	80	198	6.4	1,064.4	1,064.4	1,064.5	0.1	

¹Feet above confluence with Chattahoochee River

TABLE

9

FEDERAL EMERGENCY MANAGEMENT AGENCY

DOUGLAS COUNTY, GA AND INCORPORATED AREAS

FLOODWAY DATA

ANNEEWAKEE CREEK

FLOODING SO	G SOURCE FLOODWAY 1-PERCENT-ANNU WATER SURF					RCENT-ANNUA WATER SURFA	L-CHANCE-FLO	OD
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
ANNEEWAKEE CREEK (CONTINUED)								
CY	62,320	158	790	1.6	1.070.0	1.070.0	1.070.0	0.0
C7	62 642	111	280	4.5	1 070 0	1,070.0	1,070.0	0.0
DA	63.162	50	197	6.4	1.074.3	1.074.3	1.075.2	0.9
DB	63.236	130	438	2.9	1.077.0	1.077.0	1.077.5	0.5
DC	63,821	89	163	7.7	1,082.3	1,082.3	1,082.4	0.1
DD	64,613	76	164	7.7	1,087.5	1,087.5	1,087.5	0.0
DE	65,674	99	240	5.2	1,104.9	1,104.9	1,105.2	0.3
DF	65,761	103	366	3.4	1,107.3	1,107.3	1,108.0	0.7
DG	66,027	100	510	1.4	1,108.1	1,108.1	1,108.9	0.8
DH	66,711	33	151	4.8	1,114.7	1,114.7	1,115.3	0.6
DI	67,120	62	218	3.3	1,131.2	1,131.2	1,131.3	0.1
DJ	67,523	664	470	1.5	1,144.6	1,144.6	1,144.6	0.0
DK	67,595	566	6,096	0.1	1,144.9	1,144.9	1,144.9	0.0
DL	67,930	382	4,134	0.2	1,144.9	1,144.9	1,144.9	0.0
DM	68,314	48	140	5.2	1,147.0	1,147.0	1,147.2	0.2
¹ Feet above confluence v	with Chattahooc	nee River						
	(FLOO	DWAY D	ΑΤΑ			
AND INCOM	S COUNI RPORATED	T, GA AREAS	ANNEEWAKEE CREE					

FLOODING SO	JRCE		FLOODWAY	,	1-PE	RCENT-ANNUA WATER SURFA	L-CHANCE-FLO CE ELEVATION	OD
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
ANNEEWAKEE CREEK TRIBUTARY A								
А	910	32	49	7.4	748.6	748.5	748.5	0.0
В	1,146	73	65	5.5	775.2	775.2	775.2	0.0
С	1,190	155	1,928	0.2	775.7	775.7	775.7	0.0
D	2,074	55	625	0.6	775.7	775.7	775.7	0.0
E	2,886	36	69	5.2	798.8	798.8	798.8	0.0
ANNEEWAKEE CREEK TRIBUTARY B								
А	576	42	97	5.4	749.7	749.7	749.8	0.1
В	1,146	35	76	6.8	767.4	767.4	767.4	0.0
С	1,950	30	83	6.3	799.5	799.5	799.5	0.0
ANNEEWAKEE CREEK TRIBUTARY C								
А	628	35	79	7.8	797.6	797.6	797.7	0.1
B	1,397	26	87	7.1	865.5	865.5	865.6	0.1
¹ Feet above confluence v	vith Anneewake	e Creek						
FEDERAL EMERGI	ENCY MANAGEN		1		FLOC	DWAY D	ΑΤΑ	
DOUGLA AND INCOM	S COUNT RPORATED	ΓΥ, GA AREAS	ANN	IEEWAKI CREEK T	EE CREEK RIBUTAR \ TR	TRIBUTA (B – ANN IBUTARY	RY A – AN EEWAKEE C	INEEWAP E CREEK

FLOODING SOL	IRCE		FLOODWAY		1-PE	RCENT-ANNUA WATER SURFA	L-CHANCE-FLO	OD		
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)		
ANNEWAKEE CREEK TRIBUTARY D										
А	219	23	67	8.1	849.7	849.7	849.7	0.0		
В	946	13	50	10.8	866.6	866.6	866.6	0.0		
С	2,153	11	46	11.8	906.0	906.0	906.5	0.5		
ANNEEWAKEE CREEK TRIBUTARY E										
А	836	65	350	1.0	876.6	876.6	876.9	0.3		
В	1,462	12	55	6.3	876.6	876.6	877.0	0.4		
С	2,205	29	70	5.0	884.6	884.6	885.3	0.7		
D	2,913	16	49	7.1	894.2	894.2	894.2	0.0		
ANNEEWAKEE CREEK TRIBUTARY F										
А	1,202	449	1,962	0.3	878.6	878.6	879.5	0.9		
В	2,007	41	92	5.7	884.2	884.2	884.7	0.5		
С	2,438	40	93	5.7	889.4	889.4	889.4	0.0		
D	3,310	282	2,181	0.2	912.7	912.7	913.0	0.3		
E	4,000	84	491	1.1	912.7	912.7	913.0	0.3		
15	···									
Feet above confluence w	lith Anneewake	e Creek								
FEDERAL EMERGE	NCY MANAGEN	IENT AGENCY	/		FLOC	DWAY D	ΑΤΑ			
	S COUNI	IY, GA	ANN	IEEWAK	E CREEK	TRIBUTA	RY D – AN			
AND INCOM	PURATED	AKEAS		CREEK TRIBUTARY E – ANNEEWAKEE CREEI						

FLOODING SOL	JRCE FLOODWAY 1-PERCENT-ANNUAL- WATER SURFACE					L-CHANCE-FLO CE ELEVATION	OD	
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
ANNEEWAKEE CREEK TRIBUTARY G								
А	995	9	47	10.4	895.8	895.8	896.6	0.8
В	1,153	227	805	0.6	899.6	899.6	899.6	0.0
С	1,863	82	123	4.0	921.2	921.2	921.3	0.1
D	2,294	59	89	5.5	933.3	933.3	933.3	0.0
E	3,068	18	37	8.2	956.7	956.7	956.7	0.0
F	3,249	45	50	6.1	969.9	969.9	969.9	0.0
G	3,281	312	3,217	0.1	970.6	970.6	970.6	0.0
Н	4,270	60	62	4.9	979.9	979.9	979.9	0.0
ANNEEWAKEE CREEK TRIBUTARY H								
A	1,106	203	568	0.9	893.6	893.6	894.5	0.9
В	1,575	25	60	8.0	899.9	899.9	899.9	0.0
С	2,448	15	60	8.0	915.4	915.4	915.9	0.5
¹ Feet above confluence w	/ith Anneewake	e Creek						
FEDERAL EMERGE	NCY MANAGEM	IENT AGENCY	,		FLOC	DWAY D	ΑΤΑ	
DOUGLAS COUNTY, GA AND INCORPORATED AREAS				ANNI ANN	EEWAKEE IEEWAKEE	CREEK T	RIBUTAR FRIBUTAR	(G – Y H

FLOODING SOL	IRCE	FLOODWAY 1-PERCENT-/ WATER S					L-CHANCE-FLO CE ELEVATION	OD
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
ANNEEWAKEE CREEK TRIBUTARY I								
А	138	99	613	1.3	894.4	894.4	895.2	0.8
В	773	219	1,814	0.4	911.8	911.8	912.4	0.6
С	970	114	758	5.9	911.8	911.8	912.4	0.6
D	1,225	113	208	4.6	918.7	918.7	918.7	0.0
E	1,980	17	80	9.6	947.7	947.7	947.9	0.2
ANNEEWAKEE CREEK TRIBUTARY J								
A	390	16	128	4.4	945.0	945.0	945.4	0.4
В	775	15	54	10.6	948.0	948.0	948.0	0.0
С	1,143	87	131	4.3	962.3	962.3	962.4	0.1
D	1,479	44	90	6.3	972.9	972.9	973.0	0.1
E	1,877	41	85	6.7	980.5	980.5	980.5	0.0
F	2,688	58	96	5.9	1,009.6	1,009.6	1,009.7	0.1
¹ Feet above confluence w	ith Anneewake	ee Creek						
FEDERAL EMERGE		IENT AGENCY	,		FLOC	DWAY D	ΑΤΑ	
DOUGLA AND INCOR	S COUN PORATED	FY, GA AREAS		ANN ANN	EEWAKEE IEEWAKEE	CREEK 1 CREEK	RIBUTAR TRIBUTAR	YI- XYJ

FLOODING SOL	IRCE		FLOODWAY		1-PE	RCENT-ANNUA WATER SURFA	AL-CHANCE-FLO CE ELEVATION	OD		
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)		
ANNEEWAKEE CREEK TRIBUTARY K										
А	97	16	67	3.4	1,063.3	1,063.2 ²	1,063.4	0.2		
В	489	11	26	8.8	1,077.1	1,077.1	1,077.1	0.0		
С	763	21	48	4.7	1,081.9	1,081.9	1,082.2	0.3		
D	835	61	431	0.6	1,090.4	1,090.4	1,090.4	0.0		
Е	902	56	234	1.2	1,092.9	1,092.9	1,093.3	0.4		
F	1,140	24	35	6.4	1,099.6	1,099.6	1,099.6	0.0		
G	1,316	12	77	2.9	1,108.1	1,108.1	1,108.2	0.1		
Н	1,753	14	28	8.0	1,125.3	1,125.3	1,125.3	0.0		
I	1,827	449	3,709	0.1	1,126.4	1,126.4	1,126.4	0.0		
J	2,121	326	2,701	0.1	1,126.4	1,126.4	1,126.4	0.0		
K	2,365	296	2,476	0.1	1,126.4	1,126.4	1,126.4	0.0		
L	2,794	21	36	6.3	1,127.6	1,127.6	1,127.7	0.1		
ANNEEWAKEE CREEK TRIBUTARY L										
А	143	95	329	1.3	1,108.0	1,108.0	1,108.8	0.8		
В	583	12	55	7.6	1,111.0	1,111.0	1,111.1	0.1		
С	1,084	26	246	1.7	1,126.3	1,126.3	1,126.5	0.2		
D	1,562	29	58	7.3	1,126.5	1,126.5	1,126.6	0.1		
E	1,615	50	197	2.7	1,130.1	1,130.1	1,130.5	0.4		
F	1,895	17	70	5.9	1,130.9	1,130.9	1,131.1	0.2		
¹ Feet above confluence w ² Elevation computed with	ith Anneewake	e Creek	er effects from	Anneewakee C	reek					
FEDERAL EMERGE	FEDERAL EMERGENCY MANAGEMENT AGENCY				FLOODWAY DATA					
DOUGLA AND INCOR	DOUGLAS COUNTY, GA AND INCORPORATED AREAS				EEWAKEE IEEWAKEE	CREEK T	RIBUTAR TRIBUTAR	Υ K – Υ L		

FLOODING SO	URCE		FLOODWAY		1-PERCENT-ANNUAL-CHANCE-FLOOD WATER SURFACE ELEVATION				
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)	
ARBOR BRANCH									
А	101	16	115	13.7	995.0	990.3 ²	990.6	0.3	
В	559	34	137	11.5	1,005.8	1,005.8	1,005.9	0.1	
С	1,020	34	177	8.9	1,012.6	1,012.6	1,012.8	0.2	
D	1,402	24	138	11.3	1,017.1	1,017.1	1,017.2	0.1	
E	1,804	67	205	7.7	1,024.9	1,024.9	1,024.9	0.0	
F	2,007	33	112	10.7	1,028.2	1,028.2	1,028.2	0.0	
G	2,116	118	461	3.3	1,036.7	1,036.7	1,036.7	0.0	
Н	2,358	174	618	1.9	1,037.0	1,037.0	1,037.0	0.0	
I	2,760	197	277	4.3	1,037.3	1,037.3	1,037.5	0.2	
J	3,602	38	171	7.0	1,044.5	1,044.5	1,044.7	0.2	
K	4,315	40	744	1.6	1,061.3	1,061.3	1,061.3	0.0	
L	4,828	75	1,090	2.6	1,061.3	1,061.3	1,061.3	0.0	
Μ	5,404	51	671	4.3	1,061.3	1,061.3	1,061.5	0.2	
Ν	5,486	51	715	4.0	1,061.4	1,061.4	1,062.0	0.6	
0	5,766	42	543	5.3	1,061.4	1,061.4	1,062.4	1.0	
Р	5,926	246	313	8.1	1,062.3	1,062.3	1,062.3	0.0	
Q	6,034	287	2,779	0.9	1,063.8	1,063.8	1,063.8	0.0	
R	6,471	263	2,540	1.0	1,063.8	1,063.8	1,063.8	0.0	
S	7,423	78	674	3.8	1,072.4	1,072.4	1,072.8	0.4	
Т	8,465	126	394	6.5	1,076.0	1,076.0	1,076.0	0.0	
U	9,259	126	331	7.7	1,081.4	1,081.4	1,081.4	0.0	

¹Feet above confluence with Anneewakee Creek

TABLE

9

²Elevation computed without consideration of backwater effects from Anneewakee Creek

FEDERAL EMERGENCY MANAGEMENT AGENCY

DOUGLAS COUNTY, GA AND INCORPORATED AREAS

FLOODWAY DATA

ARBOR BRANCH
FLOODING SC	URCE		FLOODWAY		1-PE	ERCENT-ANNUA WATER SURFA	AL-CHANCE-FLO CE ELEVATION	OD
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
ARBOR BRANCH (CONTINUED)								
V	9,559 ¹	79	180	7.6	1,084.1	1,084.1	1,084.1	0.0
W	9,715 ¹	65	344	3.7	1,088.6	1,088.6	1,089.4	0.8
Х	10,570 ¹	32	115	11.1	1,098.2	1,098.2	1,098.2	0.0
Y	11,217 ¹	24	207	6.1	1,103.9	1,103.9	1,104.9	1.0
Z	11,365 ¹	75	837	1.5	1,112.9	1,112.9	1,113.9	1.0
AA	11,990 ¹	25	164	7.8	1,114.2	1,114.2	1,114.8	0.6
AB	12,564 ¹	63	180	7.0	1,121.1	1,121.1	1,121.1	0.0
AC	12,655 ¹	90	344	3.7	1,124.2	1,124.2	1,125.2	1.0
AD	12,770 ¹	30	124	10.2	1,124.6	1,124.6	1,125.5	0.9
ARBOR BRANCH TRIBUTARY A								
А	73 ²	30	128	2.8	1,083.6	1,083.5 ³	1,083.5	0.0
В	170 ²	15	41	8.8	1,083.5	1,083.5	1,083.5	0.0
С	343 ²	74	248	1.5	1,090.4	1,090.4	1,090.4	0.0
D	888 ²	15	39	9.1	1,094.2	1,094.2	1,094.3	0.1
E	1,265 ²	17	138	2.6	1,112.6	1,112.6	1,112.6	0.0
F	1,560 ²	35	192	5.0	1,112.9	1,112.9	1,113.7	0.8
G	2,388 ²	75	199	4.9	1,127.4	1,127.4	1,128.3	0.9
¹ Feet above confluence ² Feet above confluence ³ Elevation computed wit	with Anneewake with Arbor Brand hout consideratio	ee Creek ch on of backwat	er effects from	Arbor Branch				
FEDERAL EMERG	ENCY MANAGEN	IENT AGENCY	,		FLOC	DWAY D	ATA	
DOUGLA AND INCO	AS COUNT RPORATED	ΓΥ, GA AREAS	AF	RBOR BR		RBOR BR	ANCH TRI	BUTARY

FLOODING SO	URCE		FLOODWAY		1-PERCENT-ANNUAL-CHANCE-FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE1	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
AUSTIN CREEK								
A	29	24	72	9.9	935.1	930.2 ²	930.2	0.0
В	321	36	306	2.8	947.4	947.4	947.4	0.0
С	846	36	89	8.0	951.3	951.3	951.3	0.0
D	1,562	10	54	13.1	977.4	977.4	977.4	0.0
E	1,642	214	2,853	0.3	980.4	980.4	980.4	0.0
F	1,839	174	2,318	0.3	980.4	980.4	980.4	0.0
G	2,312	256	3,394	0.2	980.4	980.4	980.4	0.0
Н	2,722	113	827	0.9	980.4	980.4	980.4	0.0
1	2,884	336	175	4.1	1,002.2	1,002.2	1,002.2	0.0
J	2,921	296	2,776	0.2	1,002.5	1,002.5	1,002.5	0.0
K	3,614	319	2,940	0.2	1,002.5	1,002.5	1,002.5	0.0
L	4,033	328	3,082	0.2	1,002.5	1,002.5	1,002.5	0.0
Μ	4,563	30	70	8.6	1,002.7	1,002.7	1,002.7	0.0
Ν	4,623	30	234	2.9	1,008.9	1,008.9	1,008.9	0.0
0	5,200	83	631	0.9	1,022.5	1,022.5	1,023.2	0.7
Р	5,827	47	96	6.2	1,023.1	1,023.1	1,023.5	0.4
Q	6,830	49	81	7.3	1,073.2	1,073.2	1,073.2	0.0
R	6,908	631	7,589	0.1	1,074.1	1,074.1	1,074.1	0.0
S	7,146	427	5,147	0.1	1,074.1	1,074.1	1,074.1	0.0
Т	7,444	447	5,295	0.1	1,074.1	1,074.1	1,074.1	0.0
U	7,726	74	198	3.0	1,076.5	1,076.5	1,076.5	0.0
V	7,963	15	90	6.6	1,082.8	1,082.8	1,083.5	0.7

¹Feet above confluence with Anneewakee Creek

TABLE

9

²Elevation computed without consideration of backwater effects from Anneewakee Creek

FEDERAL EMERGENCY MANAGEMENT AGENCY

DOUGLAS COUNTY, GA AND INCORPORATED AREAS

FLOODWAY DATA

AUSTIN CREEK

FLOODING SO	URCE		FLOODWAY		1-PERCENT-ANNUAL-CHANCE-FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
BALDWIN CREEK								
А	1,144	190	882	3.5	778.9	778.9	778.9	0.0
В	1,321	80	369	8.3	779.4	779.4	779.5	0.1
С	2,110	69	307	10.0	784.9	784.9	785.0	0.1
D	2,807	108	622	4.9	790.6	790.6	791.6	1.0
E	3,193	90	284	10.7	792.3	792.3	792.6	0.3
F	3,218	90	541	5.6	794.8	794.8	795.1	0.3
G	4,296	190	415	5.5	803.1	803.1	803.1	0.0
Н	4,322	268	946	2.4	805.8	805.8	805.8	0.0
I	4,901	117	385	5.9	810.8	810.8	811.0	0.2
J	5,726	135	483	4.7	819.0	819.0	819.3	0.3
K	6,646	102	331	6.8	831.0	831.0	831.0	0.0
L	6,966	121	398	5.7	835.8	835.8	835.8	0.0
Μ	7,754	46	212	10.7	848.8	848.8	848.8	0.0
Ν	8,592	97	297	7.6	881.9	881.9	882.0	0.1
0	9,632	110	392	5.8	894.0	894.0	894.0	0.0
Р	10,190	121	747	3.0	905.1	905.1	905.1	0.0
Q	11,712	160	607	3.7	917.4	917.4	917.4	0.0
R	12,851	88	329	6.9	939.3	939.3	939.3	0.0
S	13,026	39	136	4.2	942.6	942.6	942.6	0.0
Т	14,142	50	107	5.4	967.6	967.6	967.6	0.0
U	14,764	27	61	9.5	976.9	976.9	976.9	0.0

¹Feet above confluence with Little Bear Creek

TABLE 9

FEDERAL EMERGENCY MANAGEMENT AGENCY

DOUGLAS COUNTY, GA AND INCORPORATED AREAS

FLOODWAY DATA

BALDWIN CREEK

FLOODING SO	URCE		FLOODWAY		1-PE	RCENT-ANNUA WATER SURFA	L-CHANCE-FLO CE ELEVATION	OD		
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)		
BALDWIN CREEK (CONTINUED)										
V ,	14.850	87	682	0.8	983.0	983.0	983.9	0.9		
W	15.478	30	62	9.3	986.9	986.9	986.9	0.0		
X	15,505	30	140	4.1	990.5	990.5	990.8	0.3		
Y	16,459	70	83	6.9	1.010.3	1,010.3	1,010.3	0.0		
Z	17,119	25	60	9.6	1,021.3	1,021.3	1,021.3	0.0		
AA	17,175	47	315	1.8	1,028.9	1,028.9	1,029.5	0.6		
AB	17,668	33	75	7.6	1,031.6	1,031.6	1,031.7	0.1		
AC	17,728	47	170	3.4	1,035.9	1,035.9	1,036.3	0.4		
AD	18,517	60	115	5.0	1,049.4	1,049.4	1,049.7	0.3		
¹ Feet above confluence	with Little Bear C	Creek								
				FLOODWAY DATA						
	AND INCORPORATED AREAS				BALDWIN CREEK					

FLOODING SOL	JRCE		FLOODWAY		1-PE	RCENT-ANNUA WATER SURFA	L-CHANCE-FLO	OD	
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)	
BALDWIN CREEK TRIBUTARY A									
А	110	20	67	10.2	943.7	943.7	943.7	0.0	
В	450	36	57	6.7	957.6	957.6	957.6	0.0	
С	506	123	928	0.4	958.6	958.6	958.6	0.0	
D	715	123	906	0.4	958.6	958.6	958.6	0.0	
Е	1,135	66	91	4.2	967.0	967.0	967.0	0.0	
F	2,479	48	64	5.9	997.9	997.9	997.9	0.0	
G	2,586	50	58	6.5	1,000.6	1,000.6	1,000.6	0.0	
Н	3,403	29	52	7.4	1,015.4	1,015.4	1,015.4	0.0	
I	4,190	38	54	7.0	1,040.6	1,040.6	1,040.6	0.0	
J	4,756	63	81	4.7	1,070.5	1,070.5	1,070.5	0.0	
К	4,804	95	259	1.5	1,074.9	1,074.9	1,075.8	0.9	
L	4,989	75	93	4.1	1,083.9	1,083.9	1,084.8	0.9	
¹ Feet above confluence v FEDERAL EMERGE	vith Baldwin Cre				FLOC	DWAY D	ATA		
AND INCORPORATED AREAS				BALDWIN CREEK TRIBUTARY A					

FLOODING SO	URCE		FLOODWAY	,	1-PERCENT-ANNUAL-CHANCE-FLOOD WATER SURFACE ELEVATION				
CROSS SECTION	DISTANCE1	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)	
BEAR CREEK									
А	1,085	70	769	10.2	738.4	724.7 ²	724.9	0.2	
В	1,571	122	1,355	5.8	738.4	726.6 ²	726.8	0.2	
С	1,949	64	568	13.8	738.4	726.6 ²	726.8	0.2	
D	1,989	73	773	10.1	738.4	728.3 ²	728.3	0.0	
E	2,994	55	753	10.4	738.4	731.9 ²	732.3	0.4	
F	3,246	222	1,194	6.6	738.4	733.6 ²	733.7	0.1	
G	3,534	140	1,274	6.1	738.4	734.5 ²	735.0	0.5	
н	3,794	130	1,046	7.5	738.4	734.6 ²	735.3	0.7	
I	4,031	71	924	8.5	738.4	735.2 ²	736.0	0.8	
J	4,090	71	960	8.2	738.4	735.7 ²	736.5	0.8	
K	4,831	69	1,045	7.5	738.4	737.5 ²	738.4	0.9	
L	5,724	75	1,025	7.7	738.4	740.1 ²	740.7	0.6	
М	6,142	136	823	9.6	753.6	753.6	754.0	0.4	
N	6,197	151	1,790	4.4	756.0	756.0	757.0	1.0	
0	6,479	743	9,082	0.9	756.4	756.4	757.3	0.9	
Р	6,924	536	6,550	1.2	756.4	756.4	757.3	0.9	
Q	7,453	857	10,506	0.8	756.4	756.4	757.3	0.9	
R	7,827	588	7,202	1.1	756.4	756.4	757.3	0.9	
S	8,353	407	4,978	1.6	756.4	756.4	757.3	0.9	
Т	8,785	278	3,147	2.6	756.4	756.4	757.3	0.9	
U	9,049	321	3,931	2.1	756.4	756.4	757.3	0.9	
V	9,520	355	2,826	2.9	756.4	756.4	757.3	0.9	

¹Feet above confluence with Chattahoochee River

TABLE

9

²Elevation computed without consideration of backwater effects from Chattahoochee River

FEDERAL EMERGENCY MANAGEMENT AGENCY

DOUGLAS COUNTY, GA AND INCORPORATED AREAS

FLOODWAY DATA

FLOODING SOL	JRCE		FLOODWAY		1-PERCENT-ANNUAL-CHANCE-FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
BEAR CREEK (CONTINUED)								
W	10,590	180	1,098	7.4	756.7	756.7	757.5	0.8
Х	11,411	451	2,852	2.8	761.3	761.3	762.2	0.9
Y	11,802	300	1,983	2.0	762.1	762.1	763.1	1.0
Z	12,284	80	478	8.3	764.4	764.4	765.2	0.8
AA	12,300	80	544	7.3	764.9	764.9	765.9	1.0
AB	13,227	85	423	9.4	771.5	771.5	772.3	0.8
AC	13,776	250	1,160	3.3	776.1	776.1	776.9	0.8
AD	14,632	225	670	5.7	778.8	778.8	779.2	0.4
AE	15,479	129	453	8.4	784.5	784.5	784.7	0.2
AF	16,476	51	283	13.5	807.5	807.5	807.5	0.0
AG	16,810	55	295	12.9	813.4	813.4	813.4	0.0
AH	17,119	134	492	7.5	818.6	818.6	818.9	0.3
AI	17,258	88	371	10.0	820.9	820.9	820.9	0.0
AJ	17,531	78	490	7.2	824.2	824.2	824.2	0.0
AK	17,833	80	404	8.8	825.7	825.7	825.7	0.0
AL	18,154	72	324	10.9	831.2	831.2	831.2	0.0
AM	18,642	40	390	9.1	836.8	836.8	836.8	0.0
AN	18,979	55	341	10.4	839.0	839.0	839.1	0.1
AO	19,812	76	323	11.0	853.7	853.7	853.7	0.0
AP	20,991	47	258	13.7	918.6	918.6	918.6	0.0

¹Feet above confluence with Chattahoochee River

TABLE

9

FEDERAL EMERGENCY MANAGEMENT AGENCY

DOUGLAS COUNTY, GA AND INCORPORATED AREAS

FLOODWAY DATA

FLOODING SO	URCE		FLOODWAY		1-PERCENT-ANNUAL-CHANCE-FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
BEAR CREEK (CONTINUED)								
AQ	21,064	51	513	7.2	926.7	926.7	926.7	0.0
AR	21,510	250	2,262	1.6	927.7	927.7	927.7	0.0
AS	22,323	220	1,435	2.6	927.8	927.8	927.9	0.1
AT	22,795	75	424	8.7	927.8	927.8	927.9	0.1
AU	23,748	100	579	6.4	932.9	932.9	933.6	0.7
AV	24,304	144	727	4.5	935.9	935.9	936.0	0.1
AW	25,058	180	895	3.7	938.0	938.0	938.6	0.6
AX	25,664	211	597	5.5	941.2	941.2	941.2	0.0
AY	25,674	221	1,097	3.0	943.1	943.1	943.8	0.7
AZ	26,150	150	793	4.1	943.9	943.9	944.6	0.7
BA	26,634	125	605	5.4	944.9	944.9	945.8	0.9
BB	27,390	170	685	4.8	948.4	948.4	949.1	0.7
BC	28,011	110	751	4.4	952.1	952.1	953.0	0.9
BD	28,711	41	192	6.5	954.0	954.0	954.8	0.8
BE	29,085	38	158	7.9	956.1	956.1	956.3	0.2
BF	29,247	162	270	4.6	958.3	958.3	958.3	0.0
BG	30,033	35	118	10.6	970.0	970.0	970.0	0.0
BH	30,173	41	300	4.2	980.7	980.7	980.7	0.0
BI	30,554	200	1,540	0.8	981.1	981.1	981.1	0.0
BJ	31,052	119	215	5.8	981.1	981.1	981.1	0.0

FEDERAL EMERGENCY MANAGEMENT AGENCY

DOUGLAS COUNTY, GA AND INCORPORATED AREAS

TABLE 9

FLOODWAY DATA

FLOODING SO	URCE		FLOODWAY		1-PERCENT-ANNUAL-CHANCE-FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
BEAR CREEK (CONTINUED)								
BK	31,110	200	507	2.5	983.3	983.3	983.5	0.2
BL	31,527	200	212	5.9	1,000.7	1,000.7	1,000.7	0.0
BM	31,641	403	4,528	0.3	1,001.3	1,001.3	1,001.3	0.0
BN	32,107	384	4,289	0.3	1,001.3	1,001.3	1,001.3	0.0
BO	32,508	186	1,074	1.2	1,001.3	1,001.3	1,001.3	0.0
BP	33,097	30	125	10.0	1,001.7	1,001.7	1,001.7	0.0
BQ	33,151	80	433	2.9	1,006.8	1,006.8	1,007.7	0.9
BR	33,790	119	606	2.1	1,007.5	1,007.5	1,008.4	0.9
BS	34,485	64	205	6.1	1,012.0	1,012.0	1,012.8	0.8
BT	34,560	90	392	3.2	1,015.6	1,015.6	1,016.5	0.9
BU	35,144	30	111	11.3	1,024.1	1,024.1	1,024.1	0.0
BV	35,214	61	454	2.8	1,031.0	1,031.0	1,031.9	0.9
BW	35,869	36	121	10.4	1,040.2	1,040.2	1,040.2	0.0
BX	36,504	57	177	7.1	1,048.3	1,048.3	1,048.7	0.4
BY	36,534	57	311	4.0	1,051.5	1,051.5	1,052.5	1.0
BZ	37,091	51	197	6.4	1,058.0	1,058.0	1,058.7	0.7
CA	37,863	50	167	5.0	1,067.0	1,067.0	1,067.8	0.8
СВ	38,644	55	142	5.8	1,075.3	1,075.3	1,076.3	1.0
CC	39,440	27	95	8.7	1,087.5	1,087.5	1,088.0	0.5
CD	40,010	29	108	7.7	1,094.7	1,094.7	1,095.1	0.4

¹Feet above confluence with Chattahoochee River

TABLE 9

FEDERAL EMERGENCY MANAGEMENT AGENCY

DOUGLAS COUNTY, GA AND INCORPORATED AREAS

FLOODWAY DATA

FLOODING SO	URCE		FLOODWAY		1-PERCENT-ANNUAL-CHANCE-FLOOD WATER SURFACE ELEVATION				
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)	
BEAR CREEK (CONTINUED)									
CE	40,269 ¹	50	138	6.0	1,098.0	1,098.0	1,098.6	0.6	
CF	40,340 ¹	50	253	3.3	1,101.3	1,101.3	1,102.2	0.9	
CG	40,754 ¹	48	97	8.5	1,107.1	1,107.1	1,107.1	0.0	
СН	40,816 ¹	70	225	3.7	1,109.7	1,109.7	1,110.2	0.5	
CI	41,155 ¹	28	82	10.1	1,115.1	1,115.1	1,115.1	0.0	
CJ	41,222 ¹	55	283	2.9	1,119.0	1,119.0	1,119.9	0.9	
СК	41,245 ¹	78	284	2.9	1,119.0	1,119.0	1,119.9	0.9	
CL	41,262 ¹	87	259	3.2	1,119.0	1,119.0	1,119.9	0.9	
CM	41,359 ¹	20	75	11.1	1,120.2	1,120.2	1,120.2	0.0	
CN	41,557 ¹	22	78	10.7	1,122.6	1,122.6	1,123.5	0.9	
CO	41,813 ¹	15	68	12.2	1,128.3	1,128.3	1,129.1	0.8	
BEAR CREEK TRIBUTARY A									
А	211 ²	72	791	0.7	739.1	733.8 ³	734.2	0.4	
В	1,191 ²	11	38	10.5	751.5	751.5	752.0	0.5	
	with Chattabaaa	haa Diyar	³ Elevetion		ut consideration of	f bookwatar offar	to from Chattaba		
Feet above confluence	with Bear Creek								
FEDERAL EMERG	ENCY MANAGEN	IENT AGENCY			FLOC	DWAY D	ΑΤΑ		
DOUGLA	S COUNT	TY, GA							
	RPORATED	AREAS		BEAR C	REEK – BI	EAR CREI	EK TRIBU	FARY A	

FLOODING SO	URCE		FLOODWAY		1-PERCENT-ANNUAL-CHANCE-FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
BEAR CREEK TRIBUTARY B								
А	119	32	229	1.3	740.9	735.2 ²	736.0	0.8
В	1,081	22	38	7.9	757.8	757.8	757.8	0.0
С	1,302	85	1,323	0.2	779.9	779.9	780.9	1.0
D	1,733	11	35	8.5	780.0	780.0	780.3	0.3
BEAR CREEK TRIBUTARY C								
А	173	264	3,208	0.2	756.4	756.4	757.3	0.9
В	1,398	23	81	8.6	763.1	763.1	763.6	0.5
С	2,151	25	75	9.3	776.4	776.4	776.5	0.1
D	2,196	58	193	3.6	779.0	779.0	780.0	1.0
E	2,571	24	106	6.6	782.2	782.2	782.9	0.7
BEAR CREEK TRIBUTARY D								
А	195	32	185	3.3	761.9	761.9	762.8	0.9
В	689	16	45	9.4	768.5	768.5	768.5	0.0
С	1,245	15	52	8.1	796.7	796.7	797.1	0.4
D	1,352	15	190	2.2	810.7	810.7	811.4	0.7
E	1,399	160	1,350	0.3	810.7	810.7	811.5	0.8
F	1,499	95	386	1.1	813.4	813.4	813.4	0.0
G	1,862	20	68	6.2	819.6	819.6	820.5	0.9

¹ Feet above confluence with Bear Creek

TABLE

9

²Elevation computed without consideration of backwater effects from Chattahoochee River

FEDERAL EMERGENCY MANAGEMENT AGENCY

DOUGLAS COUNTY, GA AND INCORPORATED AREAS

FLOODWAY DATA

BEAR CREEK TRIBUTARY B – BEAR CREEK TRIBUTARY C – BEAR CREEK TRIBUTARY D

	FLOODING SO	JRCE		FLOODWAY		1-PE	RCENT-ANNUA WATER SURFA	L-CHANCE-FLO CE ELEVATION	OD		
	CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)		
	BEAR CREEK TRIBUTARY E										
	А	214	25	117	2.3	775.2	775.2	776.1	0.9		
	В	1,176	135	63	3.9	824.5	824.5	824.5	0.0		
	С	1,269	217	1,212	0.2	824.7	824.7	824.7	0.0		
	D	1,728	234	1,316	0.2	824.7	824.7	824.7	0.0		
	Е	2,140	18	32	7.5	826.8	826.8	826.8	0.0		
	BEAR CREEK TRIBUTARY F										
	А	166	18	81	10.8	819.2	819.2	819.6	0.4		
	В	1,064	24	72	9.8	835.8	835.8	835.8	0.0		
	С	1,438	13	63	11.1	844.4	844.4	844.5	0.1		
	D	2,455	66	129	5.5	861.2	861.2	861.4	0.2		
	Е	2,511	70	450	1.6	871.6	871.6	872.5	0.9		
	F	3,079	50	105	6.7	885.0	885.0	885.0	0.0		
	G	3,210	50	650	1.1	900.1	900.1	901.0	0.9		
	Н	3,545	11	56	12.6	900.9	900.9	901.2	0.3		
	¹ Feet above confluence v	with Bear Creek									
+					FLOODWAY DATA						
] 	AND INCO	RPORATED	AREAS		BEAR CREEK TRIBUTARY E – BEAR CREEK TRIBUTARY F						

FLOODING SO	URCE		FLOODWAY	,	WATER SURFACE ELEVATION				
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)	
BEAR CREEK TRIBUTARY G									
А	278 ¹	20	45	8.2	834.4	834.4	834.4	0.0	
В	1,251 ¹	17	42	8.8	899.7	899.7	899.7	0.0	
С	2,080 ¹	38	54	6.8	937.0	937.0	937.0	0.0	
D	2,542 ¹	31	44	8.2	957.0	957.0	957.0	0.0	
Е	2,624 ¹	32	256	1.4	964.1	964.1	965.1	1.0	
F	2,917 ¹	13	38	9.6	967.0	967.0	967.2	0.2	
BEAVER CREEK									
А	3,602 ²	833	19,732	0.2	897.3	897.3	897.3	0.0	
В	5,416 ²	1,161	14,393	0.3	897.3	897.3	897.3	0.0	
С	7,889 ²	672	5,479	3.5	897.3	897.3	897.3	0.0	
D	8,471 ²	200	1,767	7.9	899.3	899.3	899.4	0.1	
Е	10,259 ²	490	4,222	3.4	903.0	903.0	903.0	0.0	
F	12,247 ²	48	377	16.1	911.0	911.0	911.0	0.0	
G	14,036 ²	598	6,747	1.0	914.3	914.3	914.3	0.0	
Н	15,882 ²	203	2,636	2.6	926.3	926.3	926.9	0.6	
I	17,220 ²	486	2,947	0.6	926.6	926.6	927.4	0.8	
J	18,800 ²	412	1,001	1.8	935.1	935.1	935.1	0.0	
К	20,488 ²	100	358	10.3	947.1	947.1	947.5	0.4	
Feet above confluence	with Bear Creek								
Feet above confluence	with Sweetwater	Creek							
FEDERAL EMERG	ENCY MANAGEM	ENT AGENCY	/		FL OO		ΔΤΔ		
	S COUNT	Y. GA							
		.,							

9

FLOODWAY DATA

BEAR CREEK TRIBUTARY G – BEAVER CREEK

ſ	FLOODING SO	URCE		FLOODWAY		1-PE	RCENT-ANNUA WATER SURFA	L-CHANCE-FLO CE ELEVATION	OD			
	CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)			
	BEAVER CREEK (CONTINUED)											
	È L	21,661 ¹	149	346	10.4	959.0	959.0	959.1	0.1			
	Μ	22,643 ¹	21	53	9.0	967.9	967.9	967.9	0.0			
	Ν	23,505 ¹	22	53	9.8	981.0	981.0	981.0	0.0			
	0	24,129 ¹	73	105	7.9	996.0	996.0	996.4	0.4			
	BEAVER CREEK											
	A	1,024 ²	111	147	1.9	916.6	916.6	916.6	0.0			
	В	1,978 ²	316	2,638	0.1	942.0	942.0	942.0	0.0			
	С	2,391 ²	149	460	1.1	950.6	950.6	950.6	0.0			
	BOMAR BRANCH											
	A	3,051 ³	100	619	1.1	896.4	896.4	896.4	0.0			
	В	3,791 ³	16	61	11.4	896.4	896.4	896.4	0.0			
	С	4,220 ³	20	79	8.8	902.0	902.0	902.0	0.0			
	D	5,062 ³	45	354	2.0	921.8	921.8	922.8	1.0			
	E	5,284 ³	33	210	3.3	921.9	921.9	922.8	0.9			
	F	5,570 ³	27	284	2.4	932.2	932.2	933.1	0.9			
	G	5,982 ³	29	303	2.3	938.4	938.4	939.3	0.9			
	Н	6,157 ³	50	338	2.1	938.5	938.5	939.4	0.9			
	¹ Feet above confluence v ² Feet above confluence v ³ Feet above confluence v	with Sweetwater with Beaver Crew with Anneewake	Creek ek e Creek									
↓				,	FLOODWAY DATA							
] 7 2	AND INCOM	DOUGLAS COUNTY, GA AND INCORPORATED AREAS				BEAVER CREEK – BOMAR BRANCH						

FLOODING SO	URCE		FLOODWAY	,	1-PE	RCENT-ANNUA WATER SURFA	AL-CHANCE-FLO CE ELEVATION	OD
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
CAMP BRANCH			,	/				
А	878 ¹	50	208	6.5	975.0	975.0	975.6	0.6
В	1,961 ¹	58	199	6.5	986.7	986.7	986.8	0.1
С	3,222 ¹	32	129	10.0	1,002.8	1,002.8	1,003.5	0.7
D	5,023 ¹	87	210	4.6	1,023.8	1,023.8	1,024.2	0.4
E	6,418 ¹	48	112	6.4	1,035.6	1,035.6	1,035.6	0.0
F	7,679 ¹	15	63	8.1	1,056.0	1,056.0	1,056.6	0.6
CAMP BRANCH TRIBUTARY A								
A	469 ²	18	28	7.8	1,056.6	1,056.6	1,056.6	0.0
¹ Feet above confluence v	with Hurricane (Creek						
² Feet above confluence	with Camp Brar	nch						
FEDERAL EMERG	ENCY MANAGEN	MENT AGENCY	,		FLOC	DWAY D	ΑΤΑ	
DOUGLA AND INCO	AS COUN RPORATED	TY, GA AREAS		CAMP BR	ANCH – C	AMP BRA	NCH TRIB	UTARY A

FLOODING SOL	JRCE		FLOODWAY		1-PE	RCENT-ANNUA WATER SURFA	L-CHANCE-FLO CE ELEVATION	OD		
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)		
CHAPEL FARMS CREEK										
А	755 ¹	141	635	5.9	772.2	772.2	773.1	0.9		
В	1,877 ¹	56	182	9.3	801.8	801.8	801.8	0.0		
С	2,670 ¹	92	278	6.1	852.7	852.7	852.9	0.2		
D	3,462 ¹	24	143	11.8	871.7	871.7	872.1	0.4		
E	4,281 ¹	28	133	9.6	884.7	884.7	884.9	0.2		
F	4,808 ¹	27	111	11.5	888.3	888.3	888.3	0.0		
G	4,907 ¹	31	227	5.7	896.4	896.4	896.4	0.0		
Н	5,801 ¹	130	376	3.4	899.6	899.6	900.6	1.0		
I	6,604 ¹	50	179	7.1	906.4	906.4	907.3	0.9		
J	7,329 ¹	46	202	3.0	916.6	916.6	917.6	1.0		
CHAPEL FARMS CREEK TRIBUTARY A										
А	396 ²	14	55	7.9	913.5	913.5	913.8	0.3		
В	1,020 ²	28	102	4.3	920.4	920.4	921.3	0.9		
¹ Feet above confluence w	vith Anneewake	e Creek								
² Feet above confluence w	vith Chapel Fari	ms Creek								
FEDERAL EMERGE	NCY MANAGEM	IENT AGENCY			FLOC	DWAY D	ΑΤΑ			
DOUGLA	S COUN	TY. GA								
AND INCOR	RPORATED	AREAS	CI	CHAPEL FARMS CREEK – CHAPEL FARMS CREEK TRIBUTARY A						

FLOODING SO	URCE		FLOODWAY		1-PE	RCENT-ANNUA	L-CHANCE-FLO CE ELEVATION	OD
CROSS SECTION	DISTANCE ¹	WIDTH ² (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
CHATTAHOOCHEE RIVER								
BC	69.9	344/530	12,122	4.9	730.6	730.6	731.3	0.7
BD	70.2	653/855	16,613	3.6	731.6	731.6	732.2	0.6
BE	71.0	1,050/1,200	19,551	3.1	732.9	732.9	733.9	1.0
BF	73.0	794/1,100	19,767	2.9	736.5	736.5	737.5	0.9
BG	73.8	1,344/1,834	28,706	2.0	737.8	737.8	738.6	0.9
BH	74.2	926/1,376	20,884	2.7	738.3	738.3	739.1	0.9
BI	76.2	1,780/1,970	24,149	2.3	741.3	741.3	742.2	0.9
BJ	76.9	702/1,400	23,409	2.4	742.4	742.4	743.3	1.0
BK	77.2	251/1,195	20,160	2.8	742.6	742.6	743.5	0.9
BL	77.6	416/900	17,145	3.3	743.2	743.2	744.1	0.8
BM	78.3	287/1,200	19,444	2.9	745.1	745.1	745.9	0.9
BN	78.6	179/1,200	21,306	2.6	745.5	745.5	746.4	0.9
BO	79.9	566/1,200	22,679	2.5	747.1	747.1	748.1	0.9
BP	80.9	540/806	17,191	3.1	748.5	748.5	749.3	0.9
BQ	81.1	449/679	17,792	3.0	748.9	748.9	749.7	0.8
BR	82.8	879/1,915	30,758	1.7	750.6	750.6	751.5	0.9
BS	83.7	160/924	14,332	3.6	751.4	751.4	752.3	1.0
BT	84.0	316/725	14,956	3.5	752.1	752.1	753.0	0.9
BU	84.3	848/848	17,266	3.0	752.6	752.6	753.4	0.8
BV	85.4	500/825	16,559	3.1	754.0	754.0	754.9	0.9
Miles above West Lake	Dam							
width within county / To	otal width							
FEDERAL EMERG	ENCY MANAGEI	MENT AGENCY			FLOO	DWAY D	ΑΤΑ	
DOUGLA AND INCO	DOUGLAS COUNTY, GA AND INCORPORATED AREAS				CHATTA	HOOCHE	ERIVER	

	AND INCOR	PORATED	AREAS		CHATTAHOOCHEE RIVER					
1 > 1						FLOC	DWAY D			
	Width within county / Tot	al width								
L	¹ Miles above West Lake I	Dam		1	1	1		l		
	CC	90.4	386/721	15,473	2.8	759.3	759.3	760.0	0.7	
	СВ	90.2	333/638	13,121	3.3	758.7	758.7	759.4	0.7	
	CA	90.0	920/1 326	19 594	2.2	758.6	758.6	7594	0.9	
	Bĭ P7	88.1	793/1,041	18,230	2.4	750.5	750.5	757.4	0.8	
	BX	87.0	502/1,637	31,322	1.7	755.7	755.7	756.6	0.8	
	BW	85.7	81/887	19,053	2.7	754.6	754.6	755.3	0.8	
	CHATTAHOOCHEE RIVER (CONTINUED)									
	CROSS SECTION	DISTANCE ¹	WIDTH ² (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)	
	FLOODING SOL	IRCE		FLOODWAY		1-PE	RCENT-ANNUA WATER SURFA	L-CHANCE-FLO CE ELEVATION	OD	

O P Q R	5,591 5,971 6,537 7,353	271 401 111 12	3,165 4,763 1,283 44	0.2 0.1 0.4 11 1	929.4 929.4 929.4 944.3	929.4 929.4 929.4 944.3	929.9 929.9 929.9 944 6	0.5 0.5 0.5 0.3
N	5,206 5,325	377	43 4,496	0.1	927.7 929.4	927.7 929.4	927.7 929.9	0.0
L	4,468	234	1,894	0.3	887.6	887.6	888.1	0.5
J K	3,599 4,118	197 388	1,596 3,142	0.3 0.2	887.6 887.6	887.6 887.6	888.1 888.1	0.5 0.5
I .	3,525	58	107	4.6	886.9	886.9	886.9	0.0
G H	2,768 2.917	17 96	50 367	9.8 1.3	860.2 865.6	860.2 865.6	860.2 866.4	0.0 0.8
F	2,126	16	54	10.9	857.3	857.3	857.3	0.0
DE	1,564 2.053	11 15	53 53	11.1 11.0	829.4 856.1	829.4 856.1	829.8 856.1	0.4 0.0
С	1,009	25	83	7.1	822.3	822.3	822.3	0.0
A	501 995	20 25	62 85	9.5 6.9	816.2 821.4	816.2 821.4	817.1 821.8	0.9 0.4
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)

	URCE		FLOODWAY		1-PE	RCENT-ANNUA WATER SURFA	L-CHANCE-FLO CE ELEVATION	OD
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
CROOKED CREEK								
А	968	305	1,337	2.5	875.1	875.1	876.1	1.0
В	2,264	120	691	4.8	878.6	878.6	879.6	1.0
С	3,115	424	1,948	1.7	882.8	882.8	883.8	1.0
D	3,151	270	1,286	2.6	882.8	882.8	883.8	1.0
E	4,164	130	510	6.6	884.5	884.5	885.5	1.0
F	5,318	177	792	4.5	889.0	889.0	889.7	0.7
G	6,373	200	892	4.0	892.7	892.7	893.7	1.0
Н	6,434	200	1,439	2.5	896.2	896.2	897.1	0.9
I	7,697	125	613	4.3	898.0	898.0	899.0	1.0
J	8,501	170	661	4.0	900.3	900.3	901.1	0.8
К	8,842	190	413	9.6	902.1	902.1	902.3	0.2
L	8,926	190	1,571	1.7	908.5	908.5	908.8	0.3
Μ	9,490	192	1,402	1.7	908.7	908.7	909.0	0.3
Ν	10,414	68	468	5.1	913.9	913.9	914.1	0.2
0	10,684	30	251	8.7	913.9	913.9	914.5	0.6
Р	11,275	50	302	7.2	917.8	917.8	918.7	0.9
Q	12,064	45	239	9.1	923.1	923.1	923.8	0.7
R	13,022	35	169	8.6	931.6	931.6	932.4	0.8
S	14,263	75	188	7.7	945.2	945.2	945.3	0.1
Т	14,923	40	149	9.8	953.6	953.6	953.6	0.0
	11001	65	469	24	000.0			

FLOODING SO	JRCE		FLOODWAY	,	1-PE	RCENT-ANNUA WATER SURFA	AL-CHANCE-FLO CE ELEVATION	OD			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)			
CROOKED CREEK (CONTINUED)											
V	16,278 ¹	55	181	8.0	967.6	967.6	967.6	0.0			
W	17,433 ¹	60	173	6.4	983.1	983.1	984.0	0.9			
Х	18,249 ¹	113	232	4.8	1,000.4	1,000.4	1,000.4	0.0			
Y	18,807 ¹	37	121	9.2	1,011.0	1,011.0	1,011.0	0.0			
Z	18,874 ¹	37	455	2.4	1,020.7	1,020.7	1,021.5	0.8			
CROOKED CREEK TRIBUTARY A											
А	1,333 ²	107	202	5.0	925.3	925.3	925.9	0.6			
В	2,537 ²	65	296	2.7	925.9	925.9	926.9	1.0			
С	3,352 ²	40	151	5.2	930.5	930.5	931.4	0.9			
D	4,268 ²	40	86	9.2	942.5	942.5	942.5	0.0			
CROOKED CREEK TRIBUTARY B											
А	336 ²	130	675	0.9	908.7	908.7	909.2	0.5			
В	1,509 ²	33	69	8.8	924.8	924.8	924.8	0.0			
С	1,942 ²	29	121	5.0	929.5	929.5	930.4	0.9			
D	2,044 ²	29	295	2.1	938.3	938.3	939.2	0.9			
Е	2,282 ²	18	118	5.1	938.3	938.3	939.2	0.9			
¹ Feet above confluence	with Anneewake	e Creek									
Feet above confluence	with Crooked Cr	eek									
FEDERAL EMERGI	ENCY MANAGEM	IENT AGENCY	,	FLOODWAY DATA							
DOUGLA	S COUNT	ΓY, GA	_								
AND INCO	RPORATED	AREAS		CR			EK – BUTARY /	4 – B			

FLOODING SO	JRCE		FLOODWAY	,	1-PERCENT-ANNUAL-CHANCE-FLOOD WATER SURFACE ELEVATION				
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)	
CROOKED CREEK TRIBUTARY C									
А	301	29	119	5.2	914.1	914.1	915.1	1.0	
В	980	37	244	2.5	924.3	924.3	925.2	0.9	
С	1,573	55	244	2.5	934.2	934.2	934.7	0.5	
D	1,965	24	95	6.5	934.4	934.4	934.8	0.4	
CROOKED CREEK TRIBUTARY D									
А	114	20	110	4.2	930.9	930.9	931.8	0.9	
В	718	73	88	5.2	948.6	948.6	949.2	0.6	
С	802	310	2,998	0.2	948.8	948.8	949.8	1.0	
D	1,865	34	55	7.3	963.4	963.4	963.4	0.0	
E	1,944	357	3,294	0.1	964.3	964.3	964.3	0.0	
F	2,557	151	330	5.1	964.3	964.3	964.3	0.0	
G	2,604	129	315	1.3	968.0	968.0	968.1	0.1	
Н	2,876	11	54	7.4	968.7	968.7	969.6	0.9	
Feet above confluence v	with Crooked Cr	eek							
FEDERAL EMERGE	ENCY MANAGEN	IENT AGENCY	,		FLOO	DWAY D	ΑΤΑ		
DOUGLAS COUNTY, GA AND INCORPORATED AREAS				CROOKED CREEK TRIBUTARY C –					

FLOODING SO	URCE		FLOODWAY	,	1-PE	RCENT-ANNUA WATER SURFA	L-CHANCE-FLC CE ELEVATION	OOD
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
CROSSING BRANCH								
А	1,028 ¹	65	157	3.7	904.7	902.6 ^³	903.5	0.9
В	1,468 ¹	40	131	4.4	906.7	906.7	907.2	0.5
С	2,029 ¹	40	106	5.4	911.8	911.8	912.1	0.3
D	2,061 ¹	40	170	3.4	913.6	913.6	914.5	0.9
E	2,3541	34	113	5.1	914.8	914.8	915.2	0.4
F	2,600 ¹	455	6,489	0.1	946.0	946.0	946.0	0.0
G	2,902 ¹	646	10,271	0.1	946.0	946.0	946.0	0.0
Н	3,745 ¹	330	5,215	0.1	946.0	946.0	946.0	0.0
1	4,210 ¹	88	164	4.2	946.0	946.0	946.0	0.0
J	5,284¹	63	117	5.9	963.2	963.2	963.3	0.1
К	6,342 ¹	25	111	6.3	984.9	984.9	985.5	0.6
DOG RIVER								
A	1415 [°]	527	5,340	3.6	735.5	730.2 ⁴	731.1	0.9
¹ Feet above confluence ³ Elevation computed with	with Anneewake	ee Creek	er effects from	Anneewakee	² Feet above co	onfluence with Ch computed without	hattahoochee Riv	ver If backwater
				Anneewakee	effects fror	n Chattahooche	e River	
FEDERAL EMERG			<i>,</i>		FLOO	DWAY D	ΑΤΑ	
	AS COUN RPORATED	IY, GA AREAS		CR	OSSING B	RANCH –	DOG RIV	ER

	DOUGLA AND INCOR	S COUNT	'Y, GA AREAS		DORSETT CREEK						
+ >	FEDERAL EMERGE	NCY MANAGEM	IENT AGENCY			FLOC	DWAY D	ΑΤΑ			
	² Includes combined flood	way width with I	Bear Creek		computed without	ut consideration of	Dackwater effec	is nom Bear Cre	υĸ		
L	U ¹ East above confluence ::	1,966	117	980 ³ Elovation a		1,058.7	1,058.7	1,059.7	1.0		
		7,883	44	438	1.0	1,058.7	1,058.7	1,059.6	0.9		
	S T	7,788	21	120	3.6	1,050.6	1,050.6	1,051.5	0.9		
	ĸ	7,562	47	321	1.3	1,050.6	1,050.6	1,051.5	0.9		
	Q	7,467	24	118	3.6	1,044.3	1,044.3	1,045.2	0.9		
	P	7,180	270	1,407	0.3	1,044.3	1,044.3	1,045.2	0.9		
	0	6,740	514	2,682	0.2	1,044.3	1,044.3	1,045.2	0.9		
	Ν	6,697	101	91	4.7	1,044.1	1,044.1	1,044.8	0.7		
	Μ	6,077	55	272	1.6	1,026.3	1,026.3	1,026.8	0.5		
	L	6,001	190	128	3.3	1,022.9	1,022.9	1,023.5	0.6		
	K	5,853	315	1,404	0.3	1,022.9	1,022.9	1,023.5	0.6		
	J	5,791	13	42	10.1	1,021.6	1,021.6	1,021.8	0.2		
	I	5,166	18	166	2.6	1,009.8	1,009.8	1,010.4	0.6		
	Н	5,141	15	76	5.6	1,005.2	1,005.2	1,006.2	1.0		
	G	4,386	18	55	7.8	993.5	993.5	993.9	0.4		
	F	3,497	51	298	1.4	980.9	980.9	980.9	0.0		
	E	3,414	16	72	9.7	975.6	975.6	976.0	0.4		
	D	2,678	15	69	10.1	965.0	965.0	965.3	0.3		
	С	1,474	18	88	7.8	944.7	944.7	945.7	1.0		
	В	918	10	55	12.5	940.1	940.1	940.4	0.3		
	A	51	366^{2}	189	5.6	935.5	933.0 ³	933.7	0.7		
-	DORSETT CREEK			1 2 2 1 /	OLOOND)						
	CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEFT)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)		
	FLOODING SOL	IRCE		FLOODWAY		1-PE	RCENT-ANNUA	L-CHANCE-FLO CE ELEVATION	OD		

FLOODING SO	URCE		FLOODWAY		1-PE	RCENT-ANNUA WATER SURFA	L-CHANCE-FLO CE ELEVATION	OD	
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)	
DORSETT CREEK (CONTINUED)									
ν , Υ	7,989 ¹	117	967	0.4	1,058.7	1,058.7	1,059.7	1.0	
W	8,271 ¹	36	136	3.1	1,058.7	1,058.7	1,059.7	1.0	
DRY CREEK									
А	1,884 ²	432	7,178	0.2	898.0	898.0	898.0	0.0	
В	3,787 ²	150	1,078	2.6	898.3	898.3	898.3	0.0	
С	5,361 ²	150	515	5.0	900.4	900.4	900.7	0.3	
D	6,857 ²	105	416	4.8	911.4	911.4	911.4	0.0	
E	8,149 ²	50	287	7.0	919.4	919.4	920.0	0.6	
F	9,883 ²	75	273	4.0	929.7	929.7	930.6	0.9	
G	10,906 ²	175	1,060	1.0	939.0	939.0	939.9	0.9	
Н	12,432 ²	30	87	6.6	951.3	951.3	951.8	0.5	
I	13,480 ²	50	95	6.1	966.9	966.9	967.1	0.2	
J	14,461 ²	11	42	7.2	978.2	978.2	978.8	0.6	
Feet above confluence	with Bear Creek with Beaver Creek	ek							
FEDERAL EMERG	ENCY MANAGEN	IENT AGENCY	,	FLOODWAY DATA					
DOUGLAS COUNTY, GA AND INCORPORATED AREAS				DORSETT CREEK – DRY CREEK					

FLOODING	SOURCE		FLOODWAY	,	1-PE	RCENT-ANNUA WATER SURFA	L-CHANCE-FLO	OD	
CROSS SECTIC	N DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)	
DRY CREEK TRIBUTARY A									
А	740	43	161	5.9	901.0	901.0	901.6	0.6	
В	2,221	15	92	10.4	917.1	917.1	917.9	0.8	
DRY CREEK TRIBUTARY B									
А	715	6	24	10.9	935.5	935.5	935.8	0.3	
DRY CREEK TRIBUTARY C									
А	1,453	25	87	5.8	963.5	963.5	964.0	0.5	
Feet above conflue	nce with Dry Creek								
FEDERAL EM					FLOC	DWAY D	ΑΤΑ		
DOUGLAS COUNTY, GA AND INCORPORATED AREAS				DRY CREEK TRIBUTARY A – DRY CREEK TRIBUTA B – DRY CREEK TRIBUTARY C					

ן כר

C

FLOODING SO	URCE		FLOODWAY		1-PE	RCENT-ANNUA WATER SURFA	L-CHANCE-FLO CE ELEVATION	OD	
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)	
FARM BRANCH									
Α	1.431^{2}	44	131	6.9	889 1	889 1	889.6	0.5	
В	2.014^2	55	364	2.9	900.4	900.4	901.1	0.7	
С	3.015^2	33	99	9.2	913.7	913.7	913.7	0.0	
D	3,488 ²	57	333	2.7	927.4	927.4	928.2	0.8	
FARM BRANCH TRIBUTARY A									
А	1,145 ³	91	92	5.1	894.5	894.5	895.0	0.5	
В	1,221 ³	212	1,140	0.4	894.7	894.7	895.5	0.8	
С	1,771 ³	40	204	2.3	903.6	903.6	904.3	0.7	
D	2,420 ³	85	707	1.4	921.1	921.1	921.7	0.6	
Е	3,205 ³	11	49	9.4	928.3	928.3	928.6	0.3	
F	3,836 ³	14	60	7.7	941.8	941.8	942.8	1.0	
Feet above confluence	with Anneewake	e Creek							
FEDERAL EMERG	ENCY MANAGEN	IENT AGENCY			FLOC	DWAY D	ΑΤΑ		
	S COUNT	TY. GA							
AND INCORPORATED AREAS				FARM BRANCH - FARM BRANCH TRIBUTARY A					

FLOODING SO	JRCE		FLOODWAY		1-PE	RCENT-ANNUA WATER SURFA	L-CHANCE-FLO CE ELEVATION	OD
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
GORDON CREEK								
A	3,903 ¹	437	4,634	0.8	897.5	897.5	897.5	0.0
GOTHARDS CREEK								
A	14,258 ²	309	3,064	1.8	909.0	909.0	909.7	0.7
В	18,077 ²	337	2,476	2.2	912.0	912.0	912.6	0.6
С	31,867 ²	196	1,886	2.3	926.7	926.7	927.6	0.9
D	33,983 ²	180	1,694	2.5	927.6	927.6	928.6	1.0
E	37,765 ²	439	3,420	1.3	930.9	930.9	931.9	1.0
F	40,087 ²	443	2,392	1.8	931.5	931.5	932.5	1.0
G	43,180 ²	428	3,550	1.2	939.3	939.3	940.2	0.9
н	46,300 ²	394	2,794	1.3	945.3	945.3	946.3	1.0
I	47,585 ²	402	1,820	1.9	946.3	946.3	947.3	1.0
J	50,717 ²	146	963	1.5	956.0	956.0	956.1	0.1
¹ Feet above confluence v	vith Hurricane (rook						
² Feet above confluence v	vith Sweetwater	Creek						
FEDERAL EMERGE	ENCY MANAGEN	IENT AGENCY	,		FLOC	DWAY D	ΑΤΑ	
AND INCOR	RPORATED	GORDON CREEK – GOTHARDS CREEK						

	FLOODING SOL	JRCE		FLOODWAY	,	1-PE	RCENT-ANNUA WATER SURFA	AL-CHANCE-FLO CE ELEVATION	OD		
	CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)		
	GOTHARDS CREEK (CONTINUED)										
	K	52,979 ¹	172	632	2.0	959.5	959.5	960.2	0.7		
	L	54,781 ¹	404	1,538	0.1	967.6	967.6	967.8	0.2		
	М	57,683 ¹	334	1,361	0.6	979.5	979.5	980.1	0.6		
	Ν	59,922 ¹	78	261	2.5	986.1	986.1	986.8	0.7		
	0	60,620 ¹	81	286	2.3	990.2	990.2	990.8	0.6		
	Р	62,305 ¹	195	493	1.5	998.6	998.6	998.6	0.0		
	Q	64,174 ¹	56	158	3.5	1,014.0	1,014.0	1,015.0	1.0		
	R	64,767 ¹	200	790	0.5	1,025.7	1,025.7	1,026.0	0.3		
	S	65,421 ¹	26	37	5.8	1,026.2	1,026.2	1,026.3	0.1		
	GOTHARDS CREEK TRIBUTARY 1										
	А	893 ²	37	110	3.4	906.7	906.7	907.7	1.0		
	GOTHARDS CREEK TRIBUTARY 2										
	А	771 ²	13	23	3.3	911.0	911.0	911.0	0.0		
	В	1.206 ²	11	17	4.4	920.8	920.8	921.1	0.3		
	С	1,475 ²	21	29	2.7	946.1	946.1	946.4	0.3		
	D	2,794 ²	191	707	0.7	965.8	965.8	965.8	0.0		
	E	3,499 ²	103	296	1.2	977.1	977.1	977.6	0.5		
	¹ Feet above confluence v ² Feet above confluence v	vith Sweetwater vith Gothards C	r Creek reek	·	·			·			
+	FEDERAL EMERGE		IENT AGENCY			FLOO	DWAY D	ATA			
ת	DOUGLA	S COUN ⁻	ΓΥ. GA								
Ξ Π 9	AND INCOF	PORATED	AREAS	GO	THARDS 1–G	CREEK- G OTHARDS	OTHARD	S CREEK RIBUTAR	TRIBUTAF Y 2		

FLOODING SO	URCE		FLOODWAY		1-PE	RCENT-ANNUA	L-CHANCE-FLO CE ELEVATION	OD		
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)		
GOTHARDS CREEK TRIBUTARY 2.1										
A	294 ¹	150	671	0.2	906.7	906.7	906.9	0.2		
В	732 ¹	15	17	6.0	914.4	914.4	914.5	0.0		
С	963 ¹	13	25	4.0	922.6	922.6	922.9	0.3		
GOTHARDS CREEK TRIBUTARY 3										
A	661 ¹	137	285	3.4	908.9 ³	908.9	909.9	1.0		
В	1,591 ¹	66	259	2.8	915.8	915.8	916.8	1.0		
С	2,466 ¹	19	91	5.9	927.3	927.3	928.1	0.8		
D	2,846 ¹	11	22	8.0	968.7	968.7	968.8	0.1		
E	3,367 ¹	14	41	4.3	980.0	980.0	980.8	0.8		
F	3,795 ¹	9	20	8.4	1,021.0	1,021.0	1,021.5	0.5		
G	4,566 ¹	57	229	0.7	1,051.8	1,051.8	1,052.0	0.2		
н	5,084 ¹	146	677	0.3	1,072.6	1,072.6	1,072.6	0.0		
I	5,596 ¹	42	31	4.8	1,082.8	1,082.8	1,082.8	0.0		
J	5,967 ¹	49	44	4.7	1,083.4	1,083.4	1,083.5	0.1		
GOTHARDS CREEK TRIBUTARY 3.1										
А	530 ²	13	26	7.7	932.0	932.0	932.2	0.2		
В	716 ²	12	26	7.8	963.9	963.9	963.9	0.0		
С	1,214 ²	16	39	6.9	985.5	985.5	985.7	0.2		
¹ Feet above confluence v	with Gothards C	reek	:	³ Elevation comp	outed without cons	ideration of back	water effects from	n Gothards		
² Feet above confluence	with Gothards C	reek Tributary	3	Стеек	_			_		
FEDERAL EMERGE	ENCY MANAGEN	IENT AGENCY			FLOC	DWAY D				
	S COUN	TY, GA	G	GOTHARDS CREEK TRIBUTARY 2.1–GOTHARDS						
		ANLAG		CREEK	(TRIBUTA TRI	RY 3–GO	THARDS C	REEK		

	FLOODING SOL	IRCE		FLOODWAY		1-PE	RCENT-ANNUA WATER SURFA	L-CHANCE-FLO CE ELEVATION	OD		
	CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)		
	GOTHARDS CREEK TRIBUTARY 3.1 (CONTINUED)										
	D	1,727 ¹	193	1,005	0.3	1,015.4	1,015.4	1,015.5	0.1		
	E	2,350 ¹	10	28	9.4	1,020.7	1,020.7	1,020.8	0.1		
	F	2,894 ¹	75	846	0.4	1,043.2	1,043.2	1,043.3	0.1		
	G	3,566 ¹	21	44	8.0	1,047.0	1,047.0	1,047.6	0.6		
	GOTHARDS CREEK TRIBUTARY 3.2										
	А	2331	21	81	5.6	935.5	935.5	936.5	1.0		
	В	607 ¹	19	72	6.3	941.1	941.1	942.1	1.0		
	GOTHARDS CREEK TRIBUTARY 4										
	А	4,217²	19	83	5.9	936.5	936.5	937.3	0.8		
	В	4,982²	12	48	7.2	946.6	946.6	947.5	0.9		
	¹ Feet above confluence v ² Feet above confluence v	with Gothards (with Gothards (Creek Tributary Creek	y 3							
< + >	FEDERAL EMERGE				FLOODWAY DATA						
RIFO	DOUGLAS COUNTY, GA AND INCORPORATED AREAS				GOTHARDS CREEK TRIBUTARY 3.1–GOTHARDS CREEK TRIBUTARY 3.2–GOTHARDS CREEK TRIUBTARY 4						

FLOODING SOU	JRCE		FLOODWAY	,	1-PE	RCENT-ANNUA WATER SURFA	L-CHANCE-FLO	OD		
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)		
GOTHARDS CREEK TRIBUTARY 4.1										
A	2,863¹	18	65	6.9	957.2	957.2	957.9	0.7		
GOTHARDS CREEK TRIBUTARY 4.1.1										
А	644²	45	120	3.2	936.7	936.7	937.7	1.0		
В	1,918²	17	43	8.0	966.4	966.4	966.6	0.2		
GOTHARDS CREEK TRIBUTARY 6										
А	976 ³	52	167	2.4	928.2	928.2	929.2	1.0		
В	1,846 ³	58	432	0.9	940.6	940.6	941.6	1.0		
GOTHARDS CREEK TRIBUTARY 8										
А	3,142 ³	88	317	4.1	950.7	950.7	951.7	1.0		
В	5,413 ³	94	181	7.1	964.8	964.8	965.8	1.0		
С	5,723 ³	107	444	2.9	969.2	969.2	970.2	1.0		
D	7,150 ³	25	141	5.5	981.2	981.2	981.4	0.2		
E	7,684 ³	22	118	6.5	985.0	985.0	985.6	0.6		
¹ Feet above confluence	with Gothards C	Creek Tributar	y 4							
³ Feet above confluence	with Gothards C	reek indutar Creek	y 4.1							
FEDERAL EMERGE	ENCY MANAGEN	IENT AGENCY	,	FLOODWAY DATA						
	S COUNT	ΓY GΔ								
AND INCOR	RPORATED	AREAS		GOTHARDS CREEK TRIBUTARY 4.1–GOTHARD CREEK TRIBUTARY 4.1.1–GOTHARDS CREEK						

TRIUBTARY 6 – GOTHARDS CREEK TRIBUTARY 8

FLOODING SOL	JRCE		FLOODWAY		1-PE	RCENT-ANNUA	L-CHANCE-FLO CE ELEVATION	OD
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
GOTHARDS CREEK TRIBUTARY 8 (CONTINUED)								
F	9,339 ¹	36	154	5.0	1,008.4	1,008.4	1,009.2	0.8
G	10,744 ¹	17	36	5.5	1,034.9	1,034.9	1,035.2	0.3
Н	11,173 ¹	13	33	6.1	1,073.2	1,073.2	1,074.0	0.8
GOTHARDS CREEK TRIBUTARY 8.1								
A	356²	44	71	7.1	976.6	976.6	976.8	0.2
В	1,202²	383	1,381	0.4	998.6	998.6	999.6	1.0
С	2,557²	25	63	7.6	1,006.0	1,006.0	1,006.8	0.8
GOTHARDS CREEK TRIBUTARY 9								
А	9331	90	366	2.0	946.8	946.8	947.7	0.9
В	2,116¹	50	136	4.4	958.0	958.0	958.8	0.8
GOTHARDS CREEK TRIBUTARY 10								
А	1,396 ¹	52	111	3.8	949.3	949.3	950.0	0.7
В	2,616 ¹	163	638	0.7	961.9	961.9	961.9	0.0
С	3,272 ¹	35	326	1.3	969.9	969.9	970.7	0.8
Feet above confluence	with Gothards C	reek						
² Feet above confluence	with Gothards C	reek Tributar	y 8					
FEDERAL EMERGE					FLOO	DWAY D	ΑΤΑ	
DOUGLA AND INCOF	S COUNT RPORATED	TY, GA AREAS	т	GOTHAR CREEK RIUBTAR	DS CREEK TRIBUTAF Y 9–GOTH	TRIBUTA Y 8.1–GO ARDS CR	ARY 8–GO THARDS EEK TRIU	THARDS CREEK BTARY 1(

FLOODING SOL	JRCE	FLOODWAY			1-PERCENT-ANNUAL-CHANCE-FLOOD WATER SURFACE ELEVATION					
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)		
GOTHARDS CREEK TRIBUTARY 11										
А	1,844 ¹	261	1,155	2.4	954.4	954.4	955.3	0.9		
В	5,039 ¹	102	709	3.9	968.1	968.1	969.0	0.9		
С	7,600 ¹	185	1,203	2.3	972.7	972.7	973.6	0.9		
D	9,848 ¹	76	629	4.3	982.2	982.2	983.1	0.9		
E	11,539 ¹	102	624	3.6	986.0	986.0	987.0	1.0		
F	12,823 ¹	87	423	5.3	990.7	990.7	991.7	1.0		
G	14,390 ¹	101	420	5.1	996.8	996.8	997.4	0.6		
Н	15,503 ¹	108	691	3.1	1,004.5	1,004.5	1,005.4	0.7		
I	16,732 ¹	65	188	5.9	1,007.7	1,007.7	1,008.1	0.4		
J	18,525 ¹	73	331	3.4	1,019.8	1,019.8	1,020.8	1.0		
К	20,612 ¹	20	72	6.7	1,038.2	1,038.2	1,039.0	0.8		
L	21,625 ¹	19	92	5.2	1,054.9	1,054.9	1,055.9	1.0		
GOTHARDS CREEK TRIBUTARY 11.1										
А	509 ²	29	100	5.0	972.6	972.6	973.6	1.0		
В	1,034²	26	120	4.1	980.3	980.3	981.2	0.9		
			,	FLOODWAY DATA						
AND INCOR	RPORATED	AREAS		GOTHARDS CREEK TRIBUTARY 11–GOTHARDS CREEK TRIBUTARY 11.1						

	FLOODING SOL	JRCE		FLOODWAY		1-PE	RCENT-ANNUA WATER SURFA	L-CHANCE-FLO CE ELEVATION	OD		
	CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)		
	GOTHARDS CREEK TRIBUTARY 11.2										
	А	979 ¹	29	110	6.0	991.8	991.8	992.1	0.3		
	В	2,475 ¹	18	65	10.1	1,016.0	1,016.0	1,016.2	0.2		
	С	2,861 ¹	145	790	0.8	1,042.6	1,042.6	1,043.5	0.9		
	D	4,405 ¹	15	52	10.7	1,068.4	1,068.4	1,068.5	0.1		
	GOTHARDS CREEK TRIBUTARY 11.3										
	А	810 ¹	91	356	3.4	1,010.6	1,010.6	1,011.6	1.0		
	В	1,629 ¹	30	137	5.3	1,020.0	1,020.0	1,020.7	0.7		
	С	1,934 ¹	30	155	4.7	1,026.7	1,026.7	1,027.7	1.0		
	D	2,467¹	195	1,251	0.6	1,041.7	1,041.7	1,042.5	0.8		
	GOTHARDS CREEK TRIBUTARY 12										
	А	952²	41	117	5.5	968.3	968.3	968.8	0.5		
	В	1,805²	35	133	4.8	976.9	976.9	977.9	1.0		
	С	2,822²	41	131	3.6	991.3	991.3	992.3	1.0		
	GOTHARDS CREEK TRIBUTARY 15										
	А	1,138²	57	112	3.6	986.0	986.0	986.3	0.3		
	В	2,031²	44	196	1.7	1,001.1	1,001.1	1,002.1	1.0		
_	¹ Feet above confluence	with Gothards C	Creek Tributar	y 11					_		
	² Feet above confluence	with Gothards C	Creek								
7	FEDERAL EMERGE	NCY MANAGEN	IENT AGENCY	,		FLOO	DWAY D	ΑΤΑ			
	DOUGLA	S COUNT	ΓY, GA								
	AND INCOF	RPORATED	AREAS	G	OTHARD CREEK 1	S CREEK	rributaf (11.3 – G	RY 11.2–GO OTHARDS	OTHARDS CREEK		
9					RIBUTAR	Y 12–GOTH	IARDS CF	REEK TRIE	BUTARY 15		

FLOODING SO	URCE		FLOODWAY		1-PE	RCENT-ANNUA WATER SURFA	L-CHANCE-FLO	OD			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)			
HICKORY CREEK											
А	1,111 ¹	108	834	6.0	927.7	927.7	928.3	0.6			
В	2,308 ¹	66	610	8.9	930.3	930.3	930.7	0.4			
С	4,392 ¹	164	880	7.0	938.8	938.8	939.3	0.5			
D	5,716 ¹	171	1,421	1.8	944.6	944.6	945.6	1.0			
E	7,720 ¹	125	646	6.5	951.5	951.5	952.4	0.9			
F	8,913 ¹	43	296	7.6	956.5	956.5	957.0	0.5			
G	10,466 ¹	32	189	10.0	962.7	962.7	963.5	0.8			
Н	12,388 ¹	34	227	7.4	973.3	973.3	974.3	1.0			
I	13,939 ¹	50	314	4.6	982.6	982.6	983.0	0.4			
J	15,795 ¹	36	154	9.2	992.6	992.6	993.4	0.8			
К	17,150 ¹	158	543	1.8	1,007.0	1,007.0	1,007.0	0.0			
L	18,123 ¹	46	74	8.0	1,019.4	1,019.4	1,019.4	0.0			
М	19,170 ¹	22	45	8.6	1,033.7	1,033.7	1,033.7	0.0			
HICKORY CREEK TRIBUTARY A											
А	546 ²	57	70	9.8	972.1	972.1	972.8	0.7			
В	1,518 ²	11	37	10.7	986.0	986.0	986.2	0.2			
HICKORY CREK TRIBUTARY B											
А	796 ²	42	42	7.2	970.2	970.2	970.2	0.0			
В	1,766 ²	26	60	3.7	990.1	990.1	990.2	0.1			
¹ Feet above confluence v	with Beaver Cre	ek ek									
FEDERAL EMERG	FEDERAL EMERGENCY MANAGEMENT AGENCY				FLOODWAY DATA						
DOUGLAS COUNTY, GA AND INCORPORATED AREAS				KORY CI	REEK – HIG ICKORY C	CKORY CH	REEK TRIE BUTARY I	BUTARY B			
FLOODING SO	URCE		FLOODWAY		1-PE	RCENT-ANNUA WATER SURFA	L-CHANCE-FLO CE ELEVATION	OD			
---	-----------------------	-----------------	-------------------------------------	--	---------------------------	------------------------------------	---------------------------------	--------------------			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)			
HICKORY CREEK TRIBUTARY B (CONTINUED)											
С	2,552	12	26	8.3	1,010.6	1,010.6	1,010.6	0.0			
D	3,107	12	25	8.6	1,028.5	1,028.5	1,028.5	0.0			
HICKORY CREEK TRIBUTARY C											
А	732	65	76	7.8	987.3	987.3	987.3	0.0			
В	2,158	22	62	6.5	1,003.0	1,003.0	1,003.0	0.0			
С	2,962	17	58	6.9	1,016.7	1,016.7	1,016.9	0.2			
D	4,000	137	560	0.7	1,036.4	1,036.4	1,037.2	0.8			
HICKORY CREEK TRIBUTARY D											
А	406	91	303	8.1	1,004.4	1,004.4	1,005.2	0.8			
В	981	61	551	2.7	1,020.8	1,020.8	1,021.7	0.9			
С	1,628	325	2,954	0.2	1,041.5	1,041.5	1,041.5	0.0			
HICKORY CREEK TRIBUTARY E											
A	891	11	28	6.5	1,016.5	1,016.5	1,016.6	0.1			
В	1,656	16	25	8.1	1,036.1	1,036.1	1,036.1	0.0			
С	2,465	17	26	7.1	1,056.2	1,056.2	1,056.2	0.0			
¹ Feet above confluence	with Hickory Cre	ek									
FEDERAL EMERG	ENCY MANAGEN	ENT AGENCY	,		FLOO	DWAY D	ΑΤΑ				
DOUGLA	S COUNT	Y, GA									
AND INCO	RPORATED	AREAS	T	RIBUTAF		ORYCRE		TARY D -			
			HICKORY CREEK TRIBUTARY E								

FLOODING SO	URCE		FLOODWAY		1-PE	RCENT-ANNUA WATER SURFA	AL-CHANCE-FLO CE ELEVATION	OD
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
HUEY CREEK								
А	3,247 ¹	219	1,043	2.8	932.8	932.8	933.8	1.0
В	5,071 ¹	82	455	3.9	942.5	942.5	943.0	0.5
С	6,026 ¹	106	497	3.5	947.4	947.4	948.4	1.0
D	7,485 ¹	104	380	4.6	955.7	955.7	956.7	1.0
E	8,384 ¹	101	426	3.6	962.6	962.6	963.2	0.6
F	10,571 ¹	50	194	5.5	978.3	978.3	979.2	0.9
G	11,160 ¹	52	246	4.3	983.4	983.4	984.4	1.0
Н	12,268 ¹	78	544	1.7	997.1	997.1	998.1	1.0
I	13,111 ¹	36	133	4.9	1,008.9	1,008.9	1,009.8	0.9
J	14,415 ¹	19	66	7.5	1,026.5	1,026.5	1,027.3	0.8
K	15,529 ¹	10	32	6.7	1,049.4	1,049.4	1,050.0	0.6
L	16,211 ¹	13	45	4.7	1,075.2	1,075.2	1,075.9	0.7
HUEY CREEK TRIBUTARY 1								
А	460 ²	24	152	10.3	940.2	940.2	941.2	1.0
В	955 ²	44	251	6.3	956.2	956.2	957.1	0.9
С	4,041 ²	158	436	3.6	978.4	978.4	979.4	1.0
D	6,145 ²	108	340	4.6	999.5	999.5	1,000.5	1.0
Е	7,146 ²	54	180	6.0	1,012.1	1,012.1	1,012.4	0.3
F	9,399 ²	36	164	6.6	1,053.1	1,053.1	1,053.7	0.6
G	10,136 ²	21	55	7.6	1,062.3	1,062.3	1,062.7	0.4

¹Feet above confluence with Gothards Creek

²Feet above confluence with Huey Creek

TABLE

9

FEDERAL EMERGENCY MANAGEMENT AGENCY

DOUGLAS COUNTY, GA AND INCORPORATED AREAS

FLOODWAY DATA

HUEY CREEK- HUEY CREEK TRIBUTARY 1

FLOODING SOL	JRCE		FLOODWAY		1-PE	RCENT-ANNUA WATER SURFA	AL-CHANCE-FLO	OD
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
HUEY CREEK TRIBUARY 1.1								
А	469 ¹	15	49	10.3	1,031.2	1,031.2	1,031.7	0.5
В	1,032 ¹	32	105	4.8	1,052.1	1,052.1	1,053.1	1.0
HUEY CREEK TRIBUTARY 2 A	808 ²	26	50	4.0	1,013.0	1,013.0	1,013.9	0.9
HUEY CREEK TRIBUTARY 3								
A	333 ²	20	39	6.8	988.2	988.2	988.6	0.4
В	655 ²	40	109	4.3	1,017.6	1,017.6	1,018.6	1.0
С	1,154 ²	30	95	5.0	1,025.5	1,025.5	1,026.5	1.0
D	1,560 ²	20	58	5.1	1,034.7	1,034.7	1,035.7	1.0
HURRICANE CREEK								
А	1,117 ³	180	1,365	6.1	730.3	730.3	731.0	0.7
В	4,786 ³	415	2,090	3.7	740.2	740.2	741.1	0.9
С	6,489 ³	535	2,350	3.3	746.8	746.8	747.5	0.7
D	8,023 ³	46	484	15.0	752.7	752.7	752.8	0.1
E	9,123 ³	47	655	11.0	769.2	769.2	769.9	0.7
F	10,208 ³	45	617	11.6	779.3	779.3	779.5	0.2

¹Feet above confluence with Huey Creek Tributary 1

²Feet above confluence with Huey Creek

TABLE

9

³Feet above confluence with county boundary

FEDERAL EMERGENCY MANAGEMENT AGENCY

DOUGLAS COUNTY, GA AND INCORPORATED AREAS

FLOODWAY DATA

HUEY CREEK TRIBUTARY 1.1– HUEY CREEK TRIBUTARY 2 – HUEY CREEK TRIBUTARY 2.1– HURRICANE CREEK

FLOODING SOL	JRCE		FLOODWAY	,	1-PERCENT-ANNUAL-CHANCE-FLOOD WATER SURFACE ELEVATION				
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)	
HURRICANE CREEK (CONTINUED)									
G	11,202	93	669	10.4	803.3	803.3	804.0	0.7	
Н	11,854	63	452	15.0	848.0	848.0	848.0	0.0	
I	12,626	74	557	8.3	881.3	881.3	881.3	0.0	
J	13,836	58	391	11.8	892.3	892.3	892.8	0.5	
K	14,997	194	1,057	4.3	908.1	908.1	909.1	1.0	
L	15,999	220	1,693	2.7	914.5	914.5	915.3	0.8	
Μ	17,892	106	488	9.5	929.4	929.4	929.4	0.0	
Ν	18,812	249	1,219	3.7	942.1	942.1	942.1	0.0	
0	20,783	280	1,872	2.4	953.5	953.5	954.4	0.9	
Р	23,000	175	1,031	4.3	963.9	963.9	964.8	0.9	
Q	24,797	185	1,353	2.5	975.7	975.7	976.4	0.7	
R	26,924	129	523	6.0	988.0	988.0	989.0	1.0	
S	28,495	40	214	9.5	997.1	997.1	997.4	0.3	
Т	30,429	125	290	6.1	1,013.1	1,013.1	1,013.7	0.6	
U	31,441	20	118	11.3	1,022.7	1,022.7	1,023.0	0.3	
V	32,622	170	313	4.2	1,037.1	1,037.1	1,037.2	0.1	
W	33,471	35	85	7.1	1,047.1	1,047.1	1,047.3	0.2	
Х	34,266	95	156	3.8	1,058.8	1,058.8	1,058.9	0.1	
Y	35,061	120	116	3.1	1,073.2	1,073.2	1,073.3	0.1	
Z	36.223	21	47	7.8	1,119.6	1,119.6	1,119.6	0.0	

¹Feet above county boundary

TABLE

9

FEDERAL EMERGENCY MANAGEMENT AGENCY

FLOODWAY DATA

DOUGLAS COUNTY, GA AND INCORPORATED AREAS

HURRICANE CREEK

FLOODING SOU	JRCE		FLOODWAY	,	1-PE	RCENT-ANNUA WATER SURFA	L-CHANCE-FLO	OD
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
HURRICANE CREEK (CONTINUED)								
AA	36,779 ¹	22	44	8.2	1,136.1	1,136.1	1,136.1	0.0
AB	37,800 ¹	29	31	5.6	1,161.2	1,161.2	1,161.2	0.0
AC	38,605 ¹	14	24	7.3	1,176.6	1,176.6	1,176.6	0.0
HURRICANE CREEK TRIBUTARY A								
А	891 ²	20	66	8.9	755.9	755.9	756.3	0.4
В	1,668 ²	14	55	10.7	770.2	770.2	770.4	0.2
С	2,256 ²	20	66	9.0	779.6	779.6	779.6	0.0
D	3,080 ²	80	125	4.8	791.5	791.5	791.5	0.0
HURRICANE CREEK TRIBUTARY B								
А	223 ²	30	63	8.9	789.2	789.2	789.2	0.0
В	723 ²	27	67	8.3	807.8	807.8	807.8	0.0
С	1,075 ²	68	115	4.8	819.9	819.9	820.0	0.1
Feet above county boun Feet above confluence v	dary vith Hurricane C	reek						
FEDERAL EMERGE		ENT AGENCY	(FLOC	DWAY D	ΑΤΑ	
DOUGI A	S COUNT	Y. GA						
AND INCOF	RPORATED	AREAS	Ния	RICANE	CRFFK_H	URRICAN	F CRFFK	TRIBUT

HURRICANE CREEK TRIBUTARY D	507	54	101	6.4	002.2	000.0	000.0	0.0
B C	1,491 2,441	127 70	137 115	4.5 3.7	979.5 1,002.5	979.5 1,002.5	979.6 1,002.5	0.0 0.1 0.0
HURRICANE CREEK TRIBUTARY E								
A	376	36	42	5.6	975.3	975.3	975.3	0.0
C	1 525	95	437	0.5	985.9	985.9 1 001 8	985.9	0.0
D	2,105	11	27	8.9	1,012.6	1,012.6	1,012.6	0.0
	with Uurriaana (

FLOODING SOL	JRCE		FLOODWAY		1-PE	ERCENT-ANNUA WATER SURFA	AL-CHANCE-FLO CE ELEVATION	OD
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
KNOLLWOOD BRANCH								
А	99	174	406	5.9	973.2	973.2	973.2	0.0
В	364	78	313	7.6	978.3	978.3	978.6	0.3
С	460	143	1,328	1.8	986.0	986.0	986.4	0.4
D	977	55	211	11.3	987.8	987.8	987.8	0.0
E	1,096	55	822	2.9	1,003.5	1,003.5	1,003.9	0.4
F	1,488	83	486	4.9	1,003.6	1,003.6	1,004.0	0.4
G	1,763	99	327	7.3	1,007.3	1,007.3	1,007.3	0.0
Н	2,121	74	263	9.0	1,011.3	1,011.3	1,011.3	0.0
I	2,819	206	916	2.6	1,023.7	1,023.7	1,024.5	0.8
J	3,231	177	422	5.6	1,027.1	1,027.1	1,027.2	0.1
К	3,570	56	259	9.2	1,038.9	1,038.9	1,039.1	0.2
L	3,888	50	293	8.1	1,043.2	1,043.2	1,043.4	0.2
Μ	4,465	69	249	9.6	1,056.8	1,056.8	1,056.8	0.0
Ν	5,151	235	559	2.3	1,070.1	1,070.1	1,070.1	0.0
0	5,247	231	1,077	1.6	1,078.1	1,078.1	1,078.1	0.0
Р	6,604	110	259	5.0	1,083.3	1,083.3	1,083.7	0.4
Q	7,665	49	142	9.0	1,094.0	1,094.0	1,094.4	0.4
R	7,734	280	595	2.2	1,096.8	1,096.8	1,096.8	0.0
S	8,128	161	261	4.9	1,100.4	1,100.4	1,100.4	0.0
Т	8,197	166	619	2.1	1,104.1	1,104.1	1,104.2	0.1
U	8,532	136	208	6.2	1,105.0	1,105.0	1,105.0	0.0
¹ Feet above confluence v	with Anneewake	e Creek						
FEDERAL EMERGENCY MANAGEMENT AGENCY					FLOC	DWAY D	ΑΤΑ	
DOUGLA AND INCOR	S COUN	ΓΥ, GA AREAS	KNOLLWOOD BRANCH				RANCH	

FLOODING SOU	RCE		FLOODWAY	/	1-PE	RCENT-ANNUA WATER SURFA	AL-CHANCE-FLO CE ELEVATION	OD
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
KNOLLWOOD BRANCH (CONTINUED)								
V	8,680 ¹	137	198	3.4	1,108.0	1,108.0	1,108.0	0.0
W	9,598 ¹	41	79	8.4	1,125.0	1,125.0	1,125.1	0.1
Х	9,666 ¹	41	246	2.7	1,130.0	1,130.0	1,131.0	1.0
Y	10.144 ¹	26	66	10.1	1.136.7	1,136.7	1.136.8	0.1
Z	10.299 ¹	244	991	0.7	1,142.8	1,142.8	1,143.7	0.9
AA	10,525 ¹	194	703	0.9	1,142.9	1,142.9	1,143.8	0.9
KNOLLWOOD BRANCH TRIBUTARY A								
А	114 ²	84	129	5.1	1,107.6	1,107.6	1,107.6	0.0
В	804 ²	125	191	3.5	1,122.7	1,122.7	1,122.7	0.0
С	1,305 ²	96	278	2.4	1,132.6	1,132.6	1,132.6	0.0
D	1,391 ²	144	414	1.6	1,136.8	1,136.8	1,136.9	0.1
E	1,553 ²	95	259	2.6	1,137.1	1,137.1	1,137.2	0.1
¹ Feet above confluence w ² Feet above confluence w	ith Anneewake ith Knollwood I	e Creek Branch						
FEDERAL EMERGE	NCY MANAGEM	IENT AGENCY	FLOODWAY DATA					
DOUGLAS AND INCOR	S COUN	「Y, GA AREAS	KNOLLWOOD BRANCH- KNOLL TRIBUTARY A				LLWOOD A	BRANCH

FLOODING SO	URCE		FLOODWAY	,	1-PE	RCENT-ANNUA WATER SURFA	L-CHANCE-FLO CE ELEVATION	OD
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
KRAFT CREEK								
А	124 ¹	26	68	9.2	1,018.9	1,018.9	1,018.9	0.0
В	518 ¹	25	88	7.1	1,029.1	1,029.1	1,029.8	0.7
С	785 ¹	11	28	9.4	1,035.2	1,035.2	1,035.3	0.1
KRAFT CREEK TRIBUTARY A								
А	369 ²	37	52	7.1	1,037.3	1,037.3	1,037.4	0.1
В	961 ²	11	35	10.6	1,057.3	1,057.3	1,057.4	0.1
LION BRANCH								
А	1,765 ³	125	715	3.2	903.9	903.9	904.1	0.2
В	3,168 ³	165	432	5.3	909.7	909.7	910.0	0.3
С	5,072 ³	95	425	4.6	921.7	921.7	922.1	0.4
D	6,544 ³	195	1,238	1.6	932.0	932.0	932.6	0.6
E	7,555 ³	270	1,640	1.1	944.1	944.1	944.1	0.0
F	9,416 ³	100	730	1.8	950.6	950.6	951.4	0.8
G	10,512 ³	496	4,691	0.3	962.2	962.2	962.2	0.0
Н	12,410 ³	135	433	2.8	970.3	970.3	971.0	0.7
I	13,791 ³	90	778	1.5	986.7	986.7	987.2	0.5
¹ Feet above confluence ² Feet above confluence ³ Feet above confluence	with Hurricane C with Kraft Creek with Beaver Cre	reek ek	 					
			FLOODWAY DATA					
AND INCO	RPORATED	AREAS	KRAFT CREEK – KRAFT CREEK TRIBUTARY A LION BRANCH					

FLOODING SO	URCE		FLOODWAY		1-PE	ERCENT-ANNUA WATER SURFA	L-CHANCE-FLO	OD
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
LION BRANCH (CONTINUED)								
J	15,011 ¹	130	402	3.0	994.6	994.6	995.4	0.8
К	16,497 ¹	15	56	9.7	1,022.6	1,022.6	1,023.6	1.0
L	17,756 ¹	100	161	5.2	1,045.1	1,045.1	1,045.1	0.0
Μ	18,355 ¹	90	674	1.3	1,059.7	1,059.7	1,060.5	0.8
LION BRANCH TRIBUTARY A								
А	673 ²	27	98	2.3	935.8	935.8	935.8	0.0
В	1,182 ²	46	42	5.5	946.4	946.4	946.4	0.0
С	1,934 ²	20	32	7.2	957.5	957.5	957.5	0.0
D	2,412 ²	22	54	4.3	976.1	976.1	976.1	0.0
E	2,805 ²	9	55	4.2	986.1	986.1	986.1	0.0
LION BRANCH TRIBUTARY B								
А	578 ²	73	285	4.5	965.2	965.2	966.0	0.8
В	$1,490^{2}$	14	64	3.8	978.0	978.0	978.9	0.9
С	2,112 ²	39	166	1.5	986.6	986.6	987.4	0.8
Feet above confluence	with Beaver Cre	ek						
Feet above confluence	with Lion Branch)						
FEDERAL EMERGI	ENCY MANAGEM	IENT AGENCY			FLOC	DWAY D	ΑΤΑ	
	S COUNT	TY. GA						
AND INCO	RPORATED	AREAS	'		ANCH – LIC LION BRAI	ON BRANC	CH TRIBUT	FARY A -

FLOODING SOL	JRCE		FLOODWAY		1-PE	RCENT-ANNUA	AL-CHANCE-FLO CE ELEVATION	OD
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
LITTLE ANNEEWAKEE CREEK								
А	1,016	600	5,858	1.1	902.8	902.8	902.8	0.0
В	2,231	430	2,867	2.4	903.4	903.4	903.4	0.0
С	2,972	465	2,792	2.4	904.9	904.9	904.9	0.0
D	3,345	386	2,043	3.0	905.2	905.2	905.2	0.0
E	4,493	234	1,295	4.8	909.3	909.3	910.2	0.9
F	4,726	147	819	7.5	909.7	909.7	909.8	0.1
G	5,952	90	636	9.7	915.6	915.6	915.9	0.3
Н	6,726	174	936	6.6	922.8	922.8	922.9	0.1
Ι	7,517	160	807	7.6	924.3	924.3	924.4	0.1
J	7,725	100	666	9.6	925.6	925.6	926.0	0.4
К	8,461	80	791	8.1	929.4	929.4	929.7	0.3
L	9,316	271	1,143	5.6	932.2	932.2	932.2	0.0
М	10,284	146	994	6.4	938.7	938.7	939.0	0.3
Ν	10,641	196	1,059	6.0	940.2	940.2	940.4	0.2
0	10,798	80	543	4.3	943.6	943.6	943.8	0.2
Р	10,863	80	1,008	2.3	947.6	947.6	948.3	0.7
Q	11,602	130	1,165	2.0	947.7	947.7	948.6	0.9
R	11,880	136	1,080	1.9	947.8	947.8	948.6	0.8
S	12,417	47	176	11.9	951.5	951.5	951.5	0.0
Т	12,594	83	229	7.2	969.3	969.3	969.3	0.0

¹Feet above confluence with Anneewakee Creek

TABLE

9

FEDERAL EMERGENCY MANAGEMENT AGENCY

FLOODWAY DATA

DOUGLAS COUNTY, GA AND INCORPORATED AREAS

LITTLE ANNEEWAKEE CREEK

FLOODING SOL	JRCE		FLOODWAY		1-PERCENT-ANNUAL-CHANCE-FLOOD WATER SURFACE ELEVATION				
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)	
LITTLE ANNEEWAKEE CREEK (CONTINUED)									
U	13,003	26	162	10.1	977.1	977.1	978.0	0.9	
V	13,858	175	459	3.6	995.1	995.1	996.1	1.0	
W	14,114	69	179	9.2	1,014.9	1,014.9	1,014.9	0.0	
Х	14,169	592	3,558	0.5	1,015.1	1,015.1	1,015.1	0.0	
Y	14,386	450	2,694	0.6	1,015.1	1,015.1	1,015.1	0.0	
Z	14,700	294	1,741	0.9	1,015.1	1,015.1	1,015.1	0.0	
AA	15,176	404	2,417	0.7	1,015.1	1,015.1	1,015.1	0.0	
AB	15,579	530	3,121	0.5	1,015.1	1,015.1	1,015.1	0.0	
AC	16,022	261	1,482	1.1	1,015.1	1,015.1	1,015.1	0.0	
AD	16,752	50	158	10.4	1,015.3	1,015.3	1,015.3	0.0	
AE	16,834	80	662	2.5	1,024.0	1,024.0	1,024.5	0.5	
AF	16,919	110	756	2.2	1,024.0	1,024.0	1,024.5	0.5	
AG	17,099	110	989	1.7	1,029.4	1,029.4	1,029.6	0.2	
AH	17,392	130	1,084	0.7	1,029.5	1,029.5	1,029.8	0.3	
AI	17,431	130	998	0.7	1,029.5	1,029.5	1,029.8	0.3	
AJ	17,746	51	322	2.3	1,029.5	1,029.5	1,029.8	0.3	
AK	18,088	130	795	2.2	1,035.7	1,035.7	1,035.7	0.0	
AL	18,978	16	51	9.4	1,039.9	1,039.9	1,040.0	0.1	
AM	19,138	128	713	1.8	1,048.8	1,048.8	1,048.8	0.0	
AN	19,703	49	84	7.9	1,050.3	1,050.3	1,050.3	0.0	
AO	19,819	50	302	2.0	1,057.1	1,057.1	1,057.5	0.4	

¹Feet above confluence with Anneewakee Creek

TABLE

9

FEDERAL EMERGENCY MANAGEMENT AGENCY

FLOODWAY DATA

DOUGLAS COUNTY, GA AND INCORPORATED AREAS

LITTLE ANNEEWAKEE CREEK

FLOODING SOL	JRCE		FLOODWAY		1-PERCENT-ANNUAL-CHANCE-FLOOD WATER SURFACE ELEVATION					
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)		
LITTLE ANNEEWAKEE CREEK (CONTINUED)										
AP	20,210 ¹	43	87	7.0	1,058.0	1,058.0	1,058.0	0.0		
LITTLE ANNEEWAKEE CREEK TRIBUTARY A										
А	78 ²	460 ³	1,574	0.8	905.2	905.2	905.2	0.0		
В	1,191 ²	29	98	12.0	921.7	921.7	921.7	0.0		
С	1,842 ²	587	408	4.7	966.4	966.4	966.4	0.0		
D	1,892 ²	572	5,832	0.3	966.4	966.4	966.4	0.0		
E	3,074 ²	305	3,087	0.6	966.4	966.4	966.4	0.0		
F	3,416 ²	54	179	10.7	966.4	966.4	966.4	0.0		
G	3,536 ²	100	630	3.0	975.3	975.3	975.3	0.0		
Н	4,277 ²	44	174	11.0	978.0	978.0	978.1	0.1		
I	4,367 ²	55	419	4.7	984.1	984.1	984.9	0.8		
J	4,760 ²	32	150	12.8	987.3	987.3	987.3	0.0		
K	4,853 ²	100	485	4.0	994.0	994.0	994.0	0.0		
L	5,380 ²	107	257	7.5	1,005.5	1,005.5	1,005.6	0.1		
М	5,516 ²	102	542	3.5	1,010.4	1,010.4	1,010.6	0.2		
Ν	6,409 ²	20	139	13.8	1,027.0	1,027.0	1,027.7	0.7		
0	7,062 ²	20	161	11.9	1,042.6	1,042.6	1,043.4	0.8		
Feet above confluence w Feet above confluence w	/ith Anneewake /ith Little Annee	e Creek wakee Creek	³ Combine	ed floodway wid	th with Little Annee	ewakee Creek				
FEDERAL EMERGE		IENT AGENCY	,		FLOO	DWAY D	ATA			
DOUGLA	S COUNT	ſY, GA	 							
AND INCOR	PORATED	AREAS		LITTLE ANNEEWAKEE CREEK - LITTLE						

FLOODING SOL	IRCE		FLOODWAY		1-PE	RCENT-ANNUA WATER SURFA	L-CHANCE-FLO CE ELEVATION	OD		
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)		
LITTLE ANNEEWAKEE CREEK TRIBUTARY B										
А	87	20	205	2.9	910.8	910.8	911.3	0.5		
В	685	63	98	6.0	931.1	931.1	931.1	0.0		
С	1,294	38	73	8.1	943.9	943.9	943.9	0.0		
D	1,398	78	424	2.0	954.5	954.5	954.5	0.0		
E	2,287	72	105	5.5	967.2	967.2	967.2	0.0		
LITTLE ANNEEWAKEE CREEK TRIBUTARY C										
А	133	285 ²	1,170	0.6	926.6	926.6	927.5	0.9		
В	1,224	12	61	11.4	939.3	939.3	939.9	0.6		
C	1,909	12	70	9.9	954.6	954.6	955.5	0.9		
¹ Feet above confluence w ² Combined floodway widtl	/ vith Little Annee h with Little Anr	ewakee Creek neewakee Cre	ek							
FEDERAL EMERGE	NCY MANAGEM	IENT AGENCY			FLOO	DWAY D	ΑΤΑ			
DOUGLA	S COUN	ΓΥ. GA								
AND INCORPORATED AREAS				LITTLE ANNEEWAKEE CREEK TRIBUTARY B – LITTLE ANNEEWAKEE CREEK TRIBUTARY C						

FLOODING SOU	RCE		FLOODWAY		1-PERCENT-ANNUAL-CHANCE-FLOOD WATER SURFACE ELEVATION				
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)	
LITTLE ANNEEWAKEE CREEK TRIBUTARY D									
А	70	276	2,268	0.4	947.8	947.8	948.7	0.9	
В	334	90	409	2.1	947.8	947.8	948.7	0.9	
С	367	90	394	2.2	949.0	949.0	949.4	0.4	
D	625	14	69	12.6	952.4	952.4	952.4	0.0	
E	696	100	613	1.4	960.4	960.4	960.6	0.2	
F	1,065	17	104	8.3	960.4	960.4	960.6	0.2	
G	1,125	50	217	4.0	963.2	963.2	964.0	0.8	
Н	1,623	30	157	5.5	966.7	966.7	967.6	0.9	
I	2,407	30	91	9.7	989.6	989.6	989.6	0.0	
J	2,537	30	390	2.2	1,003.0	1,003.0	1,004.0	1.0	
К	2,775	27	277	3.2	1,003.0	1,003.0	1,004.0	1.0	
LITTLE ANNEEWAKEE CREEK TRIBUTARY E									
А	153	39	77	7.7	974.1	974.1	974.1	0.0	
В	1,226	44	78	7.6	1,026.8	1,026.8	1,026.8	0.0	
С	2,016	10	67	8.8	1,039.9	1,039.9	1,040.3	0.4	

Feet above confluence with Little Anneewakee Creek

TABLE

9

FEDERAL EMERGENCY MANAGEMENT AGENCY

DOUGLAS COUNTY, GA AND INCORPORATED AREAS

FLOODWAY DATA

LITTLE ANNEEWAKEE CREEK TRIBUTARY D – LITTLE ANNEEWAKEE CREEK TRIBUTARY E

FI	LOODING SOL	JRCE		FLOODWAY		1-PE	RCENT-ANNUA WATER SURFA	AL-CHANCE-FLO CE ELEVATION	OD		
CROSS	S SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)		
LITTLE B	BEAR CREEK										
	А	916	310	1,223	4.5	756.4	754.1 ²	755.0 ²	0.9		
	В	1,714	339	2,036	2.7	757.7	757.7	758.0	0.3		
	С	2,535	313	1,753	3.2	759.6	759.6	760.1	0.5		
	D	3,345	372	2,230	2.5	761.5	761.5	762.2	0.7		
	Е	4,095	272	1,494	3.7	762.2	762.2	763.1	0.9		
	F	4,524	350	1,810	2.1	763.5	763.5	764.3	0.8		
	G	5,294	350	1,551	2.4	764.9	764.9	765.3	0.4		
	Н	6,193	254	1,192	3.1	767.5	767.5	768.4	0.9		
	I	6,986	201	961	3.9	769.9	769.9	770.4	0.5		
	J	7,542	282	1,250	3.0	770.8	770.8	771.7	0.9		
	К	7,869	84	453	8.3	771.1	771.1	771.7	0.6		
	L	7,935	365	1,488	2.5	773.5	773.5	774.2	0.7		
	М	8,358	403	1,138	3.3	773.8	773.8	774.4	0.6		
	Ν	8,374	426	1,247	3.0	773.9	773.9	774.5	0.6		
	0	8,805	372	1,123	3.3	774.2	774.2	774.6	0.4		
	Р	8,821	399	1,394	2.7	775.3	775.3	775.6	0.3		
	Q	9,189	436	790	4.7	775.4	775.4	775.5	0.1		
	R	9,346	567	1,503	2.6	775.7	775.7	776.4	0.7		
	S	9,746	120	429	9.2	777.7	777.7	778.1	0.4		
	т	9,763	120	719	5.5	780.5	780.5	780.9	0.4		
	U	10,005	238	1,431	2.8	780.6	780.6	781.6	1.0		
	V	10,351	316	1,531	2.6	780.9	780.9	781.9	1.0		
¹ Feet abov	ve confluence v	vith Bear Creek									
² Elevation	computed with	out consideration	on of backwat	er effects from	Bear Creek						
FED	DERAL EMERGE	ENCY MANAGEM	IENT AGENCY	,	FLOODWAY DATA						
J - 1 >	DOUGLAS COUNTY, GA AND INCORPORATED AREAS					LITTLE	E BEAR C	REEK			

FLOODING SOL	JRCE		FLOODWAY		1-PE	RCENT-ANNUA WATER SURFA	L-CHANCE-FLO CE ELEVATION	OD
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
LITTLE BEAR CREEK (CONTINUED)								
W	10,822	500	406	9.7	782.4	782.4	782.5	0.1
Х	10,884	366	2,472	1.6	787.6	787.6	787.8	0.2
Y	11,622	345	1,716	2.3	787.9	787.9	788.0	0.1
Z	12,424	379	1,273	3.1	788.4	788.4	788.5	0.1
AA	13,076	362	768	5.1	789.7	789.7	789.7	0.0
AB	13,514	251	867	5.1	792.5	792.5	792.5	0.0
AC	14,289	213	1,118	4.0	796.3	796.3	796.4	0.1
AD	15,101	400	1,713	2.6	798.1	798.1	798.4	0.3
AE	15,886	353	1,534	2.9	801.0	801.0	801.2	0.2
AF	17,105	530	2,472	1.8	804.0	804.0	804.6	0.6
AG	17,487	400	1,478	3.0	805.1	805.1	805.4	0.3
AH	17,906	383	1,366	2.2	806.9	806.9	807.0	0.1
AI	18,709	280	827	3.6	809.0	809.0	809.1	0.1
AJ	19,518	278	708	4.2	812.6	812.6	812.8	0.2
AK	20,299	292	1,069	2.4	815.7	815.7	816.4	0.7
AL	20,686	286	924	2.7	816.5	816.5	817.3	0.8
AM	21,054	238	780	3.3	818.6	818.6	818.9	0.3
AN	22,032	236	900	2.9	823.7	823.7	823.7	0.0
AO	22,502	185	515	5.0	825.5	825.5	825.6	0.1
AP	22,788	200	625	2.6	827.1	827.1	827.6	0.5

FEDERAL EMERGENCY MANAGEMENT AGENCY

FLOODWAY DATA

DOUGLAS COUNTY, GA AND INCORPORATED AREAS

TABLE 9

LITTLE BEAR CREEK

FLOODING SOL	JRCE		FLOODWAY		1-PE	RCENT-ANNUA WATER SURFA	L-CHANCE-FLO CE ELEVATION	OD
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
LITTLE BEAR CREEK (CONTINUED)								
AQ	23,366	49	171	9.5	832.6	832.6	832.6	0.0
AR	23,997	129	299	5.4	838.9	838.9	839.1	0.2
AS	24,580	43	241	6.7	849.4	849.4	850.3	0.9
AT	24,969	79	224	7.3	858.4	858.4	858.4	0.0
AU	25,140	250	1,085	1.5	861.0	861.0	861.1	0.1
AV	25,798	124	364	4.5	865.1	865.1	865.1	0.0
AW	27,167	204	545	3.0	884.7	884.7	885.1	0.4
AX	27,268	196	2,239	0.7	894.1	894.1	895.1	1.0
AY	27,627	100	1,067	1.5	894.2	894.2	895.1	0.9
AZ	28,673	47	167	8.3	896.1	896.1	896.7	0.6
BA	28,886	303	2,913	0.5	910.7	910.7	911.5	0.8
BB	29,660	72	481	2.9	910.8	910.8	911.6	0.8
BC	30,352	50	139	10.0	913.1	913.1	913.3	0.2
BD	30,441	175	894	1.6	919.5	919.5	919.7	0.2
BE	30,822	54	218	1.1	919.7	919.7	919.9	0.2
BF	30,908	165	464	0.5	921.2	921.2	921.4	0.2
BG	31,667	13	29	8.5	937.9	937.9	937.9	0.0
BH	32,096	22	38	6.5	948.5	948.5	948.5	0.0
BI	32,969	25	40	6.1	958.5	958.5	958.6	0.1
BJ	33,458	30	63	3.9	963.3	963.3	963.3	0.0

¹Feet above confluence with Bear Creek

TABLE 9

FEDERAL EMERGENCY MANAGEMENT AGENCY

FLOODWAY DATA

DOUGLAS COUNTY, GA AND INCORPORATED AREAS

LITTLE BEAR CREEK

-	¹ Feet above confluence w FEDERAL EMERGE	ith Bear Creek	IENT AGENCY			FLOC	DWAY D	ΑΤΑ	
	LITTLE BEAR CREEK (CONTINUED) BK BL BM BN	34,243 35,306 35,409 36,127	20 211 386 19	34 104 2,578 33	7.2 2.4 0.1 7.4	978.7 1,012.0 1,012.0 1,018.8	978.7 1,012.0 1,012.0 1,018.8	978.8 1,012.4 1,012.7 1,018.9	0.1 0.4 0.7 0.1
	CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
	FLOODING SOL	FLOODWAY			1-PERCENT-ANNUAL-CHANCE-FLOOD WATER SURFACE ELEVATION				

FLOODING SO	JRCE		FLOODWAY	,	1-PE	RCENT-ANNUA WATER SURFA	L-CHANCE-FLO CE ELEVATION	OD	
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)	
LITTLE BEAR CREEK TRIBUTARY A									
А	95	162 ²	256	4.4	775.8	775.8	776.3	0.5	
В	861	32	106	10.3	782.4	782.4	782.4	0.0	
С	929	41	274	4.0	787.1	787.1	787.1	0.0	
D	2,004	35	130	8.4	804.6	804.6	804.7	0.1	
E	2,323	34	138	4.5	807.9	807.9	808.5	0.6	
F	2,826	25	72	8.5	815.1	815.1	815.1	0.0	
G	2,892	30	249	2.5	821.1	821.1	821.9	0.8	
Н	3,446	30	78	7.9	824.3	824.3	824.3	0.0	
I	3,461	30	143	4.3	826.5	826.5	827.5	1.0	
J	3,927	45	89	6.9	834.0	834.0	834.5	0.5	
К	3,944	52	155	4.0	835.1	835.1	836.1	1.0	
L	4,600	59	111	5.5	847.8	847.8	848.3	0.5	
М	5,181	38	86	7.2	868.8	868.8	868.8	0.0	
Ν	5,205	58	164	3.8	872.0	872.0	872.0	0.0	
0	5,620	12	52	11.9	879.9	879.9	879.9	0.0	
¹ Feet above confluence v ² Combined floodway wid	with Little Bear 0 th with Little Bea	Creek ar Creek							
FEDERAL EMERG	ENCY MANAGEM	IENT AGENCY			FLOC	DWAY D	ATA		
DOUGLA AND INCO	DOUGLAS COUNTY, GA AND INCORPORATED AREAS			LITTLE BEAR CREEK TRIBUTARY A					

FLOODING SO	URCE		FLOODWAY		1-PE	RCENT-ANNUA WATER SURFA	L-CHANCE-FLO CE ELEVATION	OD		
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)		
LITTLE BEAR CREEK TRIBUTARY B										
А	88 ¹	122	136	2.8	807.1	807.1	807.1	0.0		
В	375 ¹	223	1,790	0.2	822.8	822.8	823.1	0.3		
С	569 ¹	88	703	0.5	822.8	822.8	823.1	0.3		
D	697 ¹	41	73	5.2	833.4	833.4	833.7	0.3		
E	781 ¹	225	2,410	0.2	834.1	834.1	834.7	0.6		
F	1,041 ¹	108	1,146	0.3	834.1	834.1	834.7	0.6		
G	1,345 ¹	25	54	7.0	841.3	841.3	841.4	0.1		
LITTLE BEAR CREEK TRIBUTARY C										
A	60 ²	150	461	2.7	790.8	790.8	790.8	0.0		
В	642 ²	20	71	10.1	800.2	800.2	800.5	0.3		
С	1,205 ²	20	70	10.2	809.2	809.2	809.6	0.4		
D	1,907 ²	20	74	9.6	820.4	820.4	821.0	0.6		
E	2,767 ²	17	64	11.1	831.6	831.6	831.7	0.1		
F	3,594 ²	16	65	11.0	852.6	852.6	853.5	0.9		
G	4,393 ²	57	105	6.8	870.1	870.1	870.1	0.0		
н	4,756 ²	14	60	11.8	882.3	882.3	882.3	0.0		
¹ Feet above confluence ² Feet above confluence	with Little Bear (with Little Bear (Creek Tributar Creek	y A							
FEDERAL EMERG	ENCY MANAGEN	IENT AGENCY			FLOC	DWAY D	ATA			
	DOUGLAS COUNTY, GA AND INCORPORATED AREAS				LITTLE BEAR CREEK TRIBUTARY B - LITTLE BEAR CREEK TRIBUTARY C					

FLOODING SOL	FLOODING SOURCE				1-PERCENT-ANNUAL-CHANCE-FLOOD WATER SURFACE ELEVATION				
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)	
LITTLE BEAR CREEK TRIBUTARY D									
А	175	18	64	10.2	817.7	817.7	818.2	0.5	
В	1,148	28	62	8.0	835.9	835.9	835.9	0.0	
С	1,957	16	59	8.3	852.5	852.5	852.8	0.3	
D	3,153	12	45	11.0	922.8	922.8	922.9	0.1	
LITTLE BEAR CREEK TRIBUTARY E									
А	270	132	416	2.1	827.7	827.7	828.5	0.8	
В	807	94	80	5.2	851.2	851.2	851.2	0.0	
С	887	484	3,186	0.1	851.6	851.6	851.6	0.0	
D	3,006	27	73	5.8	851.6	851.6	851.6	0.0	
E	4,040	18	57	7.3	865.2	865.2	865.3	0.1	
F	5,028	20	61	6.8	876.8	876.8	877.3	0.5	
G	5,910	23	67	6.2	888.2	888.2	888.3	0.1	
Н	6,927	84	89	4.7	906.6	906.6	906.6	0.0	
I	6,988	82	145	2.9	909.1	909.1	909.1	0.0	
J	7,506	24	49	8.5	917.1	917.1	917.1	0.0	
¹ Feet above confluence v	vith Little Bear C	Creek							
FEDERAL EMERGE		IENT AGENCY	,		FLOO	DWAY D	ΑΤΑ		
DOUGLA AND INCOF	S COUNI	TY, GA AREAS	Lľ	TTLE BE/	AR CREEK CREEP	TRIBUTA (TRIBUT/	RY D - LIT ARY E	TLE BEA	

FLOODING SOL	JRCE		FLOODWAY		1-PE	RCENT-ANNUA WATER SURFA	L-CHANCE-FLO CE ELEVATION	OD
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
LITTLE BEAR CREEK TRIBUTARY F								
А	73 ¹	234	1,410	0.5	919.7	919.7	919.9	0.2
В	869 ¹	30	66	8.3	922.0	922.0	922.0	0.0
С	2,055 ¹	20	95	5.8	940.7	940.7	941.1	0.4
LITTLE HURRICANE CREEK								
A	1,001²	27	222	16.5	882.9	882.9	882.9	0.0
В	1,787²	16	189	19.4	904.5	904.5	904.5	0.0
С	3,443²	100	728	4.8	926.2	926.2	926.5	0.3
D	4,271²	65	297	7.9	931.0	931.0	931.4	0.4
E	4,647²	34	189	12.4	942.2	942.2	942.2	0.0
F	5,191²	120	503	4.7	954.2	954.2	955.1	0.9
G	6,022²	82	899	2.5	969.0	969.0	969.0	0.0
Н	7,334²	33	182	11.1	976.7	976.7	976.8	0.1
I	8,304²	274	1,428	1.4	990.5	990.5	990.5	0.0
J	10,345 ²	135	390	3.0	1,011.0	1,011.0	1,011.2	0.2
К	11,498²	27	94	10.6	1,019.3	1,019.3	1,019.3	0.0
L	12,565 ²	41	194	4.8	1,033.0	1,033.0	1,033.6	0.6
Μ	13,664²	35	157	2.6	1,050.3	1,050.3	1,050.3	0.0
Ν	14,510²	15	47	8.8	1,064.6	1,064.6	1,064.7	0.1
Feet above confluence w	/ ith Little Bear (Creek						
Feet above confluence v	with Hurricane	Creek						

FEDERAL EMERGENCY MANAGEMENT AGENCY

DOUGLAS COUNTY, GA AND INCORPORATED AREAS

TABLE 9

FLOODWAY DATA

LITTLE BEAR CREEK TRIBUTARY F – LITTLE HURRICANE CREEK

FLOODING SOL	JRCE		FLOODWAY	,	1-PE	RCENT-ANNUA WATER SURFA	L-CHANCE-FLO	OD		
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)		
LITTLE HURRICANE CREEK TRIBUTARY A										
А	497 ¹	75	1,150	1.0	942.4	942.4	943.1	0.7		
В	1,578 ¹	45	160	5.2	944.3	944.3	944.7	0.4		
С	2,716 ¹	30	121	6.9	961.9	961.9	962.8	0.9		
D	3,547 ¹	24	55	8.7	977.1	977.1	977.1	0.0		
MARGIE BRANCH										
А	308 ²	104	239	7.5	947.4	947.4	947.4	0.0		
В	1.639 ²	474	1,435	1.0	953.6	953.6	953.6	0.0		
С	2,985 ²	45	173	5.5	963.8	963.8	964.1	0.3		
D	4,115 ²	31	249	3.8	977.8	977.8	978.6	0.8		
Е	5,536 ²	252	1,816	0.6	1,002.0	1,002.0	1,002.0	0.0		
F	6,918 ²	53	90	9.4	1,012.2	1,012.2	1,012.2	0.0		
G	7,573 ²	32	86	10.0	1,022.1	1,022.1	1,022.1	0.0		
Н	8,498 ²	118	177	8.2	1,039.7	1,039.7	1,039.9	0.2		
I	9,425 ²	328	1,767	0.4	1,067.7	1,067.7	1,067.7	0.0		
MARGIE BRANCH TRIBUTARY A										
А	496 ³	14	25	7.8	1,033.8	1,033.8	1,033.8	0.0		
В	1,042 ³	14	25	8.8	1,046.1	1,046.1	1,046.2	0.1		
С	1,802 ³	8	19	9.2	1,079.0	1,079.0	1,079.1	0.1		
¹ Feet above confluence w ² Feet above confluence w ³ Feet above confluence w	vith Little Hurric vith Beaver Cre vith Margie Brau	ane Creek ek nch								
FEDERAL EMERGE		IENT AGENCY	(FLOODWAY DATA						
DOUGLA	S COUNT	ΓY, GA								
	RPORATED	AREAS	R. /					RY A -		

FLOODING SO	JRCE		FLOODWAY	,	1-PERCENT-ANNUAL-CHANCE-FLOOD WATER SURFACE ELEVATION					
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)		
MILL CREEK										
А	1,841 ¹	194	879	2.8	937.2	937.2	937.5	0.3		
В	4,702 ¹	223	653	3.8	946.3	946.3	946.9	0.6		
С	8,035 ¹	150	484	3.7	964.7	964.7	965.7	1.0		
D	11,303 ¹	28	98	4.3	994.1	994.1	994.4	0.3		
E	12,562 ¹	18	76	5.5	1,023.3	1,023.3	1,024.3	1.0		
F	13,625 ¹	164	2,371	0.2	1,066.7	1,066.7	1,066.8	0.1		
G	14,533 ¹	22	116	3.6	1,077.2	1,077.2	1,078.1	0.9		
MILL CREEK TRIBUTARY 1										
А	1,417 ²	46	193	5.1	994.0	994.0	994.9	0.9		
В	2,004 ²	34	196	5.0	1,025.2	1,025.2	1,026.2	1.0		
С	3,070 ²	22	90	6.8	1,039.3	1,039.3	1,039.9	0.6		
D	3,516 ²	26	129	4.8	1,047.7	1,047.7	1,048.5	0.8		
MILLER CREEK										
A	849 ³	80	345	4.3	928.6	928.6	929.5	0.9		
В	1,417 ³	74	474	2.4	936.2	936.2	936.6	0.4		
С	2,846 ³	17	49	8.7	950.6	950.6	950.6	0.0		
D	3,515 ³	132	400	2.7	964.6	964.6	965.3	0.7		
¹ Feet above confluence v ² Feet above confluence v ³ Feet above confluence v	vith Gothards C vith Mill Creek vith Beaver Cree	reek			<u> </u>		l			
FEDERAL EMERGE	ENCY MANAGEN	IENT AGENCY	(FLOODWAY DATA						
DOUGLA AND INCOR	DOUGLAS COUNTY, GA AND INCORPORATED AREAS				MILL CREEK – MILL CREEK TRIBUTARY 1 – MILL					

ſ	FLOODING SO	URCE		FLOODWAY	,	1-PE	RCENT-ANNUA WATER SURFA	L-CHANCE-FLO CE ELEVATION	OD
	CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
	MILLER CREEK TRIBUTARY A								
	А	381 ¹	80	104	4.4	942.3	942.3	942.9	0.6
	В	818 ¹	35	58	8.4	952.8	952.8	952.8	0.0
	С	1,086¹	62	454	0.3	970.6	970.6	970.6	0.1
	MOBLEY CREEK								
	А	2,240²	100	430	9.8	895.2	895.2	895.2	0.0
	В	3,940²	240	890	4.8	905.8	905.8	905.8	0.0
	С	4,930 ²	120	460	9.2	911.0	911.0	911.0	0.0
	D	6,740 ²	310	1,380	2.8	920.6	920.6	920.6	0.0
	Е	8,640 ²	220	670	5.8	924.5	924.5	924.5	0.0
	F	10,450 ²	170	550	7.0	931.8	931.8	931.8	0.0
	G	12,770 ²	220	1,100	3.3	940.0	940.0	940.0	0.0
	Н	14,590²	310	1,220	3.0	942.2	942.2	943.0	0.8
	I.	17,100 ²	230	610	4.8	948.3	948.3	948.9	0.6
	J	19,210 ²	170	620	4.7	953.9	953.9	954.7	0.8
	К	21,630 ²	250	900	3.2	961.6	961.6	962.3	0.7
	L	24,140 ²	160	920	3.1	968.5	968.5	969.2	0.7
	М	25,910 ²	180	550	4.4	973.4	973.4	973.8	0.4
	Ν	26,650²	320	530	4.6	976.9	976.9	977.0	0.1
	¹ Feet above confluence	with Miller Creel	<						
-	FEDERAL EMERGI		IENT AGENCY			FI OO		ΔΤΔ	
> -									
2 7 7	AND INCO	DOUGLAS COUNTY, GA AND INCORPORATED AREAS				REEK TRI	BUTARY A	A - MOBLE	Y CREEK

FLOODING SO	URCE		FLOODWAY	,	1-PE	RCENT-ANNUA WATER SURFA	L-CHANCE-FLO CE ELEVATION	OD
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
MOBLEY CREEK TRIBUTARY 5								
А	50	80	190	7.0	913.5	912.0 ²	912.0	0.0
В	730	240	420	3.1	917.6	917.6	917.6	0.0
С	2,240	50	130	10.1	935.2	935.2	935.2	0.0
MOBLEY CREEK TRIBUTARY 6								
A	180	110	170	5.5	934.2	932.3 ³	932.3	0.0
В	1,420	50	140	6.9	942.0	942.0	942.0	0.0
С	3,060	110	160	5.9	959.2	959.2	959.2	0.0
MOBLEY CREEK TRIBUTARY 7								
А	1,860	130	240	5.9	976.5	976.5	976.5	0.0
В	3,960	40	140	9.8	990.6	990.6	990.6	0.0
С	4,790	60	250	5.6	998.4	998.4	998.7	0.3
¹ Feet above confluence ² Elevation computed with ³ Elevation computed with	with Mobley Cre nout consideration nout consideration	ek on of backwat on of flooding	er effects from	I Mobley Creek Iobley Creek	1		<u> </u>	<u> </u>
FEDERAL EMERG		IENT AGENCY	,		FLOO	DWAY D	ΑΤΑ	
DOUGLA	S COUN	ΓΥ. GA						
AND INCO	AND INCORPORATED AREAS				REEK TRI RY 6 – MO	BUTARY S	5 – MOBLE EEK TRIB	EY CREE UTARY 7

FLOODING SO	URCE		FLOODWAY	,	1-PE	RCENT-ANNUA WATER SURFA	AL-CHANCE-FLO CE ELEVATION	OD		
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)		
MUD CREEK										
А	14,846	360	2,040	2.2	945.0	945.0	946.0	1.0		
В	16,677	410	3,260	1.4	949.6	949.6	950.5	0.9		
С	18,937	350	2,240	2.0	952.6	952.6	953.4	0.8		
D	21,339	370	2,660	1.5	955.0	955.0	955.9	0.9		
E	23,697	540	3,190	1.2	956.6	956.6	957.6	1.0		
F	28,297	320	1,300	1.9	964.2	964.2	965.2	1.0		
G	31,289	320	1,480	1.7	971.4	971.4	972.3	0.9		
PALMER BRANCH										
A	897	60	370	9.0	762.6	762.6	762.7	0.1		
В	2.207	50	354	9.1	782.1	782.1	782.4	0.3		
С	3.236	64	470	6.6	796.6	796.6	797.3	0.7		
D	4.499	68	527	4.4	811.4	811.4	812.0	0.6		
E	6.121	107	553	4.2	828.9	828.9	829.1	0.2		
F	7.424	55	276	6.5	840.4	840.4	840.8	0.4		
G	8,953	145	360	5.0	853.8	853.8	854.1	0.3		
н	10,420	52	148	7 4	873 7	873 7	873.8	0.0		
I	11,647	16	48	8.9	892.9	892.9	893.4	0.5		
¹ Feet above confluence	with Sweetwater	Creek								
			/	FLOODWAY DATA						
AND INCO	RPORATED	AREAS		М	UD CREEK	– PALME	R BRANC	H		

	FLOODING SO	URCE		FLOODWAY	,	1-PE	ERCENT-ANNUA WATER SURFA	AL-CHANCE-FLO CE ELEVATION	OD
-	CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
	PALMER BRANCH TRIBUTARY A								
	A B	553 1 677	170	1,300	0.1	829.0 857 1	829.0 857 1	829.0 857 1	0.0
	C	2,478	10	13	6.8	908.0	908.0	908.0	0.0
	PALMER BRANCH TRIBUTARY B								
	А	287	45	168	5.1	810.4	810.4	810.7	0.3
	В	1,554	34	117	7.3	829.0	829.0	829.3	0.3
	C	2,398	30	113	7.5	859.1	859.1	859.3	0.3
	PALMER BRANCH TRIBUTARY C								
	А	361	44	139	6.3	860.8	860.8	861.1	0.3
	В	868	70	427	2.0	881.2	881.2	882.1	0.9
	С	1,669	19	38	7.2	928.8	928.8	928.8	0.0
	D	2,443	34	54	5.1	1,004.8	1,004.8	1,004.8	0.0
	¹ Feet above confluence	with Palmer Bra	Inch						
TAI						FLOO	DWAY D	ΑΤΑ	
BLE 9	AND INCO	DOUGLAS COUNTY, GA AND INCORPORATED AREAS				ANCH TRI	BUTARY / MER BRA	A – PALME NCH TRIE	ER BRANC BUTARY C

	FLOODING SOL	JRCE		FLOODWAY		1-PE	ERCENT-ANNUA WATER SURFA	AL-CHANCE-FLO CE ELEVATION	OD
	CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
-	PANTHER CREEK								
	А	119 ¹	211 ²	452	4.7	773.9	773.9	774.7	0.8
	В	991 ¹	97	394	5.4	780.9	780.9	781.9	1.0
	С	2,335 ¹	85	476	4.5	796.7	796.7	797.5	0.8
	D	3,353 ¹	89	333	5.7	805.5	805.5	805.9	0.4
	E	4,347 ¹	114	506	3.7	814.3	814.3	815.3	1.0
	F	5,051 ¹	100	327	5.8	824.6	824.6	825.2	0.6
	G	5,201 ¹	48	178	4.7	826.6	826.6	827.5	0.9
	Н	6.228 ¹	81	162	5.1	877.4	877.4	877.5	0.1
	I	7,136 ¹	24	85	9.9	895.7	895.7	895.8	0.1
	J	7.519 ¹	144	252	3.3	907.4	907.4	907.4	0.0
	К	7.753 ¹	144	713	1.8	915.3	915.3	916.1	0.8
	L	8.096 ¹	14	95	8.8	917.5	917.5	917.8	0.3
	Μ	8,946 ¹	107	291	2.9	933.3	933.3	934.3	1.0
	PANTHER CREEK TRIBUTARY A								
	А	99 ³	79	259	2.9	826.2	826.2	827.2	1.0
	В	540 ³	32	81	9.3	832.6	832.6	832.7	0.1
	С	1,318 ³	100	156	4.8	851.2	851.2	851.3	0.1
	¹ Feet above confluence v ² Combined floodway widt	vith Chapel Farı h with Chapel F	ms Creek Farms Creek	³ Feet	above confluen	ce with Panther C	reek		
ΔT	FEDERAL EMERGE	NCY MANAGEN	IENT AGENCY			FLOC	DWAY D	ΑΤΑ	
BLE 9	DOUGLA AND INCOF	DOUGLAS COUNTY, GA AND INCORPORATED AREAS				REEK - PA	ANTHER C	REEK TR	IBUTARY A

FLOODING SOL	JRCE		FLOODWAY		1-PERCENT-ANNUAL-CHANCE-FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
PARK CREEK								
А	2,388 ¹	109	817	2.2	888.7	888.7	889.2	0.5
В	2,805 ¹	179	1,329	1.4	893.8	893.8	894.5	0.7
С	3,682 ¹	134	776	2.3	899.7	899.7	900.4	0.7
D	4,936 ¹	72	188	6.5	908.8	908.8	908.9	0.1
E	5,672 ¹	73	322	3.8	919.5	919.5	920.5	1.0
F	6,177 ¹	90	463	2.7	927.6	927.6	928.1	0.5
G	6,891 ¹	85	179	6.9	938.0	938.0	938.1	0.1
Н	7,238 ¹	83	208	5.9	948.2	948.2	948.3	0.1
I	7,770 ¹	71	150	8.2	958.7	958.7	958.7	0.0
PINE CREEK								
А	2,278 ¹	101	1,176	0.5	889.9	889.9	889.9	0.0
В	3,544 ¹	125	821	0.8	890.0	890.0	890.0	0.0
PINEWOOD BRANCH								
А	2,022 ²	105	249	4.8	891.8	891.8	892.2	0.4
В	2,602 ²	81	114	8.2	902.6	902.6	902.6	0.0
С	3,301 ²	150	395	2.4	919.5	919.5	920.4	0.9
D	3,885 ²	105	152	6.2	930.4	930.4	930.5	0.1
E	4,490 ²	116	237	4.0	942.3	942.3	942.3	0.0

FEDERAL EMERGENCY MANAGEMENT AGENCY

DOUGLAS COUNTY, GA AND INCORPORATED AREAS

TABLE

9

FLOODWAY DATA

PARK CREEK – PINE CREEK – PINEWOOD BRANCH

FLOODING SOL	JRCE		FLOODWAY		1-PE	RCENT-ANNUA WATER SURFA	L-CHANCE-FLO	OD
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
PINEWOOD BRANCH TRIBUTARY A								
А	716 ¹	32	46	6.9	914.5	914.5	914.6	0.1
В	1,297 ¹	32	130	2.3	930.7	930.7	930.7	0.0
С	1,678 ¹	12	36	8.2	935.4	935.4	935.8	0.4
D	2,322 ¹	24	48	6.2	957.0	957.0	957.0	0.0
E	2,701 ¹	36	146	2.0	968.3	968.3	969.1	0.8
SHELL CREEK								
А	884 ²	56	215	5.5	1,000.1	1,000.1	1,001.0	0.9
В	1,656 ²	56	156	4.5	1,009.8	1,009.8	1,010.6	0.8
С	2,498 ²	37	88	8.0	1,022.0	1,022.0	1,022.0	0.0
D	3,617 ²	37	91	7.7	1,038.6	1,038.6	1,038.6	0.0
Е	4,769 ²	28	48	8.4	1,058.8	1,058.8	1,058.8	0.0
F	5,762 ²	91	106	3.8	1,077.8	1,077.8	1,077.8	0.0
SHOALS BRANCH								
А	861 ³	21	153	11.4	778.4	778.4	778.5	0.1
В	1,795 ³	25	157	9.6	802.4	802.4	802.7	0.3
С	3,211 ³	73	350	7.3	825.8	825.8	826.5	0.7
D	3,850 ³	58	209	7.6	833.7	833.7	834.0	0.3
E	5,129 ³	10	74	14.0	854.0	854.0	854.2	0.2
F	7,041 ³	56	191	5.5	886.3	886.3	886.9	0.6

Feet above confluence with Sweetwater Creek

TABLE

9

FEDERAL EMERGENCY MANAGEMENT AGENCY

DOUGLAS COUNTY, GA AND INCORPORATED AREAS

FLOODWAY DATA

PINEWOOD BRANCH TRIBUTARY A – SHELL CREEK – SHOALS BRANCH

FLOODING SO	JRCE		FLOODWAY		1-PE	RCENT-ANNUA	L-CHANCE-FLO CE ELEVATION	OD
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
SHOALS BRANCH (CONTINUED)								
G	8,915 ¹	39	131	6.0	924.8	924.8	925.4	0.6
Н	10,527 ¹	45	108	7.3	960.6	960.6	960.7	0.1
SHOALS BRANCH TRIBUTARY A								
А	666 ²	39	125	5.5	840.4	840.4	841.1	0.7
В	1,466 ²	16	62	11.0	873.0	873.0	873.5	0.5
SHOALS BRANCH TRIBUTARY B								
А	84 ²	26	101	6.5	844.5	844.5	845.4	0.9
В	635 ²	53	119	5.5	861.3	861.3	861.3	0.0
С	1,101 ²	60	138	4.7	877.5	877.5	877.5	0.0
SIMON CREEK								
А	1,456 ³	80	303	4.8	880.7	880.7	881.7	1.0
В	3,191 ³	91	673	2.2	898.6	898.6	899.6	1.0
С	4,249 ³	26	176	8.3	905.8	905.8	906.2	0.4
D	5,373 ³	17	121	7.5	912.6	912.6	913.0	0.4
Е	6,590 ³	42	392	2.3	928.8	928.8	929.4	0.6
F	7,431 ³	38	228	4.0	929.3	929.3	930.0	0.7
G	8,201 ³	24	92	9.8	933.7	933.7	933.7	0.0

²Feet above confluence with Shoals Branch

TABLE

9

³Feet above confluence with Anneewakee Creek

FEDERAL EMERGENCY MANAGEMENT AGENCY

DOUGLAS COUNTY, GA AND INCORPORATED AREAS

FLOODWAY DATA

SHOALS BRANCH – SHOALS BRANCH TRIBUTARY A – SHOALS BRANCH TRIBUTARY B- SIMON CREEK

FLOODING SO	JRCE	FLOODWAY			1-PERCENT-ANNUAL-CHANCE-FLOOD WATER SURFACE ELEVATION						
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)			
SLATER MILL CREEK											
А	242	281	2,195	3.8	950.7	950.7	951.2	0.5			
В	1,263	39	280	15.1	959.8	959.8	959.8	0.0			
С	2,427	143	603	7.0	982.5	982.5	982.5	0.0			
D	4,044	320	881	4.8	997.5	997.5	997.5	0.0			
E	5,202	60	299	10.4	1,003.4	1,003.4	1,004.0	0.6			
F	5,262	60	738	5.0	1,012.6	1,012.6	1,013.2	0.6			
G	5,852	73	691	4.5	1,013.1	1,013.1	1,013.6	0.5			
Н	6,173	73	1,477	2.5	1,026.8	1,026.8	1,027.3	0.5			
I	6,731	131	357	8.7	1,029.0	1,029.0	1,029.0	0.0			
J	6,830	359	1,131	2.7	1,031.6	1,031.6	1,031.6	0.0			
K	6,984	190	666	1.6	1,032.4	1,032.4	1,032.4	0.0			
L	8,107	75	299	3.7	1,043.0	1,043.0	1,043.9	0.9			
Μ	8,540	41	126	8.7	1,049.9	1,049.9	1,049.9	0.0			
Ν	8,629	233	476	2.4	1,053.6	1,053.6	1,053.6	0.0			
0	8,710	137	235	4.7	1,054.4	1,054.4	1,054.4	0.0			
Р	8,761	118	217	5.0	1,056.5	1,056.5	1,056.5	0.0			
Q	8,986	35	118	9.2	1,059.3	1,059.3	1,059.5	0.2			
Feet above confluence v	with Little Annee	wakee Creek									
					FLOO	DWAY D	ΑΤΑ				
AND INCO	DOUGLAS COUNTY, GA AND INCORPORATED AREAS				SLATER MILL CREEK						

FLOODING SOU	JRCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE-FLOOD WATER SURFACE ELEVATION						
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)				
SLATER MILL CREEK TRIBUTARY A												
А	78	223	545	2.5	1,031.7	1,031.7	1,031.7	0.0				
В	1,211	80	293	4.7	1,041.4	1,041.4	1,041.4	0.0				
С	1,288	76	352	4.4	1,045.1	1,045.1	1,045.1	0.0				
D	2,681	38	177	7.9	1,055.6	1,055.6	1,055.7	0.1				
E	2,796	70	814	2.5	1,067.8	1,067.8	1,068.6	0.8				
F	3,758	130	634	2.2	1,068.0	1,068.0	1,068.9	0.9				
G	5,109	79	169	8.7	1,084.8	1,084.8	1,084.8	0.0				
Н	5,129	80	293	5.4	1,086.8	1,086.8	1,087.6	0.8				
I	6,419	167	329	4.3	1,109.9	1,109.9	1,110.0	0.1				
J	6,490	76	318	4.7	1,111.7	1,111.7	1,112.3	0.6				
К	7,936	77	180	7.8	1,154.6	1,154.6	1,154.7	0.1				
L	8,022	140	490	3.4	1,160.3	1,160.3	1,160.3	0.0				
Μ	8,353	95	210	6.7	1,170.5	1,170.5	1,170.6	0.1				
'Feet above confluence v	vith Slater Mill C	reek										
FEDERAL EMERGE					FLOODWAY DATA							
AND INCOR	DOUGLAS COUNTY, GA AND INCORPORATED AREAS				SLATER MILL CREEK TRIBUTARY A							

FLOODING SOL	JRCE		FLOODWAY		1-PE	RCENT-ANNUA WATER SURFA	L-CHANCE-FLO CE ELEVATION	OD		
CROSS SECTION	DISTANCE1	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)		
SLATER MILL CREEK TRIBUTARY B										
А	134	147	681	1.1	1,032.3	1,032.3	1,032.3	0.0		
В	1,217	34	126	5.8	1,038.8	1,038.8	1,039.0	0.2		
С	2,343	15	69	10.6	1,049.0	1,049.0	1,049.4	0.4		
D	2,456	18	173	4.3	1,054.4	1,054.4	1,055.4	1.0		
E	3,081	26	77	9.5	1,059.1	1,059.1	1,059.2	0.1		
F	3,759	29	88	8.4	1,069.1	1,069.1	1,069.1	0.0		
¹ East shove confluence i	vith Slotor Mill (`rook								
					FLOC	DWAY D	ΑΤΑ			
DOUGLAS COUNTY, GA AND INCORPORATED AREAS				SLATER MILL CREEK TRIBUTARY B						
FLOODING SO	URCE		FLOODWAY		1-PERCENT-ANNUAL-CHANCE-FLOOD WATER SURFACE ELEVATION					
------------------------------------	--------------------	-----------------	-------------------------------------	--	--	------------------------------------	---------------------------------	--------------------	--	--
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)		
SPIVEY BRANCH										
A	1,269 ¹	44	237	8.2	945.6	945.6	945.7	0.1		
В	2,925 ¹	25	123	13.7	955.5	955.5	955.6	0.1		
С	3,894 ¹	25	172	6.7	966.2	966.2	966.6	0.4		
D	4,793 ¹	98	407	5.0	972.3	972.3	973.3	1.0		
E	5,496 ¹	68	305	5.3	977.7	977.7	978.7	1.0		
F	6,329 ¹	33	105	11.6	989.5	989.5	989.6	0.1		
G	7,595 ¹	17	59	11.3	1,026.6	1,026.6	1,026.8	0.2		
Н	8,797 ¹	29	77	10.3	1,056.0	1,056.0	1,056.5	0.5		
I	9,694 ¹	14	53	11.0	1,073.9	1,073.9	1,074.2	0.3		
SPIVEY BRANCH TRIBUTARY A										
A	500 ²	31	40	6.4	974.7	974.7	974.7	0.0		
В	1,689 ²	13	29	8.7	987.0	987.0	987.2	0.2		
С	3,367 ²	23	37	8.2	1,027.1	1,027.1	1,027.1	0.0		
D	3,707 ²	25	132	2.7	1,036.8	1,036.8	1,037.5	0.7		
SPIVEY BRANCH TRIBUTARY B										
A	547 ²	22	96	13.1	986.5	986.5	986.7	0.2		
В	1,644 ²	110	997	0.9	1,002.5	1,002.5	1,002.5	0.0		
¹ Feet above confluence	with Hickory Cre	ek								
Feet above confluence	with Spivey Bran	icn								
FEDERAL EMERG	ENCY MANAGEN	IENT AGENCY	(FLOODWAY DATA						
DOUGLA	S COUNT	ΓY, GA								
AND INCO	RPORATED	AREAS	SF	SPIVEY BRANCH – SPIVEY BRANCH TRIBUTARY SPIVEY BRANCH TRIBUTARY B						

	FLOODING SOU	IRCE	FLOODWAY			1-PERCENT-ANNUAL-CHANCE-FLOOD WATER SURFACE ELEVATION				
	CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)	
S	SWEETWATER CREEK									
	А	1,112	119	2,526	6.8	756.6	747.5 ²	748.4	0.9	
	В	2,362	139	2,696	6.3	756.6	749.3 ²	750.1	0.8	
	С	4,816	279	5,034	3.4	756.6	751.5 ²	752.5	1.0	
	D	6,849	450	5,543	3.0	756.6	752.7 ²	753.7	1.0	
	E	9,496	164	2,672	6.2	756.6	754.2 ²	755.1	0.9	
	F	11,819	167	1,562	10.7	757.7	757.7	758.4	0.7	
	G	13,155	400	3,648	4.6	766.5	766.5	766.7	0.2	
	Н	15,432	189	1,465	11.4	774.2	774.2	774.2	0.0	
	I	17,497	152	1,112	15.0	795.4	795.4	795.4	0.0	
	J	18.847	384	2,119	7.9	814.8	814.8	814.8	0.0	
	К	19.742	386	2.194	7.6	835.1	835.1	835.2	0.1	
	L	20,628	358	1,621	10.3	851.9	851.9	851.9	0.0	
	Μ	22.843	152	2,186	7.6	863.6	863.6	863.9	0.3	
	Ν	24,818	141	2,284	7.3	867.3	867.3	868.1	0.8	
	0	29.236	510	5.808	2.9	872.6	872.6	873.5	0.9	
	Р	33.488	513	6,171	2.7	876.5	876.5	877.5	1.0	
	Q	35.952	439	6.021	2.8	877.9	877.9	878.8	0.9	
	R	38.324	233	3.988	4.2	879.8	879.8	880.5	0.7	
	S	40.585	1526	18.690	0.9	881.1	881.1	882.0	0.9	
	Т	44,631	615	7,596	2.2	881.7	881.7	882.6	0.9	
	U	47.810	478	7,526	2.2	883.7	883.7	884.6	0.9	
1	Feet above confluence w	rith Chattahooc	hee River	1,020		00011		00110	0.0	
2	Elevation computed with	out consideration	on of backwate	er effects from	Chattahoochee	River				
						FLOO	DWAY D	ΑΤΑ		
')	DOUGLAS COUNTY, GA AND INCORPORATED AREAS				SWEETWATER CREEK					

FLOODING SOU	RCE		FLOODWAY		1-PE	RCENT-ANNUA WATER SURFA	L-CHANCE-FLC CE ELEVATION	OD		
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)		
SWEETWATER CREEK (CONTINUED)										
` V ´	50,155 ¹	498	8,337	2.0	884.8	884.8	885.7	0.9		
W	52,410 ¹	778	11,051	1.5	885.6	885.6	886.5	0.9		
Х	54,339 ¹	922	10,841	1.5	886.8	886.8	887.6	0.8		
Y	57,362 ¹	499	7,417	2.2	887.6	887.6	888.5	0.9		
Z	59,490 ¹	176	3,289	5.0	888.6	888.6	889.4	0.8		
AA	61,741 ¹	308	5,428	3.0	890.2	890.2	891.2	1.0		
AB	187,255 ¹	420/970 ³	4,470	0.8	946.8	946.8	947.6	0.8		
SWEETWATER CREEK TRIBUTARY A										
А	1,464 ²	40	107	5.6	757.6	757.6	757.6	0.0		
В	2,138 ²	19	59	10.2	769.4	769.4	769.4	0.0		
С	2,605 ²	148	1,598	0.4	792.0	792.0	793.0	1.0		
¹ Feet above confluence w ² Feet above confluence w ³ Width within county/total	rith Chattahoo rith Sweetwate width	chee River er Creek								
FEDERAL EMERGE	NCY MANAGE	MENT AGENCY	,		FLOO	DWAY D	ATA			
DOUGLAS AND INCOR	DOUGLAS COUNTY, GA AND INCORPORATED AREAS				SWEETWATER CREEK – SWEETWATER CREEF TRIBUTARY 1 – SWEETWATER CREEK TRIBUTAR					

FLOODING SOL	JRCE		FLOODWAY		1-PE	RCENT-ANNUA WATER SURFA	L-CHANCE-FLO CE ELEVATION	OD
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
SWEETWATER CREEK TRIBUTARY B								
А	1,172	17	54	10.7	756.6	751.8 ²	751.9	0.1
В	2,024	35	76	7.5	773.4	773.4	773.6	0.2
SWEETWATER CREEK TRIBUTARY C								
A	1,742	56	206	7.7	756.6	756.6	756.9	0.3
В	2,635	53	159	8.3	768.8	768.8	768.9	0.1
С	3,570	76	240	5.5	786.6	786.6	786.8	0.2
SWEETWATER CREEK TRIBUTARY D								
A	2,105	78	226	5.2	756.6	753.9 ²	754.3	0.4
В	2,961	54	192	6.1	765.3	765.3	765.6	0.3
С	4,238	53	187	6.3	786.8	786.8	787.2	0.4
D	5,324	93	243	2.4	802.8	802.8	803.7	0.9
E	6,264	83	252	2.3	817.8	817.8	818.8	1.0
F	7,532	8	43	13.2	843.7	843.7	843.9	0.2
¹ Feet above confluence v	vith Sweetwater	Creek		Cure et weter Cr				
FEDERAL EMERGE	ENCY MANAGEM	ENT AGENCY	,	Sweetwater Cr	FLOC	DWAY D	ΑΤΑ	
DOUGLA AND INCOF	S COUNI	Y, GA AREAS	SW	EETWATI CREEK T	ER CREEK RIBUTARY TR	TRIBUTA C – SWE IBUTARY	RY B– SW ETWATER D	/EETWATE R CREEK

FLOODING SOL	IRCE		FLOODWAY		1-PERCENT-ANNUAL-CHANCE-FLOOD WATER SURFACE ELEVATION				
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)	
SWEETWATER CREEK TRIBUTARY E									
А	1,014	58	221	6.2	790.5	790.5	791.1	0.6	
В	2,290	40	198	6.9	821.1	821.1	821.8	0.7	
С	3,236	55	203	6.7	847.5	847.5	847.8	0.3	
D	4,143	66	241	5.7	876.8	876.8	877.1	0.3	
SWEETWATER CREEK TRIBUTARY F									
А	619	50	101	8.4	875.9	871.7 ²	871.7	0.0	
В	1,304	50	143	6.0	906.8	906.8	906.9	0.1	
С	1,699	23	101	8.4	929.3	929.3	930.1	0.8	
D	2,452	113	410	2.1	947.6	947.6	948.6	1.0	
SWEETWATER CREEK TRIBUTARY G									
А	1,254	67	145	5.6	882.6	882.6	882.6	0.0	
В	1,593	60	501	1.6	914.4	914.4	914.8	0.4	
С	2,482	11	39	10.6	930.1	930.1	930.5	0.4	
D	3,564	36	73	5.7	967.4	967.4	967.9	0.5	
E	3.981	150	1,911	0.2	991.6	991.6	992.1	0.5	

¹Feet above confluence with Sweetwater Creek

TABLE

9

²Elevation computed without consideration of backwater effects from Sweetwater Creek

FEDERAL EMERGENCY MANAGEMENT AGENCY

DOUGLAS COUNTY, GA AND INCORPORATED AREAS

FLOODWAY DATA

SWEETWATER CREEK TRIBUTARY E – SWEETWATER CREEK TRIBUTARY F – SWEETWATER CREEK TRIBUATARY G

FLOODING SOL	JRCE		FLOODWAY	,	1-PE	RCENT-ANNUA WATER SURFA	1-PERCENT-ANNUAL-CHANCE-FLOOD WATER SURFACE ELEVATION				
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)			
SWEETWATER CREEK TRIBUTARY H											
А	2,762	181	541	4.6	883.8	883.8	883.8	0.0			
В	4,366	111	598	2.1	902.6	902.6	903.0	0.4			
SWEETWATER CREEK TRIBUTARY I											
А	1,727	33	172	1.6	885.4	885.4	886.3	0.9			
В	2,392	12	32	8.7	899.8	899.8	899.8	0.0			
С	2,923	27	102	2.7	915.4	915.4	916.0	0.6			
SWEETWATER CREEK TRIBUTARY J											
А	1,966	56	335	3.3	889.3	889.3	889.3	0.0			
В	3,283	12	43	7.7	906.1	906.1	906.9	0.8			
С	3,877	115	176	1.9	916.9	916.9	917.0	0.1			
D	4,477	19	56	5.9	926.7	926.7	927.0	0.3			
¹ Feet above confluence v	vith Sweetwater	Creek									
FEDERAL EMERGE	ENCY MANAGEN	IENT AGENCY		FLOODWAY DATA							
DOUGLA AND INCOR	S COUN RPORATED	ΓΥ, GA AREAS	sw	SWE EETWAT	ETWATER ER CREEK CREEK	CREEK T TRIBUTA TRIBUAT	RIBUTAR RY I – SW ARY J	Y H – ÆETWATE			

	FLOODING SOU	RCE		FLOODWAY		1-PE	RCENT-ANNUA WATER SURFA	AL-CHANCE-FLO CE ELEVATION	OD		
(CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)		
SW	/EETWATER CREEK TRIBUTARY K										
	А	3,398	44	103	6.8	891.4	891.4	891.5	0.1		
	В	3,883	363	2,701	0.1	905.7	905.7	905.7	0.0		
	С	5,043	56	121	2.3	915.1	915.1	916.0	0.9		
SW	/EETWATER CREEK TRIBUTARY L										
	А	3,549	97	429	2.9	906.4	906.4	907.4	1.0		
	В	5,502	28	128	4.3	923.1	923.1	924.1	1.0		
	С	6,240	59	221	2.5	931.4	931.4	932.2	0.8		
	D	7,385	42	123	4.3	938.1	938.1	938.9	0.8		
	Е	8,801	32	85	6.2	951.9	951.9	952.4	0.5		
	F	10,424	314	1,712	0.3	990.8	990.8	990.8	0.0		
	G	11,543	30	76	6.9	999.8	999.8	1,000.1	0.3		
	Н	12,599	35	121	4.4	1,013.5	1,013.5	1,014.1	0.6		
	I	13,810	13	68	7.8	1,037.4	1,037.4	1,038.1	0.7		
	J	14,247	21	81	6.5	1,045.8	1,045.8	1,046.8	1.0		
¹ Fe	eet above confluence w	ith Sweetwater	Creek								
	FEDERAL EMERGE			,	FLOODWAY DATA						
1	AND INCOR	PORATED	AREAS		SWEETWATER CREEK TRIBUTARY K – SWEETWATER CREEK TRIBUTARY L						

FLOODING SOU	FLOODING SOURCE FLO				1-PERCENT-ANNUAL-CHANCE-FLOOD WATER SURFACE ELEVATION						
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)			
SWEETWATER CREEK TRIBUTARY L.2											
А	859	22	64	5.4	921.2	921.2	921.6	0.4			
В	1,318	10	58	6.0	932.6	932.6	933.4	0.8			
С	1,512	20	75	4.6	937.6	937.6	937.7	0.1			
D	1,862	10	35	9.7	945.4	945.4	945.6	0.2			
Е	2,316	20	43	8.0	955.2	955.2	955.4	0.2			
F	2,678	18	58	5.8	963.0	963.0	963.9	0.9			
SWEETWATER CREEK TRIBUTARY L.3											
А	382	21	47	5.5	944.6	944.0	944.1	0.1			
В	551	32	99	2.6	954.1	954.1	954.2	0.1			
С	1,127	115	115	1.7	955.2	955.2	955.3	0.1			
D	1,423	259	470	0.4	973.1	973.1	973.1	0.0			
E	1,974	25	31	6.3	973.1	973.1	973.3	0.2			
F	2,155	203	328	0.6	988.6	988.6	989.0	0.4			
¹ Feet above confluence w	ith Sweetwater	Creek Tributa	ary L								
FEDERAL EMERGE				FLOODWAY DATA							
AND INCOR	DOUGLAS COUNTY, GA AND INCORPORATED AREAS				SWEETWATER CREEK TRIBUTARY L.2 – SWEETWATER CREEK TRIBUTARY L.3						

FLOODING SOU	RCE		FLOODWAY		1-PERCENT-ANNUAL-CHANCE-FLOOD WATER SURFACE ELEVATION					
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)		
SWEETWATER CREEK TRIBUTARY L.3.1										
А	312 ¹	20	22	5.9	959.1	959.1	959.7	0.6		
В	476 ¹	22	23	5.7	970.5	970.5	970.9	0.4		
С	796 ¹	58	74	1.8	976.6	976.6	976.8	0.2		
D	1,053 ¹	7	15	8.5	982.1	982.1	982.3	0.2		
TANYARD BRANCH										
A	457 ²	45	205	8.1	806.7	806.7	807.7	1.0		
В	1.047 ²	34	189	8.8	812.1	812.1	813.0	0.9		
С	1.559^{2}	40	181	9.2	816.7	816.7	816.8	0.1		
D	2.025 ²	46	170	9.8	823.2	823.2	823.9	0.7		
Е	2.277 ²	39	417	4.0	834.6	834.6	834.6	0.0		
F	3.253 ²	74	210	7.9	889.5	889.5	889.5	0.0		
G	4,603 ²	86	318	5.2	903.8	903.8	904.8	1.0		
Н	5,571 ²	212	376	4.4	916.5	916.5	916.5	0.0		
I	6.517^2	52	186	8.9	928.3	928.3	928.6	0.3		
J	7.656 ²	162	329	6.1	963.3	963.3	964.0	0.7		
К	7.745 ²	284	1.990	1.0	964.2	964.2	965.1	0.9		
L	8,024 ²	180	1,265	1.6	964.2	964.2	965.1	0.9		
Μ	8,374 ²	124	830	2.4	964.2	964.2	965.1	0.9		
Ν	8,735 ²	53	342	5.8	964.2	964.2	964.7	0.5		
¹ Feet above confluence w ² Feet above confluence w	ith Sweetwater ith Little Bear (r Creek Tributa Creek	ary L.3							
FEDERAL EMERGE	NCY MANAGEN	IENT AGENCY		FLOODWAY DATA						
DOUGLA	S COUN	ΓY, GA								
AND INCOR	PORATED	AREAS	SW	SWEETWATER CREEK TRIBUTARY L.3.1 – TANYA BRANCH						

FLOODING SOL	JRCE	FLOODWAY			1-PERCENT-ANNUAL-CHANCE-FLOOD WATER SURFACE ELEVATION					
CROSS SECTION	DISTANCE1	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)		
TANYARD BRANCH (CONTINUED)										
0	9,359	130	293	6.8	988.0	988.0	988.4	0.4		
Р	9,440	236	2,453	0.8	988.7	988.7	989.5	0.8		
Q	9,830	400	4,188	0.5	988.7	988.7	989.5	0.8		
R	10,314	30	170	11.7	988.7	988.7	988.7	0.0		
S	10,783	38	207	9.6	1,002.2	1,002.2	1,002.2	0.0		
Т	11,116	93	188	3.4	1,008.5	1,008.5	1,009.5	1.0		
U	12,290	25	84	7.5	1,030.2	1,030.2	1,030.6	0.4		
V	13,473	46	160	3.9	1,054.7	1,054.7	1,055.7	1.0		
W	14,260	51	86	7.3	1,075.4	1,075.4	1,075.4	0.0		
Х	14,683	38	84	7.5	1,088.8	1,088.8	1,088.9	0.1		
Y	14,756	38	270	2.3	1,093.2	1,093.2	1,094.1	0.9		
Z	15,592	60	103	6.1	1,104.7	1,104.7	1,105.2	0.5		
AA	15,651	61	257	2.5	1,108.6	1,108.6	1,109.3	0.7		
AB	15,921	15	71	8.9	1,113.4	1,113.4	1,114.2	0.8		
AC	16,000	46	226	2.8	1,117.3	1,117.3	1,118.3	1.0		
AD	16,416	17	64	9.9	1,126.1	1,126.1	1,126.3	0.2		
AE	16,481	63	316	2.0	1,131.1	1,131.1	1,132.1	1.0		
AF	16,658	32	46	13.6	1,132.0	1,132.0	1,132.0	0.0		
eet above confluence v	vith Little Bear C	creek								
FEDERAL EMERGE		ENT AGENCY	,	FLOODWAY DATA						
DOUGLA AND INCOF	DOUGLAS COUNTY, GA AND INCORPORATED AREAS				TANY	ARD BRA	NCH			

FLOODING SO	JRCE		FLOODWAY		1-PERCENT-ANNUAL-CHANCE-FLOOD WATER SURFACE ELEVATION				
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)	
TANYARD BRANCH TRIBUTARY A									
А	208 ¹	16	50	9.7	1,007.8	1,007.8	1,007.9	0.1	
В	1,094 ¹	10	41	11.7	1,040.6	1,040.6	1,040.8	0.2	
С	2,210 ¹	103	104	4.7	1,072.8	1,072.8	1,072.9	0.1	
D	2,332 ¹	82	190	2.6	1,077.0	1,077.0	1,077.6	0.6	
E	2,648 ¹	16	54	8.9	1,081.2	1,081.2	1,082.1	0.9	
TIGER CREEK									
А	37 ²	233 ³	172	9.2	1,045.3	1,038.1 ⁴	1,038.6	0.5	
В	964 ²	31	156	10.1	1,045.6	1,045.6	1,045.6	0.0	
С	1,822 ²	35	183	8.6	1,050.4	1,050.4	1,051.4	1.0	
D	2,624 ²	45	172	9.2	1,058.0	1,058.0	1,058.2	0.2	
Е	3,764 ²	35	142	10.9	1,073.9	1,073.9	1,074.1	0.2	
F	3,875 ²	35	347	4.5	1,081.2	1,081.2	1,081.9	0.7	
G	4,370 ²	162	349	4.4	1,085.5	1,085.5	1,085.6	0.1	
Н	4,410 ²	184	1,725	0.9	1,086.3	1,086.3	1,086.9	0.6	
I	4,702 ²	238	2,422	0.6	1,086.3	1,086.3	1,086.9	0.6	
J	4,975 ²	120	294	4.2	1,086.3	1,086.3	1,086.9	0.6	
К	5,815 ²	153	295	4.1	1,098.3	1,098.3	1,098.3	0.0	
L	6,876 ²	76	190	4.3	1,117.7	1,117.7	1,117.7	0.0	
Μ	7,216 ²	35	128	6.4	1,119.7	1,119.7	1,120.5	0.8	
eet above confluence	with Tanyard Bra	anch	³ Combined flo	odway width wi	th Anneewakee C	reek			
Feet above confluence	with Anneewake	e Creek	⁴ Elevation cor	nputed without	consideration of ba	ackwater effects	from Anneewake	e Creek	
FEDERAL EMERGE	FEDERAL EMERGENCY MANAGEMENT AGENCY				FLOO				
DOUGLA AND INCOR	S COUNT RPORATED	FY, GA AREAS	ТА	ANYARD	BRANCH T	RIBUTAR	Y A – TIGI	ER CREE	

FLOODING SO	URCE		FLOODWAY		1-PERCENT-ANNUAL-CHANCE-FLOOD WATER SURFACE ELEVATION					
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)		
TIGER CREEK (CONTINUED)										
Ν	7,308 ¹	35	235	3.5	1,123.9	1,123.9	1,124.9	1.0		
0	7,529 ¹	45	182	4.5	1,126.6	1,126.6	1,126.8	0.2		
Р	7,636 ¹	45	217	3.8	1,129.1	1,129.1	1,130.0	0.9		
Q	8,133 ¹	68	167	4.9	1,140.2	1,140.2	1,140.3	0.1		
R	8,217 ¹	115	186	4.4	1,149.0	1,149.0	1,149.6	0.6		
S	8,254 ¹	314	2,188	0.4	1,149.5	1,149.5	1,150.5	1.0		
Т	8,516 ¹	276	1,907	0.4	1,149.5	1,149.5	1,150.5	1.0		
U	8,808 ¹	14	68	12.0	1,152.4	1,152.4	1,152.4	0.0		
TIGER CREEK TRIBUTARY A										
А	271 ²	12	44	7.7	1,086.4	1,086.0 ³	1,086.3	0.3		
В	876 ²	26	68	5.0	1,096.5	1,096.5	1,096.5	0.0		
TOWN BRANCH										
A	3,030 ⁴	250	2,510	1.0	969.5	969.5	970.5	1.0		
В	3,890 ⁴	250	1,580	1.7	970.1	970.1	971.0	0.9		
С	5,781 ⁴	140	780	3.4	973.3	973.3	974.0	0.7		
D	7,228 ⁴	550	3,530	0.7	979.6	979.6	980.4	0.8		
E	10,628 ⁴	300	1,350	1.8	985.5	985.5	986.5	1.0		
¹ Feet above confluence	with Anneewake	e Creek	³ Elevation com	puted without o	consideration of ba	ckwater effects f	rom Tiger Creek			
reet above connuence	with figer Creek			onnuence with I						
FEDERAL EMERG	ENCY MANAGEN	ENT AGENCY	<i>,</i>		FLOO	DWAY D	ΑΤΑ			
DOUGLA	S COUNT	Y, GA		_		_				
AND INCO	RPORATED	AREAS	TIG	TIGER CREEK – TIGER CREEK TRIBUTARY A – TOV BRANCH						

FLOODING SOL	JRCE		FLOODWAY		1-PE	RCENT-ANNUA WATER SURFA	L-CHANCE-FLO CE ELEVATION	OD
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
TYREE BRANCH								
А	8981	24	61	8.9	1,052.7	1,052.7	1,052.7	0.0
В	1,307¹	19	56	9.7	1,061.6	1,061.6	1,061.6	0.0
С	1,867¹	17	54	10.1 9.0 7.7	1,073.3 1,088.8 1,108.1	1,073.3 1,088.8 1,108.1	1,073.3 1,088.8 1,108.2	0.0 0.0 0.1
D	2,625¹	24	60					
E	3,662 ¹	20	37					
F	4,874 ¹	14	33	8.7	1,139.9	1,139.9	1,139.9	0.0
G	5,303 ¹	15	34	8.4	1,156.7	1,156.7	1,156.7	0.0
WATERFALL BRANCH								
А	1,790 ²	200	790	1.7	955.1	955.1	956.1	1.0
В	5,070 ²	130	480	2.8	970.1	970.1	971.1	1.0
С	5,951²	210	280	4.9	974.2	974.2	975.2	1.0
ZION BRANCH								
А	887¹	130	320	4.4	739.0	739.0	739.7	0.7
В	2,2831	25	78	9.9	795.7	795.7	795.7	0.0
С	2,850 ¹	16	66	11.7	847.8	847.8	847.8	0.0
D	3,589 ¹	32	91	8.5	875.9	875.9	875.9	0.0
Е	4,854 ¹	21	30	7.2	901.4	901.4	901.4	0.0
F	5,688 ¹	16	28	7.7	927.7	927.7	927.7	0.0
G	6,247 ¹	79	620	0.8	954.6	954.6	954.6	0.0
Н	7,130 ¹	41	113	4.3	966.8	966.8	967.8	1.0
¹ Feet above confluence v	with Hurricane (Creek	1					L
² Feet above confluence v	with Mud Creek							
FEDERAL EMERGE	NCY MANAGEN	IENT AGENCY	,		FLOO	DWAY D	ΑΤΑ	
DOUGLA	S COUNT	Y, GA						
AND INCOR	PORATED	AREAS		IYREE BI	RANCH - W	/ATERFAL BRANCH	L BRANC	H – ZION

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 WSEL of the 1-percent-annual-chance flood more than 1 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

No floodways were computed for Dog River, upstream of the Douglas County Water Reservoir Dam, Tributary 1 to Northern Lake, Tributary 2 to Northern Lake, and Unnamed Tributary to Southern Lake.

5.0 **INSURANCE APPLICATIONS**

For flood insurance rating purposes, flood insurance zone designations are assigned to a community based on the results of the engineering analyses. These zones are as follows:

Zone A

Zone A is the flood insurance risk zone that corresponds to the 1-percent-annual-chance floodplains that are determined in the FIS by approximate methods. Because detailed hydraulic analyses are not performed for such areas, no BFEs or base flood depths are shown within this zone.

Zone AE

Zone AE is the flood insurance risk zone that corresponds to the 1-percent-annual-chance floodplains that are determined in the FIS by detailed methods. In most instances, whole-foot BFEs derived from the detailed hydraulic analyses are shown at selected intervals within this zone.

Zone X

Zone X is the flood insurance risk zone that corresponds to areas outside the 0.2-percentannual-chance floodplain, areas within the 0.2-percent-annual-chance floodplain, areas of 1-percent-annual-chance flooding where average depths are less than 1 foot, areas of 1percent-annual-chance flooding where the contributing drainage area is less than 1 square mile, and areas protected from the 1-percent-annual-chance flood by levees. No BFEs or base flood depths are shown within this zone.

6.0 FLOOD INSURANCE RATE MAP

The FIRM is designed for flood insurance and floodplain management applications.

For flood insurance applications, the map designates flood insurance risk zones as described in Section 5.0 and, in the 1-percent-annual-chance floodplains that were studied by detailed methods, shows selected whole-foot BFEs or average depths. Insurance agents use the zones and BFEs in conjunction with information on structures and their contents to assign premium rates for flood insurance policies.

For floodplain management applications, the map shows by tints, screens, and symbols, the 1- and 0.2-percent-annual-chance floodplains, floodways, and the locations of selected cross sections used in the hydraulic analyses and floodway computations.

The countywide FIRM presents flooding information for the entire geographic area of Douglas County. Previously, FIRMs were prepared for each incorporated community and the unincorporated areas of the County identified as flood-prone. This countywide FIRM also includes flood-hazard information that was presented separately on Flood Boundary and Floodway Maps, where applicable. Historical data relating to the maps prepared for each community are presented in Table 10.

	I							
	FEDERAL EMERG				Douglasville, City of	Douglas County (Unincorporated Areas)	Austell, City of	COMMUNITY NAME
AS COUNTY, GA RPORATED AREAS	ENCY MANAGEMENT AGENCY				April 25, 1975	March 5, 1976	April 5, 1974	INITIAL IDENTIFICATION
	,				July 25	Nc	February	BOUNDA REVISION
C					5, 1980	one	20, 1976	ARY MAP N DATE(S)
OMMUNITY MA		<u> </u>			June 25, 1982	January 2, 1980	December 1, 1977	FLOOD INSURANCE RATE MAP EFFECTIVE DATE
P HISTORY					None	March 15, 1984	September 27, 1991	FLOOD INSURANCE RATE MAP REVISION DATE(S)

7.0 OTHER STUDIES

This report either supersedes or is compatible with all previous studies on streams studied in this report and should be considered authoritative for purposes of the NFIP.

8.0 LOCATION OF DATA

Information concerning the pertinent data used in the preparation of this study can be obtained by contacting FEMA, Federal Insurance and Mitigation Division, Koger Center – Rutgers Building, 3003 Chamblee Tucker Road, Atlanta, Georgia 30341.

9.0 **<u>BIBLIOGRAPHY AND REFERENCES</u>**

Atlanta Regional Commission, <u>Georgia Stormwater Management Manual</u>, Appendix A, August 2001.

Federal Emergency Management Agency, <u>Flood Insurance Study</u>, <u>Douglas County</u>, <u>Georgia (Unincorporated Areas)</u>, March 15, 1984.

Federal Emergency Management Agency, <u>Flood Insurance Study</u>, <u>Paulding County</u>, <u>Georgia and Incorporated Areas</u>, September 29, 2006.

Federal Emergency Management Agency, <u>Flood Insurance Study</u>, <u>Douglas County</u>, <u>Georgia (Unincorporated Areas</u>), August 18, 2009.

Federal Insurance Administration, <u>Flood Insurance Study</u>, <u>Douglas County</u>, <u>Georgia</u> (<u>Unincorporated Areas</u>), Flood Insurance Study Report, July 2, 1979; Flood Insurance Rate Map, January 2, 1980.

Golden, H. G. and McGlone Price, <u>Flood Frequency Analysis for Small Natural</u> <u>Streams in Georgia</u>, July 1976.

Hydrologic Engineering Center, <u>HEC-2 Water Surface Profiles</u>, U.S. Army Corps of Engineers, Davis, California, October 1973.

Hydrologic Engineering Center, <u>HEC-2 Water Surface Profiles</u>, U.S. Army Corps of Engineers, Davis, California, November 1976.

Hydrologic Engineering Center, <u>HEC-HMS</u>, Version 2.0, U.S. Army Corps of Engineers, Davis, California, March 2000.

Hydrologic Engineering Center, <u>HEC-RAS</u>, Version 3.1.3, U.S. Army Corps of Engineers, Davis, California, May 2005.

Hydrologic Engineering Center, <u>HEC-GeoRAS</u>, Version 4.1, U.S. Army Corps of Engineers, Davis, California, January 2006.

Hydrologic Engineering Center, <u>HEC-HMS</u>, Version 3.4, U.S. Army Corps of Engineers, Davis, California, August 2009.

Hydrologic Engineering Center, <u>HEC-RAS</u>, Version 4.1, U.S. Army Corps of Engineers, Davis, California, January 2010.

Inman, E.J., <u>Flood-Frequency Relations For Urban Streams in Georgia-1994</u> Update; U.S. Geological Survey; Scientific-Resources Investigations Report 95-4017 p. 1995.

Jack W. Berry & Associates, Inc., <u>Topographic Map</u>, Scale 1:24,000, Contour Interval 5 foot, 1977.

Jordan, Jones and Goulding, Inc., <u>Hydrologic and Hydraulic Analysis for the</u> <u>Anneewakee Creek Basin, Douglas County, Georgia</u>, January 17, 2007a.

Jordan, Jones and Goulding, Inc., <u>Hydrologic and Hydraulic Analysis for the Bear Creek</u> <u>Basin, Douglas County, Georgia</u>, January 17, 2007b.

National Geodetic Survey, <u>VERTCON-North American Vertical Datum Conversion</u> <u>Utility</u>. Retrieved on November 18, 2006, from <u>http://www.ngs.noaa.gov/.</u>

Photo Science Geospatial Solutions, <u>LiDAR Data and Aerial Photographs</u>, Scale 1:800, Contour Interval 2 Feet, Douglas County, Georgia, 2004.

Soil Conservation Service, Engineering Division, <u>Urban Hydrology for Small</u> <u>Watersheds</u>, Technical Release 55, U.S. Department of Agriculture, June 1986.

U.S. Army Corps of Engineers, Mobile District, <u>Flood Hazard Information</u>, <u>Chattahoochee River</u>, <u>Atlanta</u>, <u>Georgia</u>, <u>River Mile 282 to Mile 331</u>, <u>Restudy</u>, July 1981 (unpublished).

U.S. Census Bureau, <u>American Factfinder</u>, Douglas County, Georgia, 2009. Retrieved February 18, 2011, from <u>http://factfinder.census.gov</u>.

U.S. Geological Survey, <u>7.5-Minute Topographic Maps</u>. Scale 1:24,000, Contour Interval 20 Feet: Nebo Georgia; Hulett, Georgia; Mableton, Georgia; Ben Hill, Georgia; Austell, Georgia; New Georgia, Georgia; Villa Rica, Georgia; Winston, Georgia; Campellton, Georgia; Rico, Georgia, U.S. Department of the Interior, 1973a.

U.S. Geological Survey, <u>Preliminary Flood Frequency Relationships for Small Streams</u> <u>in Georgia</u>, U.S. Department of the Interior, April 1973b.

U.S. Geological Survey, <u>Preliminary Flood-Frequency Relations for Urban Streams in</u> <u>Metropolitan Atlanta, Georgia</u>, Open-File Report 77-57, U.S. Department of the Interior, 1977.

U.S. Geological Survey, <u>The National Flood-Frequency Program-Methods for</u> <u>Estimating Flood Magnitude and Frequency in Rural and Urban Areas in Georgia</u>, USGS Fact Sheet 169-98, U.S. Department of the Interior, August 1999.

U.S. Geological Survey, <u>Principles, Policies, and Procedures: Domestic Geographic</u> <u>Names</u>, Orth, Donald J., et al., Online Edition, Revised 2003. Retrieved from <u>http://geonames.usgs.gov/pppdgn.html</u>.

U.S. Geological Survey, <u>Peak Streamflow for the Nation</u>, USGS 02337000 Sweetwater Creek Near Austell, Georgia. Retrieved August 17, 2007, from <u>http://nwis.waterdata.usgs.gov/usa/nwis/peak</u>.

U.S. Geological Survey, <u>Magnitude and Frequency of Rural Floods in the Southeastern</u> <u>United States, 2006; Volume 1, Georgia</u>, Scientific Investigation Report 2009-5013, U.S. Department of the Interior, Reston, VA, 2009.

U.S. Geological Survey, <u>Peak Streamflow for the Nation</u>, USGS 02337000 Sweetwater Creek Near Austell, Georgia. Retrieved February 17, 2011, from <u>http://nwis.waterdata.usgs.gov/usa/nwis/peak</u>.

Water Resources Council, Hydrology Committee, <u>A Uniform Technique for</u> <u>Determining Flood Flow Frequencies</u>, Bulletin No. 15, December 1967.

Water Resources Council, Hydrology Committee, <u>Guidelines for Determining Flood</u> <u>Flow Frequencies</u>, Bulletin No. 17B, Revised September 1981, Editorial Corrections March 1982.